A Complete Bibliography of Publications in the *SIAM Journal on Applied Mathematics*: 2010–2019

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References

Velo:2009:TMO

[1] Ani P. Velo, George A. Gazonas, and Takanobu Ameya. z-transform methods for the optimal design of one-dimensional layered elastic media. *SIAM Journal on Applied Mathematics*, 70(3):762–788, ???? 2009. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [17].

Bhat:2010:DTD

[2] H. S. Bhat and B. Osting. Diffraction on the two-dimensional square lattice. *SIAM Journal on Applied Mathematics*, 70(5):1389–1406, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Le:2010:MGF

[3] Long Lê and E. Bruce Pitman. A model for granular flows over an erodible surface. *SIAM Journal on Applied Mathematics*, 70(5):1407–1427, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2010:ERS

[4] Habib Ammari, Eric Bonnetier, and Yves Capdeboscq. Enhanced resolution in structured media. *SIAM Journal on Applied Mathematics*, 70 (5):1428–1452, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Griffiths:2010:STD

[5] I. M. Griffiths and P. D. Howell. The surface-tension-driven retraction of a viscida. *SIAM Journal on Applied Mathematics*, 70(5):1453–1487, ????

2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bressloff:2010:SNF

[6] Paul C. Bressloff. Stochastic neural field theory and the system-size expansion. *SIAM Journal on Applied Mathematics*, 70(5):1488–1521, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2010:NST

[7] Tong Li and Zhi an Wang. Nonlinear stability of traveling waves to a hyperbolic-parabolic system modeling chemotaxis. *SIAM Journal on Applied Mathematics*, 70(5):1522–1541, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Baskin:2010:ATR

[8] Lev Baskin, Pekka Neittaanmäki, Boris Plamenevsky, and Oleg Sarafanov. Asymptotic theory of resonant tunneling in 3D quantum waveguides of variable cross-section. *SIAM Journal on Applied Mathematics*, 70(5):1542–1566, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Peter:2010:WWS

[9] Malte A. Peter and Michael H. Meylan. Water-wave scattering by vast fields of bodies. *SIAM Journal on Applied Mathematics*, 70(5):1567–1586, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ali:2010:EUE

[10] Giuseppe Alì, Andreas Bartel, and Michael Günther. Existence and uniqueness for an elliptic PDAE model of integrated circuits. *SIAM Journal on Applied Mathematics*, 70(5):1587–1610, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Adimy:2010:SHB

[11] Mostafa Adimy, Fabien Crauste, My Lhassan Hbid, and Redouane Qesmi. Stability and Hopf bifurcation for a cell population model with state-dependent delay. *SIAM Journal on Applied Mathematics*, 70(5):1611–1633, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Heitzinger:2010:MMP

[12] Clemens Heitzinger, Norbert J. Mauser, and Christian Ringhofer. Multiscale modeling of planar and nanowire field-effect biosensors. *SIAM Journal on Applied Mathematics*, 70(5):1634–1654, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gendelman:2010:AAP

[13] O. V. Gendelman, A. F. Vakakis, L. A. Bergman, and D. M. McFarland. Asymptotic analysis of passive nonlinear suppression of aeroelastic instabilities of a rigid wing in subsonic flow. *SIAM Journal on Applied Mathematics*, 70(5):1655–1677, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Olmstead:2010:DIB

[14] W. E. Olmstead and Catherine A. Roberts. Dimensional influence on blow-up in a superdiffusive medium. *SIAM Journal on Applied Mathematics*, 70(5):1678–1690, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Budaev:2010:SCA

[15] Bair V. Budaev and David B. Bogy. A self-consistent acoustics model of interface thermal resistance. *SIAM Journal on Applied Mathematics*, 70 (5):1691–1710, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marigo:2010:ESI

[16] Alessia Marigo. Entropic solutions for irrigation networks. *SIAM Journal on Applied Mathematics*, 70(5):1711–1735, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Velo:2010:ETM

[17] Ani P. Velo, George A. Gazonas, and Takanobu Ameya. Erratum: z-transform methods for the optimal design of one-dimensional layered elastic media. *SIAM Journal on Applied Mathematics*, 70(5):1736–1737, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [1].

Rubinstein:2010:BSW

[18] Jacob Rubinstein, Peter Sternberg, and Junghwa Kim. On the behavior of a superconducting wire subjected to a constant voltage difference. *SIAM Journal on Applied Mathematics*, 70 (6):1739–1760, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Vignal:2010:BLP

[19] Marie Hélène Vignal. A boundary layer problem for an asymptotic preserving scheme in the quasi-neutral limit for the Euler–Poisson system. *SIAM Journal on Applied Mathematics*, 70 (6):1761–1787, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zabarankin:2010:TDS

[20] Michael Zabarankin and Anton Molyboha. Three-dimensional shape optimization in Stokes flow problems. *SIAM Journal on Applied Mathematics*, 70(6):1788–1809, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Briane:2010:AEH

[21] Marc Briane and Graeme W. Milton. An antisymmetric effective Hall matrix. *SIAM Journal on Applied Mathematics*, 70(6):1810–1820, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Berezovskaya:2010:RPD

[22] Faina S. Berezovskaya, Baojun Song, and Carlos Castillo-Chavez. Role of prey dispersal and refuges on predator-prey dynamics. *SIAM Journal on Applied Mathematics*, 70(6):1821–1839, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Anderson:2010:DWR

[23] David F. Anderson and Anne Shiu. The dynamics of weakly reversible population processes near facets. *SIAM Journal on Applied Mathematics*, 70 (6):1840–1858, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Craciun:2010:MEC

[24] Gheorghe Craciun and Martin Feinberg. Multiple equilibria in complex chemical reaction networks: Semiopen mass action systems. *SIAM Journal on Applied Mathematics*, 70(6):1859–1877, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hyvonen:2010:FDR

[25] Nuutti Hyvönen, Kimmo Karhunen, and Aku Seppänen. Fréchet derivative with respect to the shape of an internal electrode in electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 70(6):1878–1898, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ryser:2010:CDB

[26] Marc D. Ryser, Svetlana V. Komarova, and Nilima Nigam. The cellular dynamics of bone remodeling: a mathematical model. *SIAM Journal on Applied Mathematics*, 70(6):1899–1921, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tambaca:2010:MMV

[27] J. Tambača, M. Kosor, S. Čanić, D. Paniagua, and M. D. Mathematical modeling of vascular stents. *SIAM Journal on Applied Mathematics*, 70 (6):1922–1952, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kogan:2010:CIH

[28] Yuri Kogan, Urszula Foryá, Ofir Shukron, Natalie Kronik, and Zvia Agur. Cellular immunotherapy for high grade gliomas: Mathematical analysis deriving efficacious infusion rates based on patient requirements. *SIAM Journal on Applied Mathematics*, 70 (6):1953–1976, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Goodman:2010:BST

[29] Jonathan Goodman and Daniel N. Ostrov. Balancing small transaction costs with loss of optimal allocation in dynamic stock trading strategies. *SIAM Journal on Applied Mathematics*, 70 (6):1977–1998, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lim:2010:TDS

[30] Sookkyung Lim and Eunok Jung. Three-dimensional simulations of a closed valveless pump system immersed in a viscous fluid. *SIAM Journal on Applied Mathematics*, 70(6):1999–2022, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lou:2010:CBM

[31] Yijun Lou and Xiao-Qiang Zhao. A climate-based malaria transmission model with structured vector population. *SIAM Journal on Applied Math-*

ematics, 70(6):2023–2044, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Glasner:2010:SLS

[32] Karl B. Glasner. Spatially localized structures in diblock copolymer mixtures. *SIAM Journal on Applied Mathematics*, 70(6):2045–2074, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cregan:2010:SSL

[33] V. Cregan, S. B. G. O'Brien, and S. McKee. The shape of a small liquid drop on a cone and plate rheometer. *SIAM Journal on Applied Mathematics*, 70(6):2075–2096, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ptashnyk:2010:DMM

[34] Mariya Ptashnyk and Tiina Roose. Derivation of a macroscopic model for transport of strongly sorbed solutes in the soil using homogenization theory. *SIAM Journal on Applied Mathematics*, 70(7):2097–2118, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kirst:2010:PRP

[35] Christoph Kirst and Marc Timme. Partial reset in pulse-coupled oscillators. *SIAM Journal on Applied Mathematics*, 70(7):2119–2149, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ibragimov:2010:SAR

[36] Akif Ibragimov, Laura Ritter, and Jay R. Walton. Stability analysis of a reaction-diffusion system modeling atherogenesis. *SIAM Journal on Applied Mathematics*, 70(7):2150–2185, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Burger:2010:HAP

[37] Raimund Bürger, Rosa Donat, Pep Mulet, and Carlos A. Vega. Hyperbolicity analysis of polydisperse sedimentation models via a secular equation for the flux Jacobian. *SIAM Journal on Applied Mathematics*, 70 (7):2186–2213, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Keeler:2010:SAG

[38] H. P. Keeler and P. G. Taylor. A stochastic analysis of a greedy routing scheme in sensor networks. *SIAM Journal on Applied Mathematics*, 70 (7):2214–2238, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Delon:2010:FTO

[39] Julie Delon, Julien Salomon, and Andrei Sobolevski. Fast transport optimization for Monge costs on the circle. *SIAM Journal on Applied Mathematics*, 70(7):2239–2258, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sun:2010:SCS

[40] Kun Sun, Bo Tian, Wen-Jun Liu, Min Li, Qi-Xing Qu, and Yan Jiang. Symbolic-computation study on the (2+1)-dimensional dispersive long wave system. *SIAM Journal on Applied Mathematics*, 70(7):2259–2272, ????

2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Godin:2010:DBI

[41] Yuri A. Godin and Boris Vainberg. On the determination of the boundary impedance from the far field pattern. *SIAM Journal on Applied Mathematics*, 70(7):2273–2280, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cogan:2010:EBI

[42] N. G. Cogan. An extension of the boundary integral method applied to periodic disinfection of a dynamic biofilm. *SIAM Journal on Applied Mathematics*, 70(7):2281–2307, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Peter:2010:GSA

[43] Malte A. Peter and Michael H. Meylan. A general spectral approach to the time-domain evolution of linear water waves impacting on a vertical elastic plate. *SIAM Journal on Applied Mathematics*, 70(7):2308–2328, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liondas:2010:TIS

[44] C. A. Liondas and D. P. Chrissoulidis. Two-interval Sturm–Liouville theory for the electrostatic potential of a point charge near a dielectric cone. *SIAM Journal on Applied Mathematics*, 70 (7):2329–2352, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hein:2010:ERI

[45] Ricardo Hein, Mario Durán, and Jean-Claude Nédélec. Explicit representation for the infinite-depth two-dimensional free-surface Green's function in linear water-wave theory. *SIAM Journal on Applied Mathematics*, 70 (7):2353–2372, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Akers:2010:TWD

[46] Benjamin Akers and David P. Nicholls. Traveling waves in deep water with gravity and surface tension. *SIAM Journal on Applied Mathematics*, 70 (7):2373–2389, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Akers:2010:DTD

[47] Benjamin Akers and Paul A. Milewski. Dynamics of three-dimensional gravity-capillary solitary waves in deep water. *SIAM Journal on Applied Mathematics*, 70(7):2390–2408, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zammett:2010:MMI

[48] R. J. Zammett and A. C. Fowler. The morphology of the Martian ice caps: a mathematical model of ice-dust kinetics. *SIAM Journal on Applied Mathematics*, 70(7):2409–2433, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2010:IID

[49] Michael Y. Li and Hongying Shu. Impact of intracellular delays and target-cell dynamics on in vivo viral infec-

tions. *SIAM Journal on Applied Mathematics*, 70(7):2434–2448, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Joly:2010:AAW

[50] Patrick Joly and Ricardo Weder. Analysis of acoustic wave propagation in a thin moving fluid. *SIAM Journal on Applied Mathematics*, 70(7):2449–2472, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zabarankin:2010:GAF

[51] M. Zabarankin. Generalized analytic functions in axially symmetric Oseen flows. *SIAM Journal on Applied Mathematics*, 70(7):2473–2508, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Delbary:2010:VMB

[52] F. Delbary, M. Brignone, G. Bozza, R. Aramini, and M. Piana. A visualization method for breast cancer detection using microwaves. *SIAM Journal on Applied Mathematics*, 70 (7):2509–2533, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kokkendorff:2010:IMP

[53] Simon Lyngby Kokkendorff, Jens Starke, and Noemi Hummel. Interacting many-particle systems of different particle types converge to a sorted state. *SIAM Journal on Applied Mathematics*, 70(7):2534–2555, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Harris:2010:GER

[54] Chris Harris, Sam Howison, and Ronnie Sircar. Games with exhaustible resources. *SIAM Journal on Applied Mathematics*, 70(7):2556–2581, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Huang:2010:SSB

[55] Yanghong Huang and Andrea L. Bertozzi. Self-similar blowup solutions to an aggregation equation in R^n. *SIAM Journal on Applied Mathematics*, 70(7):2582–2603, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Arun:2010:ADK

[56] K. R. Arun, M. Lukáčová-Medvi ová, Phoolan Prasad, and S. V. Raghurama Rao. An application of 3-D kinematical conservation laws: Propagation of a 3-D wavefront. *SIAM Journal on Applied Mathematics*, 70 (7):2604–2626, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gonzalez:2010:HDR

[57] O. Gonzalez and J. Li. On the hydrodynamic diffusion of rigid particles of arbitrary shape with application to DNA. *SIAM Journal on Applied Mathematics*, 70(7):2627–2651, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Colombo:2010:PTM

[58] Rinaldo M. Colombo, Francesca Marcellini, and Michel Rascle. A 2-phase traffic model based on a speed bound.

SIAM Journal on Applied Mathematics, 70(7):2652–2666, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Keller:2010:PM

[59] Joseph B. Keller. Ponytail motion. *SIAM Journal on Applied Mathematics*, 70(7):2667–2672, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dai:2010:ABS

[60] Hui-Hui Dai and Fan-Fan Wang. Asymptotic bifurcation solutions for compressions of a clamped nonlinearly elastic rectangle: Transition region and barrelling to a corner-like profile. *SIAM Journal on Applied Mathematics*, 70 (7):2673–2692, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Huang:2010:LFD

[61] Gang Huang, Yasuhiro Takeuchi, and Wanbiao Ma. Lyapunov functionals for delay differential equations model of viral infections. *SIAM Journal on Applied Mathematics*, 70(7):2693–2708, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Haslinger:2010:MFM

[62] J. Haslinger, M. Kočvara, G. Leugering, and M. Stingl. Multidisciplinary free material optimization. *SIAM Journal on Applied Mathematics*, 70(7): 2709–2728, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hall:2010:AAS

[63] Cameron L. Hall, S. Jonathan Chapman, and John R. Ockendon. Asymptotic analysis of a system of algebraic equations arising in dislocation theory. *SIAM Journal on Applied Mathematics*, 70(7):2729–2749, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2010:VFM

[64] Fang Li, Michael K. Ng, and Chunming Li. Variational fuzzy Mumford–Shah model for image segmentation. *SIAM Journal on Applied Mathematics*, 70 (7):2750–2770, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nong:2010:TFE

[65] Kumnit Nong and Daniel M. Anderson. Thin film evolution over a thin porous layer: Modeling a tear film on a contact lens. *SIAM Journal on Applied Mathematics*, 70(7):2771–2795, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Abenda:2010:NSS

[66] S. Abenda, T. Grava, and C. Klein. Numerical solution of the small dispersion limit of the Camassa–Holm and Whitham equations and multiscale expansions. *SIAM Journal on Applied Mathematics*, 70(8):2797–2821, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2010:TPW

[67] Chao-Nien Chen, Shin-Ichiro Ei, and Ya-Ping Lin. Turing patterns and

wavefronts for reaction-diffusion systems in an infinite channel. *SIAM Journal on Applied Mathematics*, 70 (8):2822–2843, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Daly:2010:ETB

[68] K. R. Daly, G. D'Alessandro, and M. Kaczmarek. An efficient $\mathcal{Q}$-tensor-based algorithm for liquid crystal alignment away from defects. *SIAM Journal on Applied Mathematics*, 70(8): 2844–2860, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Flaatten:2010:WPM

[69] Tore Flåtten, Alexandre Morin, and Svend Tollak Munkejord. Wave propagation in multicomponent flow models. *SIAM Journal on Applied Mathematics*, 70(8):2861–2882, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2010:PEE

[70] Jijun Liu, Jinkeun Seo, and EungJe Woo. A posteriori error estimate and convergence analysis for conductivity image reconstruction in MREIT. *SIAM Journal on Applied Mathematics*, 70 (8):2883–2903, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Elliott:2010:SPF

[71] Charles M. Elliott and Björn Stinner. A surface phase field model for two-phase biological membranes. *SIAM Journal on Applied Mathematics*, 70 (8):2904–2928, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2010:DWC

[72] Xianmin Xu and Xiaoping Wang. Derivation of the Wenzel and Cassie equations from a phase field model for two phase flow on rough surface. *SIAM Journal on Applied Mathematics*, 70 (8):2929–2941, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hsu:2010:SPS

[73] Sze-Bi Hsu and Yuan Lou. Single phytoplankton species growth with light and advection in a water column. *SIAM Journal on Applied Mathematics*, 70 (8):2942–2974, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Thompson:2010:GSW

[74] I. Thompson and C. M. Linton. Guided surface waves on one- and two-dimensional arrays of spheres. *SIAM Journal on Applied Mathematics*, 70 (8):2975–2995, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hetmaniuk:2010:ACD

[75] Ulrich Hetmaniuk and Hongyu Liu. On acoustic cloaking devices by transformation media and their simulation. *SIAM Journal on Applied Mathematics*, 70(8):2996–3021, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yang:2010:CSD

[76] Y. Yang, L. K. Gross, and J. Yu. Comparison study of dynamics in one-sided

and two-sided solid-combustion models. *SIAM Journal on Applied Mathematics*, 70(8):3022–3038, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ermentrout:2010:SDT

[77] G. Bard Ermentrout, Jozsi Z. Jalics, and Jonathan E. Rubin. Stimulus-driven traveling solutions in continuum neuronal models with a general smooth firing rate function. *SIAM Journal on Applied Mathematics*, 70 (8):3039–3064, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gautesen:2010:DTD

[78] A. K. Gautesen and L. Ju. Fradkin. Diffraction by a two-dimensional traction-free elastic wedge. *SIAM Journal on Applied Mathematics*, 70 (8):3065–3085, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Golovaty:2010:FRL

[79] Dmitry Golovaty, L. K. Gross, and James T. Joyner. Frontal reaction in a layered polymerizing medium. *SIAM Journal on Applied Mathematics*, 70 (8):3086–3104, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2010:DIO

[80] Xiaodong Liu and Bo Zhang. Direct and inverse obstacle scattering problems in a piecewise homogeneous medium. *SIAM Journal on Applied Mathematics*, 70(8):3105–3120, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zou:2010:ASM

[81] Lan Zou, Shigui Ruan, and Weinian Zhang. An age-structured model for the transmission dynamics of hepatitis B. *SIAM Journal on Applied Mathematics*, 70(8):3121–3139, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sheng:2010:CTS

[82] Wancheng Sheng, Guodong Wang, and Tong Zhang. Critical transonic shock and supersonic bubble in oblique rarefaction wave reflection along a compressive corner. *SIAM Journal on Applied Mathematics*, 70(8):3140–3155, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2010:CSF

[83] Zhuchun Li and Xiaoping Xue. Cucker–Smale flocking under rooted leadership with fixed and switching topologies. *SIAM Journal on Applied Mathematics*, 70(8):3156–3174, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Szomolay:2010:AAR

[84] Barbara Szomolay, Isaac Klapper, and Martin Dindos. Analysis of adaptive response to dosing protocols for biofilm control. *SIAM Journal on Applied Mathematics*, 70(8):3175–3202, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Massot:2010:RMM

[85] Marc Massot, Frédérique Laurent, Damien Kah, and Stéphane de Chaisemartin. A robust moment method

for evaluation of the disappearance rate of evaporating sprays. *SIAM Journal on Applied Mathematics*, 70 (8):3203–3234, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bagarello:2010:OLD

[86] Fabio Bagarello and Francesco Oliveri. An operator-like description of love affairs. *SIAM Journal on Applied Mathematics*, 70(8):3235–3251, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Glover:2010:NMM

[87] Kristoffer J. Glover, Peter W. Duck, and David P. Newton. On nonlinear models of markets with finite liquidity: Some cautionary notes. *SIAM Journal on Applied Mathematics*, 70 (8):3252–3271, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v70/i8/p3252_s1`.

Briane:2010:NBS

[88] Marc Briane and Graeme W. Milton. New bounds on strong field magnetotransport in multiphase columnar composites. *SIAM Journal on Applied Mathematics*, 70(8):3272–3286, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v70/i8/p3272_s1`.

El-Rabii:2010:PFP

[89] Hazem El-Rabii, Guy Joulin, and Kirill A. Kazakov. Premixed flame propagation in channels of varying width. *SIAM Journal on Applied Mathematics*, 70(8):3287–3318, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v70/i8/p3287_s1`.

Baruch:2010:SSB

[90] G. Baruch, G. Fibich, and E. Mandelbaum. Singular solutions of the biharmonic nonlinear Schrödinger equation. *SIAM Journal on Applied Mathematics*, 70(8):3319–3341, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v70/i8/p3319_s1`.

Nachman:2010:RPC

[91] Adrian Nachman, Alexandru Tamasan, and Alexandre Timonov. Reconstruction of planar conductivities in subdomains from incomplete data. *SIAM Journal on Applied Mathematics*, 70 (8):3342–3362, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v70/i8/p3342_s1`.

Gaubert:2011:FLC

[92] Laurent Gaubert. Frequency locking in countable cellular systems, localization of (asymptotic) quasi-periodic solutions of autonomous differential systems. *SIAM Journal on Applied Mathematics*, 71(1):1–19, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p1_s1`.

Barg:2011:MEC

[93] Michael C. Barg, Jieun Lee, and Frank Baginski. Modeling the equilibrium configuration of a piecewise-orthotropic pneumatic envelope with applications to pumpkin-shaped balloons. *SIAM Journal on Applied Mathematics*, 71(1):20–40, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p20_s1`.

Flaatten:2011:SEP

[94] Tore Flåtten, Alexandre Morin, and Svend Tollak Munkejord. On solutions to equilibrium problems for systems of stiffened gases. *SIAM Journal on Applied Mathematics*, 71(1):41–67, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p41_s1`.

Ammari:2011:ISP

[95] Habib Ammari, Josselin Garnier, Hyonbae Kang, Won-Kwang Park, and Knut Sølna. Imaging schemes for perfectly conducting cracks. *SIAM Journal on Applied Mathematics*, 71(1):68–91, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p68_s1`.

Atkinson:2011:RST

[96] Colin Atkinson and Adel Osseiran. Rational solutions for the time-fractional diffusion equation. *SIAM Journal on Applied Mathematics*, 71(1):92–106, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p92_s1`.

Blandin:2011:GPT

[97] S. Blandin, D. Work, P. Goatin, B. Piccoli, and A. Bayen. A general phase transition model for vehicular traffic. *SIAM Journal on Applied Mathematics*, 71(1):107–127, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p107_s1`.

Angeli:2011:PRC

[98] David Angeli, Patrick De Leenheer, and Eduardo D. Sontag. Persistence results for chemical reaction networks with time-dependent kinetics and no global conservation laws. *SIAM Journal on Applied Mathematics*, 71 (1):128–146, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p128_s1`.

Wang:2011:NTD

[99] Wendi Wang and Xiao-Qiang Zhao. A nonlocal and time-delayed reaction-diffusion model of dengue transmission. *SIAM Journal on Applied Mathematics*, 71(1):147–168, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p147_s1`.

Kuwamura:2011:DPD

[100] Masataka Kuwamura and Takefumi Nakazawa. Dormancy of predators

dependent on the rate of variation in prey density. *SIAM Journal on Applied Mathematics*, 71(1):169–179, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p169_s1`.

Goudon:2011:VVR

[101] T. Goudon, J. Nieto, O. Sánchez, and J. Soler. Vanishing viscosity regimes and nonstandard shock relations for semiconductor superlattices models. *SIAM Journal on Applied Mathematics*, 71(1):180–199, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p180_s1`.

Chapman:2011:UMS

[102] S. J. Chapman and S. E. McBurnie. A unified multiple-scales approach to one-dimensional composite materials and multiphase flow. *SIAM Journal on Applied Mathematics*, 71(1):200–217, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p200_s1`.

Liu:2011:AEC

[103] Hongyu Liu and Ting Zhou. On approximate electromagnetic cloaking by transformation media. *SIAM Journal on Applied Mathematics*, 71(1):218–241, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p218_s1`.

Ali:2011:BML

[104] Amir Ali, Hadi Susanto, and Jonathan A. D. Wattis. Breathing modes of long Josephson junctions with phase-shifts. *SIAM Journal on Applied Mathematics*, 71(1):242–269, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p242_s1`.

Cox:2011:SOC

[105] Stephen M. Cox, Meng Tong Tan, and Jun Yu. A second-order class-D audio amplifier. *SIAM Journal on Applied Mathematics*, 71(1):270–287, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p270_s1`.

Kampen:2011:GRP

[106] Jörg Kampen. Global regularity and probabilistic schemes for free boundary surfaces of multivariate American derivatives and their Greeks. *SIAM Journal on Applied Mathematics*, 71 (1):288–308, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p288_s1`.

Petra:2011:MDO

[107] Noemi Petra, John Zweck, Susan E. Minkoff, Anatoliy A. Kosterev, and James H. Doty III. Modeling and design optimization of a resonant optothermoacoustic trace gas sensor. *SIAM Journal on Applied Mathematics*, 71(1):309–332, ???? 2011. CODEN

SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p309_s1.

Yang:2011:SHB

[108] Shan Yang, Georg Stadler, Robert Moser, and Omar Ghattas. A shape Hessian-based boundary roughness analysis of Navier–Stokes flow. *SIAM Journal on Applied Mathematics*, 71 (1):333–355, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p333_s1.

Dontsov:2011:ELF

[109] E. V. Dontsov and B. B. Guzina. Effect of low-frequency modulation on the acoustic radiation force in Newtonian fluids. *SIAM Journal on Applied Mathematics*, 71(1):356–378, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i1/p356_s1.

Bressloff:2011:TDB

[110] Paul C. Bressloff and Zachary P. Kilpatrick. Two-dimensional bumps in piecewise smooth neural fields with synaptic depression. *SIAM Journal on Applied Mathematics*, 71(2):379–408, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p379_s1.

Friis:2011:GWS

[111] Helmer André Friis and Steinar Evje. Global weak solutions for a gas-liquid model with external forces and general pressure law. *SIAM Journal on Applied Mathematics*, 71(2):409–442, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p409_s1.

Duran:2011:OTH

[112] Mario Durán, Ignacio Muga, and Jean-Claude Nédélec. The outgoing time-harmonic elastic wave in a half-plane with free boundary. *SIAM Journal on Applied Mathematics*, 71(2):443–464, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p443_s1.

Passerini:2011:TRS

[113] A. Passerini, C. Ferrario, M. Ruzicka, and G. Thäter. Theoretical results on steady convective flows between horizontal coaxial cylinders. *SIAM Journal on Applied Mathematics*, 71 (2):465–486, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p465_s1.

Bourouiba:2011:IMB

[114] Lydia Bourouiba, Stephen A. Gourley, Rongsong Liu, and Jianhong Wu. The interaction of migratory birds and domestic poultry and its role in sustaining avian influenza. *SIAM Journal*

on Applied Mathematics, 71(2):487–516, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p487_s1`.

Kimura:2011:AFL

[115] Toshikazu Kimura. American fractional lookback options: Valuation and premium decomposition. *SIAM Journal on Applied Mathematics*, 71 (2):517–539, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p517_s1`.

Bennetts:2011:WAT

[116] Luke G. Bennetts. Wave attenuation through multiple rows of scatterers with differing periodicities. *SIAM Journal on Applied Mathematics*, 71 (2):540–558, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p540_s1`.

Fikioris:2011:EUO

[117] George Fikioris, Panagiotis J. Papakanellos, Themistoklis K. Mavrogordatos, Nikolaos Lafkas, and Demosthenes Koulikas. Eliminating unphysical oscillations arising in Galerkin solutions to classical integral equations of antenna theory: An asymptotic study. *SIAM Journal on Applied Mathematics*, 71(2):559–585, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p559_s1`.

Rao:2011:ORA

[118] Murali Rao, Tathagata D. Goswami, Joseph Glover, and John M. Shea. On the optimal receiver activation function for distance-based geographic transmissions. *SIAM Journal on Applied Mathematics*, 71(2):586–604, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p586_s1`.

Ambrosi:2011:ECC

[119] D. Ambrosi, G. Arioli, F. Nobile, and A. Quarteroni. Electromechanical coupling in cardiac dynamics: The active strain approach. *SIAM Journal on Applied Mathematics*, 71(2):605–621, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p605_s1`.

Sample:2011:MCO

[120] Christine Sample and Alexander A. Golovin. Morphological and chemical oscillations in a double-membrane system. *SIAM Journal on Applied Mathematics*, 71(2):622–634, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p622_s1`.

Costabel:2011:KMI

[121] Martin Costabel and Frédérique Le Louër. On the Kleinman–Martin integral equation method for electromagnetic scattering by a dielectric body.

SIAM Journal on Applied Mathematics, 71(2):635–656, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i2/p635_s1`.

Richardson:2011:DBE

[122] G. Richardson and S. J. Chapman. Derivation of the bidomain equations for a beating heart with a general microstructure. *SIAM Journal on Applied Mathematics*, 71(3):657–675, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p657_s1`.

Ammari:2011:ROA

[123] Habib Ammari, Emmanuel Bossy, Vincent Jugnon, and Hyeonbae Kang. Reconstruction of the optical absorption coefficient of a small absorber from the absorbed energy density. *SIAM Journal on Applied Mathematics*, 71 (3):676–693, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p676_s1`.

Kon:2011:ASL

[124] Ryusuke Kon. Age-structured Lotka–Volterra equations for multiple semelparous populations. *SIAM Journal on Applied Mathematics*, 71(3):694–713, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p694_s1`.

Lipkova:2011:ABD

[125] Jana Lipková, Konstantinos C. Zygalakis, S. Jonathan Chapman, and Radek Erban. Analysis of Brownian dynamics simulations of reversible bimolecular reactions. *SIAM Journal on Applied Mathematics*, 71(3):714–730, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p714_s1`.

Biscari:2011:CRF

[126] Paolo Biscari, Sara Minisini, Dario Pierotti, Gianmaria Verzini, and Paolo Zunino. Controlled release with finite dissolution rate. *SIAM Journal on Applied Mathematics*, 71(3):731–752, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p731_s1`.

Arens:2011:DIM

[127] Tilo Arens, Drossos Gintides, and Armin Lechleiter. Direct and inverse medium scattering in a three-dimensional homogeneous planar waveguide. *SIAM Journal on Applied Mathematics*, 71(3):753–772, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p753_s1`.

Kampel:2011:TNB

[128] Guido Kampel and Guillermo H. Goldsztein. Transport of non-Brownian particles in porous media. *SIAM*

Journal on Applied Mathematics, 71 (3):773–790, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p773_s1`.

Hoang:2011:LAP

[129] Vu Hoang. The limiting absorption principle for a periodic semi-infinite waveguide. *SIAM Journal on Applied Mathematics*, 71(3):791–810, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p791_s1`.

Kapitula:2011:WDE

[130] Todd Kapitula, Nate De Jong, and Katelyn Plaisier. Wave dynamics in the extended forced Korteweg–de Vries equation. *SIAM Journal on Applied Mathematics*, 71(3):811–828, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p811_s1`.

Asch:2011:RCA

[131] J. Asch, T. Kalvoda, and P. Stovícek. Resonant cyclotron acceleration of particles by a time periodic singular flux tube. *SIAM Journal on Applied Mathematics*, 71(3):829–853, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p829_s1`.

Keener:2011:KSG

[132] James P. Keener, Sarthok Sircar, and Aaron L. Fogelson. Kinetics of swelling gels. *SIAM Journal on Applied Mathematics*, 71(3):854–875, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p854_s1`.

Gray:2011:SDE

[133] A. Gray, D. Greenhalgh, L. Hu, X. Mao, and J. Pan. A stochastic differential equation SIS epidemic model. *SIAM Journal on Applied Mathematics*, 71(3):876–902, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p876_s1`.

Donovan:2011:ISM

[134] Graham M. Donovan and William L. Kath. An iterative stochastic method for simulating large deviations and rare events. *SIAM Journal on Applied Mathematics*, 71(3):903–924, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i3/p903_s1`.

Zabarankin:2011:GAF

[135] Michael Zabarankin and Avinoam Nir. Generalized analytic functions in an extensional Stokes flow with a deformable drop. *SIAM Journal on Applied Mathematics*, 71(4):925–951, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (elec-

tronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p925_s1.

Knowles:2011:CWP

[136] Ian Knowles and Mary A. LaRussa. Conditional well-posedness for an elliptic inverse problem. *SIAM Journal on Applied Mathematics*, 71(4):952–971, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p952_s1.

Al-Musallam:2011:RRI

[137] Fadhel Al-Musallam and Amin Boumenir. Reconstruction of the refraction index in stratified ocean. *SIAM Journal on Applied Mathematics*, 71(4):972–982, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p972_s1.

Dubrovin:2011:NSB

[138] B. Dubrovin, T. Grava, and C. Klein. Numerical study of breakup in generalized Korteweg–de Vries and Kawahara equations. *SIAM Journal on Applied Mathematics*, 71(4):983–1008, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p983_s1.

Garibaldi:2011:ASR

[139] Eduardo Garibaldi and Marcelo Sobottka. Average sex ratio and population maintenance cost. *SIAM Journal on Applied Mathematics*, 71(4):1009–1025, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1009_s1.

Morzfeld:2011:TSO

[140] Matthias Morzfeld, Fai Ma, and Beresford N. Parlett. The transformation of second-order linear systems into independent equations. *SIAM Journal on Applied Mathematics*, 71(4):1026–1043, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1026_s1.

Aramini:2011:RPS

[141] R. Aramini, G. Caviglia, and G. Giorgi. The role of point sources and their power fluxes in the linear sampling method. *SIAM Journal on Applied Mathematics*, 71(4):1044–1069, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1044_s1.

Armbruster:2011:SCL

[142] Dieter Armbruster, Simone Göttlich, and Michael Herty. A scalar conservation law with discontinuous flux for supply chains with finite buffers. *SIAM Journal on Applied Mathematics*, 71(4):1070–1087, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1070_s1.

Spayd:2011:BLE

[143] K. Spayd and M. Shearer. The Buckley–Leverett equation with dynamic capillary pressure. *SIAM Journal on Applied Mathematics*, 71(4): 1088–1108, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1088_s1`.

Petropavlovsky:2011:QLM

[144] S. V. Petropavlovsky and S. V. Tsynkov. Quasi-lacunae of Maxwell's equations. *SIAM Journal on Applied Mathematics*, 71(4):1109–1122, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1109_s1`.

Steele:2011:PAF

[145] Brooke N. Steele, Daniela Valdez-Jasso, Mansoor A. Haider, and Mette S. Olufsen. Predicting arterial flow and pressure dynamics using a 1D fluid dynamics model with a viscoelastic wall. *SIAM Journal on Applied Mathematics*, 71(4):1123–1143, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1123_s1`.

Olivier:2011:GTS

[146] Julien Olivier and Michael Renardy. Glass transition seen through asymptotic expansions. *SIAM Journal on Applied Mathematics*, 71(4):1144–1167, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1144_s1`.

Langlands:2011:FCE

[147] T. A. M. Langlands, B. I. Henry, and S. L. Wearne. Fractional cable equation models for anomalous electrodiffusion in nerve cells: Finite domain solutions. *SIAM Journal on Applied Mathematics*, 71(4):1168–1203, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1168_s1`.

Slater:2011:BSC

[148] D. M. Slater and P. H. Steen. Bifurcation and stability of n coupled droplet oscillators with S_n symmetry. *SIAM Journal on Applied Mathematics*, 71 (4):1204–1219, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1204_s1`.

Guillemin:2011:WMN

[149] Fabrice Guillemin, Charles Knessl, and Johan S. H. van Leeuwaarden. Wireless multihop networks with stealing: Large buffer asymptotics via the ray method. *SIAM Journal on Applied Mathematics*, 71(4):1220–1240, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1220_s1`.

Jin:2011:SIP

[150] Yu Jin and Mark A. Lewis. Seasonal influences on population spread and persistence in streams: Critical domain size. *SIAM Journal on Applied Mathematics*, 71(4):1241–1262, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1241_s1`.

Johnston:2011:WDN

[151] Matthew D. Johnston and David Siegel. Weak dynamical nonemptiability and persistence of chemical kinetics systems. *SIAM Journal on Applied Mathematics*, 71(4):1263–1279, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1263_s1`.

Gourley:2011:SPM

[152] Stephen A. Gourley, Horst R. Thieme, and P. van den Driessche. Stability and persistence in a model for bluetongue dynamics. *SIAM Journal on Applied Mathematics*, 71(4):1280–1306, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1280_s1`.

Dalmao:2011:CSF

[153] Federico Dalmao and Ernesto Mordecki. Cucker–Smale flocking under hierarchical leadership and random interactions. *SIAM Journal on Applied Mathematics*, 71(4):1307–1316, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1307_s1`.

Qin:2011:SEI

[154] Bo Qin, Bo Tian, Wen-Jun Liu, Li-Cai Liu, Qi-Xing Qu, and Hai-Qiang Zhang. Solitonic excitations and interactions in the three-spine α-helical protein with inhomogeneity. *SIAM Journal on Applied Mathematics*, 71 (4):1317–1353, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1317_s1`.

Eloe:2011:ULS

[155] P. Eloe and R. H. Liu. Upper and lower solutions for regime-switching diffusions with applications in financial mathematics. *SIAM Journal on Applied Mathematics*, 71(4):1354–1373, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1354_s1`.

Humphries:2011:FSB

[156] A. R. Humphries, Brian E. Moore, and Erik S. Van Vleck. Front solutions for bistable differential-difference equations with inhomogeneous diffusion. *SIAM Journal on Applied Mathematics*, 71(4):1374–1400, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1374_s1`.

Mori:2011:ABA

[157] Yoichiro Mori, Alexandra Jilkine, and Leah Edelstein-Keshet. Asymptotic and bifurcation analysis of wave-pinning in a reaction-diffusion model for cell polarization. *SIAM Journal on Applied Mathematics*, 71(4):1401–1427, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1401_s1`.

Kolokolnikov:2011:SSS

[158] Theodore Kolokolnikov and Juncheng Wei. Stability of spiky solutions in a competition model with cross-diffusion. *SIAM Journal on Applied Mathematics*, 71(4):1428–1457, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1428_s1`.

DeVille:2011:SST

[159] R. E. Lee DeVille, N. Sri Namachchivaya, and Zoi Rapti. Stability of a stochastic two-dimensional non-Hamiltonian system. *SIAM Journal on Applied Mathematics*, 71(4):1458–1475, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1458_s1`.

Lebensztayn:2011:LTG

[160] E. Lebensztayn, F. P. Machado, and P. M. Rodríguez. Limit theorems for a general stochastic rumour model. *SIAM Journal on Applied Mathematics*, 71(4):1476–1486, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1476_s1`.

Anderson:2011:PGA

[161] David F. Anderson. A proof of the global attractor conjecture in the single linkage class case. *SIAM Journal on Applied Mathematics*, 71(4):1487–1508, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1487_s1`.

Qesmi:2011:HBC

[162] Redouane Qesmi, Susie ElSaadany, Jane Marie Heffernan, and Jianhong Wu. A hepatitis B and C virus model with age since infection that exhibits backward bifurcation. *SIAM Journal on Applied Mathematics*, 71(4):1509–1530, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1509_s1`.

Popovic:2011:SCM

[163] Lea Popovic, Scott A. McKinley, and Michael C. Reed. A stochastic compartmental model for fast axonal transport. *SIAM Journal on Applied Mathematics*, 71(4):1531–1556, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i4/p1531_s1`.

Han:2011:TFX

[164] Weimin Han, Joseph A. Eichholz, Xiaoliang Cheng, and Ge Wang. A theoretical framework of X-ray dark-field tomography. *SIAM Journal on Applied Mathematics*, 71(5):1557–1577, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1557_s1`.

Wall:2011:IPM

[165] David J. N. Wall, Peter Olsson, and Elijah E. W. van Houten. On an inverse problem from magnetic resonance elastic imaging. *SIAM Journal on Applied Mathematics*, 71(5): 1578–1605, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1578_s1`.

Tsai:2011:TWB

[166] Je-Chiang Tsai and James Sneyd. Traveling waves in the buffered FitzHugh–Nagumo model. *SIAM Journal on Applied Mathematics*, 71(5): 1606–1636, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1606_s1`.

Haltmeier:2011:MAI

[167] Markus Haltmeier. A mollification approach for inverting the spherical mean Radon transform. *SIAM Journal on Applied Mathematics*, 71(5): 1637–1652, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1637_s1`.

Lafortune:2011:ILD

[168] S. Lafortune, J. Lega, and S. Madrid. Instability of local deformations of an elastic rod: Numerical evaluation of the Evans function. *SIAM Journal on Applied Mathematics*, 71(5):1653–1672, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1653_s1`.

Chipot:2011:ESM

[169] Christophe Chipot and Tony Lelièvre. Enhanced sampling of multidimensional free-energy landscapes using adaptive biasing forces. *SIAM Journal on Applied Mathematics*, 71(5): 1673–1695, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1673_s1`.

Fontelos:2011:SSB

[170] M. A. Fontelos, J. H. Snoeijer, and J. Eggers. The spatial structure of bubble pinch-off. *SIAM Journal on Applied Mathematics*, 71(5):1696–1716, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1696_s1`.

Peppin:2011:FHC

[171] Stephen Peppin, Apala Majumdar, Robert Style, and Graham Sander. Frost heave in colloidal soils. *SIAM*

Journal on Applied Mathematics, 71 (5):1717–1732, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1717_s1`.

Bao:2011:ILS

[172] Gang Bao and Junshan Lin. Imaging of local surface displacement on an infinite ground plane: The multiple frequency case. *SIAM Journal on Applied Mathematics*, 71(5): 1733–1752, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1733_s1`.

Xu:2011:AWC

[173] Xianmin Xu and Xiaoping Wang. Analysis of wetting and contact angle hysteresis on chemically patterned surfaces. *SIAM Journal on Applied Mathematics*, 71(5):1753–1779, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1753_s1`.

Varslot:2011:WDS

[174] Trond Varslot, J. Héctor Morales, and Margaret Cheney. Waveform design for synthetic-aperture radar imaging through dispersive media. *SIAM Journal on Applied Mathematics*, 71(5): 1780–1800, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1780_s1`.

Lou:2011:GDT

[175] Yuan Lou and Chang-Hong Wu. Global dynamics of a tritrophic model for two patches with cost of dispersal. *SIAM Journal on Applied Mathematics*, 71 (5):1801–1820, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1801_s1`.

Shtylla:2011:MMF

[176] Blerta Shtylla and James P. Keener. A mathematical model for force generation at the kinetochore–microtubule interface. *SIAM Journal on Applied Mathematics*, 71(5):1821–1848, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i5/p1821_s1`.

Colli:2011:WPL

[177] Pierluigi Colli, Gianni Gilardi, Paolo Podio-Guidugli, and Jürgen Sprekels. Well-posedness and long-time behavior for a nonstandard viscous Cahn–Hilliard system. *SIAM Journal on Applied Mathematics*, 71(6):1849–1870, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p1849_s1`.

Ringhofer:2011:SDM

[178] C. Ringhofer. Subband diffusion models for quantum transport in a strong force regime. *SIAM Journal on Applied Mathematics*, 71(6):1871–1895, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p1871_s1.

Liu:2011:PEM

[179] Xiuxiang Liu and Xiao-Qiang Zhao. A periodic epidemic model with age structure in a patchy environment. *SIAM Journal on Applied Mathematics*, 71(6):1896–1917, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p1896_s1.

Doumic:2011:SPM

[180] Marie Doumic, Anna Marciniak-Czochra, Benoît Perthame, and Jorge P. Zubelli. A structured population model of cell differentiation. *SIAM Journal on Applied Mathematics*, 71 (6):1918–1940, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p1918_s1.

Fontelos:2011:EBV

[181] M. A. Fontelos, V. J. García-Garrido, and U. Kindelán. Evolution and breakup of viscous rotating drops. *SIAM Journal on Applied Mathematics*, 71(6):1941–1964, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p1941_s1.

Jiang:2011:ASS

[182] Yu Jiang, Hiroshi Fujiwara, and Gen Nakamura. Approximate steady state models for magnetic resonance elastography. *SIAM Journal on Applied Mathematics*, 71(6):1965–1989, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p1965_s1. See erratum [1069].

Duan:2011:RTI

[183] Ran Duan, Fei Jiang, and Song Jiang. On the Rayleigh–Taylor instability for incompressible, inviscid magnetohydrodynamic flows. *SIAM Journal on Applied Mathematics*, 71(6):1990–2013, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p1990_s1.

Friis:2011:WPC

[184] Helmer André Friis and Steinar Evje. Well-posedness of a compressible gas-liquid model with a friction term important for well control operations. *SIAM Journal on Applied Mathematics*, 71(6):2014–2047, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2014_s1.

Dhia:2011:MAJ

[185] Anne-Sophie Bonnet-Ben Dhia, Benjamin Goursaud, and Christophe Hazard. Mathematical analysis of the junction of two acoustic open waveguides. *SIAM Journal on Applied Mathematics*, 71(6):2048–2071, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2048_s1.

Lai:2011:NNR

[186] Geng Lai and Wancheng Sheng. Nonexistence of the von Neumann reflection configuration for the triple point paradox. *SIAM Journal on Applied Mathematics*, 71(6):2072–2092, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2072_s1.

Li:2011:DBF

[187] Bo Li, Xiaoliang Cheng, and Zhengfang Zhang. Dielectric boundary force in molecular solvation with the Poisson–Boltzmann free energy: a shape derivative approach. *SIAM Journal on Applied Mathematics*, 71(6):2093–2111, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2093_s1.

Ammari:2011:MIE

[188] Habib Ammari, Yves Capdeboscq, Frédéric de Gournay, Anna Rozanova-Pierrat, and Faouzi Triki. Microwave imaging by elastic deformation. *SIAM Journal on Applied Mathematics*, 71 (6):2112–2130, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2112_s1.

Yariv:2011:ICV

[189] Ehud Yariv. Improved current–voltage approximations for currents exceeding the diffusion limit. *SIAM Journal on Applied Mathematics*, 71(6): 2131–2150, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2131_s1.

Sobral:2011:GOS

[190] Yuri D. Sobral and E. John Hinch. Gravitational overturning in stratified particulate flows. *SIAM Journal on Applied Mathematics*, 71(6): 2151–2167, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2151_s1.

Repke:2011:TAB

[191] Sabine Repke, Nicole Marheineke, and René Pinnau. Two adjoint-based optimization approaches for a free surface Stokes flow. *SIAM Journal on Applied Mathematics*, 71(6):2168–2184, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2168_s1.

Negron-Marrero:2011:RVD

[192] Pablo V. Negrón-Marrero and Jeyabal Sivaloganathan. The radial volume derivative and the critical boundary displacement for cavitation. *SIAM Journal on Applied Mathematics*, 71 (6):2185–2204, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2185_s1.

Dondl:2011:CEC

[193] Patrick W. Dondl, Luca Mugnai, and Matthias Röger. Confined elastic curves. *SIAM Journal on Applied Mathematics*, 71(6):2205–2226, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2205_s1`.

Nepomnyashchy:2011:SSC

[194] Alexander Nepomnyashchy and Vladimir Volpert. Special section on controlled drug delivery. *SIAM Journal on Applied Mathematics*, 71(6):2227, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2227_s1`.

Minelli:2011:CDD

[195] Andrea Minelli, Francesco Topputo, and Franco Bernelli-Zazzera. Controlled drug delivery in cancer immunotherapy: Stability, optimization, and Monte Carlo analysis. *SIAM Journal on Applied Mathematics*, 71 (6):2229–2245, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2229_s1`.

Kurbatova:2011:HME

[196] Polina Kurbatova, Samuel Bernard, Nikolai Bessonov, Fabien Crauste, Ivan Demin, Charles Dumontet, Stephan Fischer, and Vitaly Volpert. Hybrid model of erythropoiesis and leukemia treatment with cytosine arabinoside. *SIAM Journal on Applied Mathematics*, 71(6):2246–2268, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2246_s1`.

Blanchet:2011:QMF

[197] Guillaume Blanchet, Michel C. Delfour, and André Garon. Quadratic models to fit experimental data of paclitaxel release kinetics from biodegradable polymers. *SIAM Journal on Applied Mathematics*, 71(6):2269–2286, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2269_s1`.

McCue:2011:ANR

[198] Scott W. McCue, Mike Hsieh, Timothy J. Moroney, and Mark I. Nelson. Asymptotic and numerical results for a model of solvent-dependent drug diffusion through polymeric spheres. *SIAM Journal on Applied Mathematics*, 71 (6):2287–2311, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2287_s1`.

DAngelo:2011:MRS

[199] Carlo D'Angelo, Paolo Zunino, Azzurra Porpora, Stefano Morlacchi, and Francesco Migliavacca. Model reduction strategies enable computational analysis of controlled drug release from cardiovascular stents. *SIAM Journal on Applied Mathematics*, 71(6): 2312–2333, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print),

1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2312_s1.

Amoruso:2011:MES

[200] C. Amoruso, T. Lagache, and D. Holcman. Modeling the early steps of cytoplasmic trafficking in viral infection and gene delivery. *SIAM Journal on Applied Mathematics*, 71(6): 2334–2358, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v71/i6/p2334_s1.

Hu:2012:SSD

[201] Qingwen Hu, Wieslaw Krawcewicz, and Janos Turi. Stabilization in a state-dependent model of turning processes. *SIAM Journal on Applied Mathematics*, 72(1):1–24, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v72/i1/p1_s1.

Huang:2012:LFG

[202] Gang Huang, Xianning Liu, and Yasuhiro Takeuchi. Lyapunov functions and global stability for age-structured HIV infection model. *SIAM Journal on Applied Mathematics*, 72(1):25–38, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v72/i1/p25_s1.

Tilley:2012:GDC

[203] B. S. Tilley, B. Vernescu, and J. D. Plummer. Geometry-driven charge accumulation in electrokinetic flows between thin, closely spaced laminates. *SIAM Journal on Applied Mathematics*, 72(1):39–60, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v72/i1/p39_s1.

Izen:2012:SFD

[204] Steven H. Izen. Sampling in flat detector fan beam tomography. *SIAM Journal on Applied Mathematics*, 72(1):61–84, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v72/i1/p61_s1.

Emami:2012:SSC

[205] Babak Emami, Markus Bussmann, and Honghi N. Tran. A semianalytical solution for a compressible turbulent axisymmetric jet. *SIAM Journal on Applied Mathematics*, 72(1):85–98, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/siap/resource/1/smjmap/v72/i1/p85_s1.

Fehrenbach:2012:GGP

[206] Jérôme Fehrenbach, Frédéric de Gournay, Charles Pierre, and Franck Plouraboué. The generalized Graetz problem in finite domains. *SIAM Journal on Applied Mathematics*, 72(1):99–123, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hunter:2012:SSD

[207] John K. Hunter and Allen M. Tesdall. On the self-similar diffraction of

a weak shock into an expansion wavefront. *SIAM Journal on Applied Mathematics*, 72(1):124–143, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Foster:2012:RIS

[208] J. M. Foster, C. P. Please, A. D. Fitt, and G. Richardson. The reversing of interfaces in slow diffusion processes with strong absorption. *SIAM Journal on Applied Mathematics*, 72 (1):144–162, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mohler:2012:GPK

[209] George O. Mohler and Martin B. Short. Geographic profiling from kinetic models of criminal behavior. *SIAM Journal on Applied Mathematics*, 72(1):163–180, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dai:2012:ESS

[210] Hui-Hui Dai and Xiaochun Peng. Elliptic-spline solutions for large localizations in a circular Blatz–Ko cylinder due to geometric softening. *SIAM Journal on Applied Mathematics*, 72 (1):181–200, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Griffiths:2012:ATR

[211] I. M. Griffiths, C. D. Bain, C. J. W. Breward, S. J. Chapman, P. D. Howell, and S. L. Waters. An asymptotic theory for the re-equilibration of a micellar surfactant solution. *SIAM Journal on Applied Mathematics*, 72 (1):201–215, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Shipman:2012:TRT

[212] Stephen P. Shipman and Hairui Tu. Total resonant transmission and reflection by periodic structures. *SIAM Journal on Applied Mathematics*, 72 (1):216–239, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ablowitz:2012:NWS

[213] Mark J. Ablowitz and Yi Zhu. Nonlinear waves in shallow honeycomb lattices. *SIAM Journal on Applied Mathematics*, 72(1):240–260, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Guo:2012:GDG

[214] Hongbin Guo, Michael Y. Li, and Zhisheng Shuai. Global dynamics of a general class of multistage models for infectious diseases. *SIAM Journal on Applied Mathematics*, 72(1):261–279, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zemlyanova:2012:SSV

[215] A. Y. Zemlyanova and Y. A. Antipov. Single-spiral-vortex model for a cavitating elastic curvilinear foil. *SIAM Journal on Applied Mathematics*, 72 (1):280–298, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sugie:2012:ULC

[216] Jitsuro Sugie and Yasuhisa Saito. Uniqueness of limit cycles in a Rosenzweig-MacArthur model with

prey immigration. *SIAM Journal on Applied Mathematics*, 72(1):299–316, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2012:NSL

[217] Habib Ammari, Elie Bretin, Josselin Garnier, and Abdul Wahab. Noise source localization in an attenuating medium. *SIAM Journal on Applied Mathematics*, 72(1):317–336, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Starosvetsky:2012:SNB

[218] Yuli Starosvetsky, M. Arif Hasan, Alexander F. Vakakis, and Leonid I. Manevitch. Strongly nonlinear beat phenomena and energy exchanges in weakly coupled granular chains on elastic foundations. *SIAM Journal on Applied Mathematics*, 72(1):337–361, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bauer:2012:MAA

[219] Maria Bauer and Ingenuin Gasser. Modeling, asymptotic analysis, and simulation of an energy tower. *SIAM Journal on Applied Mathematics*, 72 (1):362–381, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sun:2012:GBR

[220] Hui Sun, David Uminsky, and Andrea L. Bertozzi. A generalized Birkhoff-Rott equation for two-dimensional active scalar problems. *SIAM Journal on Applied Mathematics*, 72(1):382–404, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Skrynnikov:2012:SIV

[221] Yuri Skrynnikov. Solving initial value problem by matching asymptotic expansions. *SIAM Journal on Applied Mathematics*, 72(1):405–416, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2012:GDH

[222] Tong Li, Ronghua Pan, and Kun Zhao. Global dynamics of a hyperbolic-parabolic model arising from chemotaxis. *SIAM Journal on Applied Mathematics*, 72(1):417–443, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dodwell:2012:SSV

[223] T. J. Dodwell, M. A. Peletier, C. J. Budd, and G. W. Hunt. Self-similar voiding solutions of a single layered model of folding rocks. *SIAM Journal on Applied Mathematics*, 72(1):444–463, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Du:2012:NAN

[224] Qiang Du, James R. Kamm, R. B. Lehoucq, and Michael L. Parks. A new approach for a nonlocal, nonlinear conservation law. *SIAM Journal on Applied Mathematics*, 72(1):464–487, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Givli:2012:SMB

[225] Sefi Givli, Ha Giang, and Kaushik Bhattacharya. Stability of multicomponent biological membranes. *SIAM*

Journal on Applied Mathematics, 72 (2):489–511, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Leugering:2012:ETA

[226] G. Leugering, S. Nazarov, F. Schury, and M. Stingl. The Eshelby Theorem and application to the optimization of an elastic patch. *SIAM Journal on Applied Mathematics*, 72(2):512–534, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Keeler:2012:RTR

[227] H. P. Keeler and P. G. Taylor. Random transmission radii in greedy routing models for ad hoc sensor networks. *SIAM Journal on Applied Mathematics*, 72(2):535–557, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Arnold:2012:UVF

[228] Lilian Arnold and Bastian Harrach. A unified variational formulation for the parabolic-elliptic eddy current equations. *SIAM Journal on Applied Mathematics*, 72(2):558–576, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2012:ESN

[229] Jinglai Li and William L. Kath. Extracting solitons from noisy pulses. *SIAM Journal on Applied Mathematics*, 72(2):577–593, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Calvez:2012:ANM

[230] Vincent Calvez, Rhoda J. Hawkins, Nicolas Meunier, and Raphael Voituriez. Analysis of a nonlocal model for spontaneous cell polarization. *SIAM Journal on Applied Mathematics*, 72 (2):594–622, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Illner:2012:FDE

[231] Reinhard Illner and Geoffrey McGregor. On a functional-differential equation arising from a traffic flow model. *SIAM Journal on Applied Mathematics*, 72(2):623–645, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lakshtanov:2012:HFS

[232] E. Lakshtanov, B. D. Sleeman, and B. Vainberg. High frequency scattering by a classically invisible body. *SIAM Journal on Applied Mathematics*, 72(2):646–669, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jones:2012:SPI

[233] Don A. Jones, Hal L. Smith, Horst R. Thieme, and Gergely Röst. On spread of phage infection of bacteria in a Petri dish. *SIAM Journal on Applied Mathematics*, 72(2):670–688, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Akers:2012:SSD

[234] Benjamin Akers and David P. Nicholls. Spectral stability of deep two-dimensional gravity water waves: Repeated eigenvalues. *SIAM Journal on Applied Mathematics*, 72(2):689–711, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Goldsztein:2012:EFS

[235] Guillermo H. Goldsztein. Effects of the fibers' shape and volume fraction on the strength of ideally plastic fiber reinforced composites. *SIAM Journal on Applied Mathematics*, 72 (3):713–724, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Martin:2012:GIG

[236] P. A. Martin and Stefan G. Llewellyn Smith. Generation of internal gravity waves by an oscillating horizontal elliptical plate. *SIAM Journal on Applied Mathematics*, 72(3):725–739, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ma:2012:SSV

[237] Manjun Ma, Chunhua Ou, and Zhi-An Wang. Stationary solutions of a volume-filling chemotaxis model with logistic growth and their stability. *SIAM Journal on Applied Mathematics*, 72(3):740–766, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lam:2012:IPC

[238] Thomas Lam and Pavlo Pylyavskyy. Inverse problem in cylindrical electrical networks. *SIAM Journal on Applied Mathematics*, 72(3):767–788, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhou:2012:ARM

[239] Tianshou Zhou and Jiajun Zhang. Analytical results for a multistate gene model. *SIAM Journal on Applied Mathematics*, 72(3):789–818, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gao:2012:MMM

[240] Daozhou Gao and Shigui Ruan. A multipatch malaria model with logistic growth populations. *SIAM Journal on Applied Mathematics*, 72(3):819–841, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

He:2012:MEF

[241] Andong He, John Lowengrub, and Andrew Belmonte. Modeling an elastic fingering instability in a reactive Hele–Shaw flow. *SIAM Journal on Applied Mathematics*, 72(3):842–856, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Joshi:2012:SJC

[242] Badal Joshi and Anne Shiu. Simplifying the Jacobian criterion for precluding multistationarity in chemical reaction networks. *SIAM Journal on Applied Mathematics*, 72(3):857–876, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Riaza:2012:MEB

[243] Ricardo Riaza. Manifolds of equilibria and bifurcations without parameters in memristive circuits. *SIAM Journal on Applied Mathematics*, 72 (3):877–896, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Oliveras:2012:RWW

[244] K. L. Oliveras, V. Vasan, B. Deconinck, and D. Henderson. Recovering the water-wave profile from pressure

measurements. *SIAM Journal on Applied Mathematics*, 72(3):897–918, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Epele:2012:GSL

[245] L. N. Epele, H. Fanchiotti, and C. A. García Canal. General solution of Laplace and Poisson equations in a multiply connected circular domain: Applications to torsion. *SIAM Journal on Applied Mathematics*, 72 (3):919–934, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lindsay:2012:MQS

[246] A. E. Lindsay and J. Lega. Multiple quenching solutions of a fourth order parabolic PDE with a singular nonlinearity modeling a MEMS capacitor. *SIAM Journal on Applied Mathematics*, 72(3):935–958, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Feliu:2012:VEC

[247] Elisenda Feliu and Carsten Wiuf. Variable elimination in chemical reaction networks with mass-action kinetics. *SIAM Journal on Applied Mathematics*, 72(4):959–981, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kuegler:2012:SUM

[248] Philipp Kuegler. A sparse update method for solving underdetermined systems of nonlinear equations applied to the manipulation of biological signaling pathways. *SIAM Journal on Applied Mathematics*, 72(4):982–1001, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Castillo-Chavez:2012:GDP

[249] Carlos Castillo-Chavez, Zhilan Feng, and Wenzhang Huang. Global dynamics of a plant-herbivore model with toxin-determined functional response. *SIAM Journal on Applied Mathematics*, 72(4):1002–1020, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jiang:2012:EEC

[250] Xue Jiang and Weiying Zheng. An efficient eddy current model for nonlinear Maxwell equations with laminated conductors. *SIAM Journal on Applied Mathematics*, 72(4):1021–1040, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rees:2012:AAF

[251] Tim Rees, Kevin G. Lamb, and Francis J. Poulin. Asymptotic analysis of the forced internal gravity wave equation. *SIAM Journal on Applied Mathematics*, 72(4):1041–1060, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tang:2012:SBF

[252] Sanyi Tang, Juhua Liang, Yanni Xiao, and Robert A. Cheke. Sliding bifurcations of Filippov two stage pest control models with economic thresholds. *SIAM Journal on Applied Mathematics*, 72(4):1061–1080, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rebelo:2012:MTF

[253] Magda Rebelo, Teresa Diogo, and Sean McKee. A mathematical treatment of the fluorescence capillary-fill device. *SIAM Journal on Applied Mathematics*, 72(4):1081–1112, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Beaumont:2012:PSW

[254] C. Beaumont, J.-B. Burie, A. Ducrot, and P. Zongo. Propagation of salmonella within an industrial hen house. *SIAM Journal on Applied Mathematics*, 72(4):1113–1148, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sprague:2012:DAA

[255] Isaac B. Sprague and Prashanta Dutta. Depth averaged analytic solution for a laminar flow fuel cell with electric double layer effects. *SIAM Journal on Applied Mathematics*, 72(4):1149–1168, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chiricotto:2012:TSG

[256] Maria Chiricotto, Lorenzo Giacomelli, and Giuseppe Tomassetti. Torsion in strain-gradient plasticity: Energetic scale effects. *SIAM Journal on Applied Mathematics*, 72(4):1169–1191, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhou:2012:MSB

[257] Lin Zhou, L. Pamela Cook, and Gareth H. McKinley. Multiple shear-banding transitions for a model of wormlike micellar solutions. *SIAM Journal on Applied Mathematics*, 72 (4):1192–1212, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ai:2012:MSS

[258] Shangbing Ai, Jia Li, and Junliang Lu. Mosquito-stage-structured malaria models and their global dynamics. *SIAM Journal on Applied Mathematics*, 72(4):1213–1237, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Conca:2012:MGS

[259] Carlos Conca, Antoine Laurain, and Rajesh Mahadevan. Minimization of the ground state for two phase conductors in low contrast regime. *SIAM Journal on Applied Mathematics*, 72 (4):1238–1259, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Shlizerman:2012:NAM

[260] Eli Shlizerman, Konrad Schroder, and J. Nathan Kutz. Neural activity measures and their dynamics. *SIAM Journal on Applied Mathematics*, 72 (4):1260–1291, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jouvet:2012:SSI

[261] Guillaume Jouvet and Ed Bueler. Steady, shallow ice sheets as obstacle problems: Well-posedness and finite element approximation. *SIAM Journal on Applied Mathematics*, 72 (4):1292–1314, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bonilla:2012:HOA

[262] L. L. Bonilla, A. Klar, and S. Martin. Higher order averaging of linear Fokker–Planck equations with periodic forcing. *SIAM Journal on Applied Mathematics*, 72(4):1315–1342, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Korzec:2012:HOC

[263] M. D. Korzec and P. Rybka. On a higher order convective Cahn–Hilliard-type equation. *SIAM Journal on Applied Mathematics*, 72(4):1343–1360, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yin:2012:RSR

[264] G. Yin, Guangliang Zhao, and Fuke Wu. Regularization and stabilization of randomly switching dynamic systems. *SIAM Journal on Applied Mathematics*, 72(5):1361–1382, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hu:2012:GSL

[265] Qingwen Hu, Wieslaw Krawcewicz, and Janos Turi. Global stability lobes of turning processes with state-dependent delay. *SIAM Journal on Applied Mathematics*, 72(5):1383–1405, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ilin:2012:SSI

[266] Konstantin Ilin and Andrey Morgulis. On the steady streaming induced by vibrating walls. *SIAM Journal on Applied Mathematics*, 72(5):1406–1427, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Freistuhler:2012:SLD

[267] Heinrich Freistühler, Christian Schmeiser, and Nikolaos Sfakianakis. Stable length distributions in colocalized polymerizing and depolymerizing protein filaments. *SIAM Journal on Applied Mathematics*, 72(5):1428–1448, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bodmann:2012:SRA

[268] Bernhard G. Bodmann and Christopher L. Liner. Spikes, roots, and aliasing: Recovering bandlimited signals from roots of the short-time Fourier transform. *SIAM Journal on Applied Mathematics*, 72(5):1449–1473, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zemlyanova:2012:MCP

[269] A. Y. Zemlyanova and J. R. Walton. Modeling of a curvilinear planar crack with a curvature-dependent surface tension. *SIAM Journal on Applied Mathematics*, 72(5):1474–1492, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

LeLouer:2012:FDE

[270] Frédérique Le Louër. On the Fréchet derivative in elastic obstacle scattering. *SIAM Journal on Applied Mathematics*, 72(5):1493–1507, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kirsch:2012:SRA

[271] Andreas Kirsch and Otmar Scherzer. Simultaneous reconstructions of absorption density and wave speed with photoacoustic measurements. *SIAM Journal on Applied Mathematics*, 72 (5):1508–1523, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Huang:2012:MII

[272] Mingzhan Huang, Jiaxu Li, Xinyu Song, and Hongjian Guo. Modeling impulsive injections of insulin: Towards artificial pancreas. *SIAM Journal on Applied Mathematics*, 72(5):1524–1548, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ha:2012:BAU

[273] Seung-Yeal Ha and Moon-Jin Kang. On the basin of attractors for the unidirectionally coupled Kuramoto model in a ring. *SIAM Journal on Applied Mathematics*, 72(5):1549–1574, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Singh:2012:NBI

[274] Jitendra Singh. A new boundary integral formulation for stream function and vorticity in axisymmetric Stokes flow. *SIAM Journal on Applied Mathematics*, 72(5):1575–1591, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2012:AET

[275] Habib Ammari, Emmanuel Bossy, Josselin Garnier, and Laurent Seppecher. Acousto-electromagnetic tomography. *SIAM Journal on Applied Mathematics*, 72(5):1592–1617, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bordas:2012:BMV

[276] R. M. Bordas, K. Gillow, D. Gavaghan, B. Rodriguez, and D. Kay. A bidomain model of the ventricular specialized conduction system of the heart. *SIAM Journal on Applied Mathematics*, 72 (5):1618–1643, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Friedman:2012:HDA

[277] Avner Friedman and Abdul-Aziz Yakubu. Host demographic Allee effect, fatal disease, and migration: Persistence or extinction. *SIAM Journal on Applied Mathematics*, 72(5):1644–1666, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Daripa:2012:USP

[278] Prabir Daripa and Xueru Ding. Universal stability properties for multilayer Hele–Shaw flows and application to instability control. *SIAM Journal on Applied Mathematics*, 72(5):1667–1685, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ishimoto:2012:CBP

[279] Kenta Ishimoto and Michio Yamada. A coordinate-based proof of the Scallop Theorem. *SIAM Journal on Applied Mathematics*, 72(5):1686–1694, ???? 2012. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lam:2013:UCD

[280] King-Yeung Lam and Wei-Ming Ni. Uniqueness and complete dynamics in heterogeneous competition-diffusion systems. *SIAM Journal on Applied Mathematics*, 72(6):1695–1712, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lund:2013:HRM

[281] Halvor Lund. A hierarchy of relaxation models for two-phase flow. *SIAM Journal on Applied Mathematics*, 72 (6):1713–1741, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mohlenkamp:2013:CIC

[282] Martin J. Mohlenkamp. Capturing the interelectron cusp using a geminal layer on an unconstrained sum of Slater determinants. *SIAM Journal on Applied Mathematics*, 72(6):1742–1771, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gugat:2013:CSD

[283] Martin Gugat. Contamination source determination in water distribution networks. *SIAM Journal on Applied Mathematics*, 72(6):1772–1791, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Richardson:2013:ASM

[284] Giles Richardson, Colin Please, Jamie Foster, and James Kirkpatrick. Asymptotic solution of a model for bilayer organic diodes and solar cells. *SIAM Journal on Applied Mathematics*, 72 (6):1792–1817, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dai:2013:MIG

[285] Shibin Dai and Qiang Du. Motion of interfaces governed by the Cahn–Hilliard equation with highly disparate diffusion mobility. *SIAM Journal on Applied Mathematics*, 72(6):1818–1841, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kim:2013:EUB

[286] Jae Kyoung Kim and Daniel B. Forger. On the existence and uniqueness of biological clock models matching experimental data. *SIAM Journal on Applied Mathematics*, 72(6):1842–1855, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gales:2013:SSC

[287] C. Gales. Structural stability and convergence in piezoelectricity. *SIAM Journal on Applied Mathematics*, 72 (6):1856–1868, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2013:FAC

[288] Li-Lian Wang, Bo Wang, and Xiaodan Zhao. Fast and accurate computation of time-domain acoustic scattering problems with exact nonreflecting boundary conditions. *SIAM Journal on Applied Mathematics*, 72(6):1869–1898, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Campillo-Funollet:2013:MSE

[289] E. Campillo-Funollet, G. Grün, and F. Klingbeil. On modeling and simulation of electrokinetic phenomena in two-phase flow with general mass densities. *SIAM Journal on Applied Mathematics*, 72(6):1899–1925, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Muller:2013:GMA

[290] Stefan Müller and Georg Regensburger. Generalized mass action systems: Complex balancing equilibria and sign vectors of the stoichiometric and kinetic-order subspaces. *SIAM Journal on Applied Mathematics*, 72 (6):1926–1947, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2013:VIS

[291] Bo Li and Yanxiang Zhao. Variational implicit solvation with solute molecular mechanics: From diffuse-interface to sharp-interface models. *SIAM Journal on Applied Mathematics*, 73(1):1–23, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Riva:2013:SPN

[292] Matteo Dalla Riva and Paolo Musolino. A singularly perturbed nonideal transmission problem and application to the effective conductivity of a periodic composite. *SIAM Journal on Applied Mathematics*, 73(1):24–46, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Albrecher:2013:EAR

[293] Hansjörg Albrecher, Corina Constantinescu, Zbigniew Palmowski, Georg Regensburger, and Markus Rosenkranz. Exact and asymptotic results for insurance risk models with surplus-dependent premiums. *SIAM Journal on Applied Mathematics*, 73(1):47–66, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

vanGennip:2013:CDU

[294] Yves van Gennip, Blake Hunter, Raymond Ahn, Peter Elliott, Kyle Luh, Megan Halvorson, Shannon Reid, Matthew Valasik, James Wo, George E. Tita, Andrea L. Bertozzi, and P. Jeffrey Brantingham. Community detection using spectral clustering on sparse geosocial data. *SIAM Journal on Applied Mathematics*, 73(1):67–83, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

ElBadia:2013:IDM

[295] A. El Badia and A. El Hajj. Identification of dislocations in materials from boundary measurements. *SIAM Journal on Applied Mathematics*, 73 (1):84–103, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mori:2013:DMP

[296] Yoichiro Mori, Haoran Chen, Catherine Micek, and Maria-Carme Calderer. A dynamic model of polyelectrolyte gels. *SIAM Journal on Applied Mathematics*, 73(1):104–133, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Batenkov:2013:ASC

[297] Dmitry Batenkov and Yosef Yomdin. On the accuracy of solving confluent Prony systems. *SIAM Journal on Applied Mathematics*, 73(1):134–154, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marzec:2013:EIS

[298] Zachary Marzec, Jonathan Schuster, and Gino Biondini. On the efficiency of importance sampling techniques for polarization-mode dispersion in optical fiber transmission systems. *SIAM Journal on Applied Mathematics*, 73 (1):155–174, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kryeziu:2013:SSN

[299] O. Kryeziu and E. R. Johnson. Subsonic to supersonic nozzle flows. *SIAM Journal on Applied Mathematics*, 73 (1):175–194, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fromion:2013:SGE

[300] Vincent Fromion, Emanuele Leoncini, and Philippe Robert. Stochastic gene expression in cells: a point process approach. *SIAM Journal on Applied Mathematics*, 73(1):195–211, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Giorgi:2013:AIL

[301] Giovanni Giorgi, Massimo Brignone, Riccardo Aramini, and Michele Piana. Application of the inhomogeneous Lippmann–Schwinger equation to inverse scattering problems. *SIAM Journal on Applied Mathematics*, 73 (1):212–231, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chapman:2013:EAT

[302] S. Jonathan Chapman, Philippe H. Trinh, and Thomas P. Witelski. Exponential asymptotics for thin film rupture. *SIAM Journal on Applied Mathematics*, 73(1):232–253, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Escobedo:2013:COP

[303] Ramón Escobedo and Luis A. Fernández. Classical one-phase Stefan problems for describing polymer crystallization processes. *SIAM Journal on Applied Mathematics*, 73(1):254–280, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2013:MMW

[304] Rongsong Liu, Stephen A. Gourley, Donald L. DeAngelis, and John P. Bryant. A mathematical model of woody plant chemical defenses and snowshoe hare feeding behavior in boreal forests: The effect of age-dependent toxicity of twig segments. *SIAM Journal on Applied Mathematics*, 73(1):281–304, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Craciun:2013:PPM

[305] Gheorghe Craciun, Fedor Nazarov, and Casian Pantea. Persistence and permanence of mass-action and power-law dynamical systems. *SIAM Journal on Applied Mathematics*, 73(1):305–329, ????

2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sherratt:2013:PSKa

[306] Jonathan A. Sherratt. Pattern solutions of the Klausmeier model for banded vegetation in semiarid environments IV: Slowly moving patterns and their stability. *SIAM Journal on Applied Mathematics*, 73(1):330–350, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xiao:2013:CMM

[307] Yanyu Xiao and Xingfu Zou. Can multiple malaria species co-persist? *SIAM Journal on Applied Mathematics*, 73 (1):351–373, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Crooks:2013:SEM

[308] Elaine Crooks, Bogdan Kazmierczak, and Tomasz Lipniacki. A spatially extended model of kinase-receptor interaction. *SIAM Journal on Applied Mathematics*, 73(1):374–400, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Goudon:2013:FKM

[309] Thierry Goudon, Mamadou Sy, and Léon M. Tiné. A fluid-kinetic model for particulate flows with coagulation and breakup: Stationary solutions, stability, and hydrodynamic regimes. *SIAM Journal on Applied Mathematics*, 73 (1):401–421, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ghazaryan:2013:SBC

[310] Anna Ghazaryan, Jeffrey Humpherys, and Joshua Lytle. Spectral behavior of combustion fronts with high exothermicity. *SIAM Journal on Applied Mathematics*, 73(1):422–437, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bendali:2013:MJR

[311] Abderrahmane Bendali, M'Barek Fares, Estelle Piot, and Sébastien Tordeux. Mathematical justification of the Rayleigh conductivity model for perforated plates in acoustics. *SIAM Journal on Applied Mathematics*, 73 (1):438–459, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mamode:2013:TPS

[312] Malik Mamode. Two phase Stefan problem with boundary temperature conditions: an analytical approach. *SIAM Journal on Applied Mathematics*, 73(1):460–474, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kang:2013:BVF

[313] Hyeonbae Kang and Graeme W. Milton. Bounds on the volume fractions of two materials in a three-dimensional body from boundary measurements by the translation method. *SIAM Journal on Applied Mathematics*, 73(1):475–492, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deHoop:2013:RGF

[314] Maarten V. de Hoop, Josselin Garnier, Sean F. Holman, and Knut Sølna. Re-

trieval of a Green's function with reflections from partly coherent waves generated by a wave packet using cross correlations. *SIAM Journal on Applied Mathematics*, 73(1):493–522, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2013:ACM

[315] Kuan Xu, M. R. Booty, and M. Siegel. Analytical and computational methods for two-phase flow with soluble surfactant. *SIAM Journal on Applied Mathematics*, 73(1):523–548, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liang:2013:CFS

[316] Jin Liang, Ming Yang, and Lishang Jiang. A closed-form solution for the exercise strategy in a real options model with a jump-diffusion process. *SIAM Journal on Applied Mathematics*, 73(1):549–571, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Demasse:2013:ASW

[317] Ramses Djidjou Demasse and Arnaud Ducrot. An age-structured within-host model for multistrain malaria infections. *SIAM Journal on Applied Mathematics*, 73(1):572–593, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cheng:2013:MCD

[318] Li-Tien Cheng, Bo Li, Michael White, and Shenggao Zhou. Motion of a cylindrical dielectric boundary. *SIAM Journal on Applied Mathematics*, 73(1):594–616, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yang:2013:FMR

[319] Jiaqing Yang, Bo Zhang, and Haiwen Zhang. The factorization method for reconstructing a penetrable obstacle with unknown buried objects. *SIAM Journal on Applied Mathematics*, 73(2):617–635, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gardner:2013:SEE

[320] Carl L. Gardner, Jeremiah R. Jones, Steven M. Baer, and Shaojie Chang. Simulation of the ephaptic effect in the cone–horizontal cell synapse of the retina. *SIAM Journal on Applied Mathematics*, 73(2):636–648, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ceseri:2013:MMS

[321] Maurizio Ceseri and John M. Stockie. A mathematical model of sap exudation in maple trees governed by ice melting, gas dissolution, and osmosis. *SIAM Journal on Applied Mathematics*, 73(2):649–676, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zabarankin:2013:LSD

[322] Michael Zabarankin. A liquid spheroidal drop in a viscous incompressible fluid under a steady electric field. *SIAM Journal on Applied Mathematics*, 73(2):677–699, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lafitte-Godillon:2013:EPD

[323] Pauline Lafitte-Godillon, Kilian Raschel, and Viet Chi Tran. Extinction probabilities for a distylous plant population modeled by an inhomogeneous random walk on the positive quadrant. *SIAM Journal on Applied Mathematics*, 73(2):700–722, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bonnivard:2013:MCR

[324] Matthieu Bonnivard and Dorin Bucur. Microshape control, riblets, and drag minimization. *SIAM Journal on Applied Mathematics*, 73(2):723–740, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bao:2013:MMO

[325] Gang Bao, Di Liu, and Songting Luo. A multiscale method for optical responses of nanostructures. *SIAM Journal on Applied Mathematics*, 73(2):741–756, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cai:2013:ACG

[326] Yongyong Cai and Hanquan Wang. Analysis and computation for ground state solutions of Bose–Fermi mixtures at zero temperature. *SIAM Journal on Applied Mathematics*, 73(2):757–779, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nguyen:2013:LLE

[327] B.-T. Nguyen and D. S. Grebenkov. Localization of Laplacian eigenfunctions in circular, spherical, and elliptical domains. *SIAM Journal on Applied Mathematics*, 73(2):780–803, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dresch:2013:TLM

[328] Jacqueline M. Dresch, Marc A. Thompson, David N. Arnosti, and Chichia Chiu. Two-layer mathematical modeling of gene expression: Incorporating DNA-level information and system dynamics. *SIAM Journal on Applied Mathematics*, 73(2):804–826, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Osting:2013:LLS

[329] Braxton Osting and Michael I. Weinstein. Long-lived scattering resonances and Bragg structures. *SIAM Journal on Applied Mathematics*, 73 (2):827–852, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2013:CTV

[330] Wenjing Zhang, Lindi M. Wahl, and Pei Yu. Conditions for transient viremia in deterministic in-host models: Viral blips need no exogenous trigger. *SIAM Journal on Applied Mathematics*, 73(2):853–881, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

DeMatteis:2013:EFI

[331] Giovanni De Matteis and Gaetano Napoli. Electric-field–induced density modulations in a nematic liquid crystal cell. *SIAM Journal on Applied Mathematics*, 73(2):882–903, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Conway:2013:SAP

[332] Jessica M. Conway, Bernhard P. Konrad, and Daniel Coombs. Stochastic analysis of pre- and postexposure prophylaxis against HIV infection. *SIAM Journal on Applied Mathematics*, 73 (2):904–928, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nave:2013:CHP

[333] Ophir Nave, Suraj Ajadi, Yaron Lehavi, and Vladimir Gol'dshtein. Comparison of the Homotopy Perturbation Method (HPM) and Method of Integral Manifolds (MIM) on a thermal explosion of polydisperse fuel spray system. *SIAM Journal on Applied Mathematics*, 73(2):929–952, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

vanderSchaft:2013:MSB

[334] Arjan van der Schaft, Shodhan Rao, and Bayu Jayawardhana. On the mathematical structure of balanced chemical reaction networks governed by mass action kinetics. *SIAM Journal on Applied Mathematics*, 73(2):953–973, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hennessy:2013:MSA

[335] Matthew G. Hennessy and Andreas Münch. A multiple-scale analysis of evaporation induced Marangoni convection. *SIAM Journal on Applied Mathematics*, 73(2):974–1001, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lin:2013:RFO

[336] Junshan Lin and Fadil Santosa. Resonances of a finite one-dimensional photonic crystal with a defect. *SIAM Journal on Applied Mathematics*, 73 (2):1002–1019, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rundell:2013:IEP

[337] William Rundell and Paul Sacks. An inverse eigenvalue problem for a vibrating string with two Dirichlet spectra. *SIAM Journal on Applied Mathematics*, 73(2):1020–1037, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Balasuriya:2013:CUA

[338] Sanjeeva Balasuriya and Kathrin Padberg-Gehle. Controlling the unsteady analogue of saddle stagnation points. *SIAM Journal on Applied Mathematics*, 73(2):1038–1057, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Magal:2013:TGI

[339] Pierre Magal and Connell McCluskey. Two-group infection age model including an application to nosocomial infection. *SIAM Journal on Applied Mathematics*, 73(2):1058–1095, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Andersson:2013:AFS

[340] L.-E. Andersson, J. R. Barber, and Y.-J. Ahn. Attractors in frictional systems subjected to periodic loads. *SIAM Journal on Applied Mathematics*, 73 (3):1097–1116, ???? 2013. CODEN

SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gottlich:2013:DCL

[341] Simone Göttlich, Axel Klar, and Patrick Schindler. Discontinuous conservation laws for production networks with finite buffers. *SIAM Journal on Applied Mathematics*, 73(3):1117–1138, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Turzi:2013:SAM

[342] S. S. Turzi and T. J. Sluckin. Symmetry adapted molecular-field theory for thermotropic biaxial nematic liquid crystals and its expansion at low temperature. *SIAM Journal on Applied Mathematics*, 73(3):1139–1163, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Figueiredo:2013:PPE

[343] Isabel N. Figueiredo and Carlos Leal. Physiologic parameter estimation using inverse problems. *SIAM Journal on Applied Mathematics*, 73(3):1164–1182, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jachalski:2013:SSL

[344] S. Jachalski, Robert Huth, Georgy Kitavtsev, Dirk Peschka, and Barbara Wagner. Stationary solutions of liquid two-layer thin-film models. *SIAM Journal on Applied Mathematics*, 73 (3):1183–1202, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cousins:2013:NPB

[345] Will Cousins, Pierre A. Gremaud, and Daniel M. Tartakovsky. A new physiological boundary condition for hemodynamics. *SIAM Journal on Applied Mathematics*, 73(3):1203–1223, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Franz:2013:MRD

[346] Benjamin Franz, Mark B. Flegg, S. Jonathan Chapman, and Radek Erban. Multiscale reaction-diffusion algorithms: PDE-assisted Brownian dynamics. *SIAM Journal on Applied Mathematics*, 73(3):1224–1247, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lei:2013:DCD

[347] Jing Lei, Zhu-Yuan Yang, and Ji-Bin Li. Delayed controller design in communication networks via positive output feedback. *SIAM Journal on Applied Mathematics*, 73(3):1248–1259, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Pakdaman:2013:RSS

[348] Khashayar Pakdaman, Benoît Perthame, and Delphine Salort. Relaxation and self-sustained oscillations in the time elapsed neuron network model. *SIAM Journal on Applied Mathematics*, 73 (3):1260–1279, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Shu:2013:GSN

[349] Hongying Shu, Lin Wang, and James Watmough. Global stability of a non-

linear viral infection model with infinitely distributed intracellular delays and CTL immune responses. *SIAM Journal on Applied Mathematics*, 73 (3):1280–1302, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ghazaryan:2013:GCF

[350] Anna Ghazaryan, Stephen Schecter, and Peter L. Simon. Gasless combustion fronts with heat loss. *SIAM Journal on Applied Mathematics*, 73 (3):1303–1326, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bellouquid:2013:HVP

[351] Abdelghani Bellouquid, Juan Calvo, Juan Nieto, and Juan Soler. Hyperbolic versus parabolic asymptotics in kinetic theory toward fluid dynamic models. *SIAM Journal on Applied Mathematics*, 73(4):1327–1346, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sherratt:2013:PSKb

[352] Jonathan A. Sherratt. Pattern solutions of the Klausmeier model for banded vegetation in semiarid environments V: The transition from patterns to desert. *SIAM Journal on Applied Mathematics*, 73(4):1347–1367, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kapitula:2013:KMG

[353] Todd Kapitula, Panayotis G. Kevrekidis, and Dong Yan. The Krein matrix: General theory and concrete applications in atomic Bose–Einstein condensates. *SIAM Journal on Applied Mathematics*, 73(4):1368–1395, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2013:MTI

[354] Zhenli Xu, Yihao Liang, and Xiangjun Xing. Mellin transform and image charge method for dielectric sphere in an electrolyte. *SIAM Journal on Applied Mathematics*, 73(4):1396–1415, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rey:2013:LTB

[355] Thomas Rey and Giuseppe Toscani. Large-time behavior of the solutions to Rosenau-type approximations to the heat equation. *SIAM Journal on Applied Mathematics*, 73(4):1416–1438, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Camiola:2013:CTM

[356] V. D. Camiola and V. Romano. 2DEG–3DEG charge transport model for MOSFET based on the Maximum Entropy Principle. *SIAM Journal on Applied Mathematics*, 73(4):1439–1459, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Roubicek:2013:MRL

[357] Tomás Roubícek, Ondrej Soucek, and Roman Vodicka. A model of rupturing lithospheric faults with reoccurring earthquakes. *SIAM Journal on Applied Mathematics*, 73(4):1460–1488, ???? 2013. CODEN SMJMAP. ISSN

0036-1399 (print), 1095-712X (electronic).

Dobson:2013:RPW

[358] D. C. Dobson, F. Santosa, S. P. Shipman, and M. I. Weinstein. Resonances of a potential well with a thick barrier. *SIAM Journal on Applied Mathematics*, 73(4):1489–1512, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Shuai:2013:GSI

[359] Zhisheng Shuai and P. van den Driessche. Global stability of infectious disease models using Lyapunov functions. *SIAM Journal on Applied Mathematics*, 73(4):1513–1532, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fermo:2013:FDS

[360] Luisa Fermo and Andrea Tosin. A fully-discrete-state kinetic theory approach to modeling vehicular traffic. *SIAM Journal on Applied Mathematics*, 73(4):1533–1556, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Keller:2013:PQE

[361] Johannes Keller and Caroline Lasser. Propagation of quantum expectations with Husimi functions. *SIAM Journal on Applied Mathematics*, 73(4): 1557–1581, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Martin:2013:EWR

[362] Calin Iulian Martin and Bogdan-Vasile Matioc. Existence of Wilton ripples for water waves with constant vorticity and capillary effects. *SIAM Journal on Applied Mathematics*, 73 (4):1582–1595, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Stefanov:2013:CFP

[363] Plamen Stefanov and Gunther Uhlmann. Is a curved flight path in SAR better than a straight one? *SIAM Journal on Applied Mathematics*, 73(4):1596–1612, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bennetts:2013:SAW

[364] Luke G. Bennetts and Malte A. Peter. Spectral analysis of wave propagation through rows of scatterers via random sampling and a coherent potential approximation. *SIAM Journal on Applied Mathematics*, 73(4):1613–1633, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Landi:2013:BSE

[365] Pietro Landi, Fabio Dercole, and Sergio Rinaldi. Branching scenarios in eco-evolutionary prey-predator models. *SIAM Journal on Applied Mathematics*, 73(4):1634–1658, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ts:2013:PEI

[366] Munkh-Erdene Ts, Eunjung Lee, Jin Keun Seo, Bastian Harrach, and Sungwhan Kim. Projective electrical impedance reconstruction with two measurements. *SIAM Journal on Applied Mathematics*, 73(4):1659–1675,

???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Meyer:2013:SMP

[367] Kimberly I. Meyer and Bingtuan Li. A spatial model of plants with an age-structured seed bank and juvenile stage. *SIAM Journal on Applied Mathematics*, 73(4):1676–1702, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chaturapruek:2013:CML

[368] Sorathan Chaturapruek, Jonah Breslau, Daniel Yazdi, Theodore Kolokolnikov, and Scott G. McCalla. Crime modeling with Lévy flights. *SIAM Journal on Applied Mathematics*, 73 (4):1703–1720, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2013:TSS

[369] Jingzhi Li, Hongyu Liu, Zaijiu Shang, and Hongpeng Sun. Two single-shot methods for locating multiple electromagnetic scatterers. *SIAM Journal on Applied Mathematics*, 73(4):1721–1746, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Calvo-Garrido:2013:MAN

[370] M. Carmen Calvo-Garrido, Andrea Pascucci, and Carlos Vázquez. Mathematical analysis and numerical methods for pricing pension plans allowing early retirement. *SIAM Journal on Applied Mathematics*, 73(5):1747–1767, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mercker:2013:MCD

[371] M. Mercker, A. Marciniak-Czochra, T. Richter, and D. Hartmann. Modeling and computing of deformation dynamics of inhomogeneous biological surfaces. *SIAM Journal on Applied Mathematics*, 73(5):1768–1792, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cheng:2013:MMA

[372] Yiming Cheng, Bin Tian, and Robert M. Miura. Mathematical modeling of alternative polyadenylation in the human gene, *CSTF* 3. *SIAM Journal on Applied Mathematics*, 73 (5):1793–1810, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2013:NIE

[373] Haiwen Zhang and Bo Zhang. A novel integral equation for scattering by locally rough surfaces and application to the inverse problem. *SIAM Journal on Applied Mathematics*, 73 (5):1811–1829, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mackey:2013:DBS

[374] M. C. Mackey, M. Tyran-Kamińska, and R. Yvinec. Dynamic behavior of stochastic gene expression models in the presence of bursting. *SIAM Journal on Applied Mathematics*, 73 (5):1830–1852, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Balsim:2013:ACP

[375] Igor Balsim, Shripad Joshi, and David S. Rumschitzki. Analysis and

computation of the pressure field of preatherosclerotic transport in the artery wall. *SIAM Journal on Applied Mathematics*, 73(5):1853–1875, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2013:BIT

[376] Jing Chen, Jicai Huang, Shigui Ruan, and Jihua Wang. Bifurcations of invariant tori in predator-prey models with seasonal prey harvesting. *SIAM Journal on Applied Mathematics*, 73 (5):1876–1905, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Black:2013:MMC

[377] J. P. Black, C. J. W. Breward, P. D. Howell, and R. J. S. Young. Mathematical modeling of contact resistance in silicon photovoltaic cells. *SIAM Journal on Applied Mathematics*, 73 (5):1906–1925, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fikioris:2013:SWS

[378] George Fikioris, Panagiotis J. Papakanellos, and Themistoklis K. Mavrogordatos. Surface-wave and superdirectivity aspects of effective current for linear antennas. *SIAM Journal on Applied Mathematics*, 73(5):1926–1940, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Prigiobbe:2013:HTF

[379] Valentina Prigiobbe, Marc A. Hesse, and Steven L. Bryant. Hyperbolic theory for flow in permeable media with pH-dependent adsorption. *SIAM Journal on Applied Mathematics*, 73 (5):1941–1957, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ablowitz:2013:NWP

[380] Mark J. Ablowitz and Yi Zhu. Nonlinear wave packets in deformed honeycomb lattices. *SIAM Journal on Applied Mathematics*, 73(6):1959–1979, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schmidt:2013:UAT

[381] K. Schmidt and A. Chernov. A unified analysis of transmission conditions for thin conducting sheets in the time-harmonic eddy current model. *SIAM Journal on Applied Mathematics*, 73 (6):1980–2003, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

McGinty:2013:MAW

[382] Sean McGinty, Sean McKee, Roger M. Wadsworth, and Christopher McCormick. Modeling arterial wall drug concentrations following the insertion of a drug-eluting stent. *SIAM Journal on Applied Mathematics*, 73(6):2004–2028, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hall:2013:MCR

[383] Cameron L. Hall, Dominic Vella, and Alain Goriely. The mechanics of a chain or ring of spherical magnets. *SIAM Journal on Applied Mathematics*, 73 (6):2029–2054, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2013:ENC

[384] Habib Ammari, Hyeonbae Kang, Hyundae Lee, Mikyoung Lim, and Sanghyeon Yu. Enhancement of near cloaking for the full Maxwell equations. *SIAM Journal on Applied Mathematics*, 73(6):2055–2076, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2013:RDL

[385] Yuxiang Zhang and Xiao-Qiang Zhao. A reaction-diffusion Lyme disease model with seasonality. *SIAM Journal on Applied Mathematics*, 73(6):2077–2099, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bao:2013:DRS

[386] Weizhu Bao, Huaiyu Jian, Norbert J. Mauser, and Yong Zhang. Dimension reduction of the Schrödinger equation with Coulomb and anisotropic confining potentials. *SIAM Journal on Applied Mathematics*, 73(6):2100–2123, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Vaughan:2013:MOM

[387] Benjamin L. Vaughan, Jr., Ruth E. Baker, David Kay, and Philip K. Maini. A modified Oster–Murray–Harris mechanical model of morphogenesis. *SIAM Journal on Applied Mathematics*, 73(6):2124–2142, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yariv:2013:EDD

[388] Ehud Yariv and Dov Rhodes. Electrohydrodynamic drop deformation by strong electric fields: Slender-body analysis. *SIAM Journal on Applied Mathematics*, 73(6):2143–2161, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bao:2013:NFI

[389] Gang Bao and Peijun Li. Near-field imaging of infinite rough surfaces. *SIAM Journal on Applied Mathematics*, 73(6):2162–2187, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gu:2013:NAD

[390] Yiqi Gu and Xiaoliang Cheng. A numerical approach for defect modes localization in an inhomogeneous medium. *SIAM Journal on Applied Mathematics*, 73(6):2188–2202, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Shklyaev:2013:OLM

[391] Sergey Shklyaev, Alexander A. Nepomnyashchy, and Alexander Oron. Oscillatory longwave Marangoni convection in a binary liquid: Rhombic patterns. *SIAM Journal on Applied Mathematics*, 73(6):2203–2223, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hu:2013:MBT

[392] Huiyi Hu, Thomas Laurent, Mason A. Porter, and Andrea L. Bertozzi. A method based on total variation for network modularity optimization using the MBO scheme. *SIAM Journal on Applied Mathematics*, 73(6):2224–2246, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hirokawa:2013:ODT

[393] Masao Hirokawa and Takuya Kosaka. One-dimensional tunnel-junction formula for the Schrödinger particle. *SIAM Journal on Applied Mathematics*, 73(6):2247–2261, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Song:2013:CPI

[394] Yizhuang Song and Jin Keun Seo. Conductivity and permittivity image reconstruction at the Larmor frequency using MRI. *SIAM Journal on Applied Mathematics*, 73(6):2262–2280, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mikucki:2014:EFC

[395] Michael Mikucki and Y. C. Zhou. Electrostatic forces on charged surfaces of bilayer lipid membranes. *SIAM Journal on Applied Mathematics*, 74(1):1–21, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Monache:2014:POM

[396] M. L. Delle Monache, J. Reilly, S. Samaranayake, W. Krichene, P. Goatin, and A. M. Bayen. A PDE–ODE model for a junction with ramp buffer. *SIAM Journal on Applied Mathematics*, 74(1):22–39, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Berselli:2014:PVF

[397] Luigi C. Berselli, Francesca Guerra, Barbara Mazzolai, and Edoardo Sinibaldi. Pulsatile viscous flows in elliptical vessels and annuli: Solution to the inverse problem, with application to blood and cerebrospinal fluid flow. *SIAM Journal on Applied Mathematics*, 74(1):40–59, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hermanns:2014:AAV

[398] Miguel Hermanns and José Miguel Pérez. Asymptotic analysis of vertical geothermal boreholes in the limit of slowly varying heat injection rates. *SIAM Journal on Applied Mathematics*, 74(1):60–82, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bronski:2014:STD

[399] Jared C. Bronski and Lee DeVille. Spectral theory for dynamics on graphs containing attractive and repulsive interactions. *SIAM Journal on Applied Mathematics*, 74(1):83–105, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yang:2014:RCO

[400] Jiaqing Yang, Bo Zhang, and Haiwen Zhang. Reconstruction of complex obstacles with generalized impedance boundary conditions from far-field data. *SIAM Journal on Applied Mathematics*, 74(1):106–124, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kang:2014:CEF

[401] Hyeonbae Kang, Mikyoung Lim, and KiHyun Yun. Characterization of the electric field concentration between two adjacent spherical perfect conductors. *SIAM Journal on Applied Mathematics*, 74(1):125–146, ???? 2014. CODEN

SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Garvie:2014:IST

[402] Marcus R. Garvie and Catalin Trenchea. Identification of space-time distributed parameters in the Gierer–Meinhardt reaction-diffusion system. *SIAM Journal on Applied Mathematics*, 74(1):147–166, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rombach:2014:CPS

[403] M. Puck Rombach, Mason A. Porter, James H. Fowler, and Peter J. Mucha. Core-periphery structure in networks. *SIAM Journal on Applied Mathematics*, 74(1):167–190, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cain:2014:SIF

[404] John W. Cain. Stability of impulsively forced excitable fibers to perturbations of the forcing period. *SIAM Journal on Applied Mathematics*, 74 (1):191–207, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2014:BDM

[405] Wan Chen, Radek Erban, and S. Jonathan Chapman. From Brownian dynamics to Markov chain: an ion channel example. *SIAM Journal on Applied Mathematics*, 74(1):208–235, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Calderer:2014:EMN

[406] M. C. Calderer, A. DeSimone, D. Golovaty, and A. Panchenko. An effective model for nematic liquid crystal composites with ferromagnetic inclusions. *SIAM Journal on Applied Mathematics*, 74(2):237–262, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kim:2014:NFS

[407] Yongsam Kim, Joohee Lee, and Sookkyung Lim. Nodal flow simulations by the immersed boundary method. *SIAM Journal on Applied Mathematics*, 74(2):263–283, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Guermond:2014:VRE

[408] Jean-Luc Guermond and Bojan Popov. Viscous regularization of the Euler equations and entropy principles. *SIAM Journal on Applied Mathematics*, 74(2):284–305, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dohnal:2014:TSW

[409] Tomás Dohnal. Traveling solitary waves in the periodic nonlinear Schrödinger equation with finite band potentials. *SIAM Journal on Applied Mathematics*, 74(2):306–321, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2014:SSH

[410] Li Wang and Andrea L. Bertozzi. Shock solutions for high concentration particle-laden thin films. *SIAM Journal on Applied Mathematics*, 74

(2):322–344, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Alves:2014:LES

[411] Margareth Alves, Jaime Munñoz Rivera, Mauricio Sepúlveda, and Octavio Vera Villagrán. The lack of exponential stability in certain transmission problems with localized Kelvin–Voigt dissipation. *SIAM Journal on Applied Mathematics*, 74(2):345–365, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bonilla:2014:HOA

[412] L. L. Bonilla, A. Klar, and S. Martin. Higher-order averaging of Fokker–Planck equations for nonlinear fiber lay-down processes. *SIAM Journal on Applied Mathematics*, 74(2):366–391, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klibanov:2014:PIS

[413] Michael V. Klibanov. Phaseless inverse scattering problems in three dimensions. *SIAM Journal on Applied Mathematics*, 74(2):392–410, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Buckwar:2014:ATM

[414] Evelyn Buckwar and Cónall Kelly. Asymptotic and transient mean-square properties of stochastic systems arising in ecology, fluid dynamics, and system control. *SIAM Journal on Applied Mathematics*, 74(2):411–433, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Llibre:2014:GDL

[415] Jaume Llibre and Dongmei Xiao. Global dynamics of a Lotka–Volterra model with two predators competing for one prey. *SIAM Journal on Applied Mathematics*, 74(2):434–453, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Asheim:2014:EUA

[416] Andreas Asheim and Daan Huybrechs. Extraction of uniformly accurate phase functions across smooth shadow boundaries in high frequency scattering problems. *SIAM Journal on Applied Mathematics*, 74(2):454–476, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Panchenko:2014:DMF

[417] Alexander Panchenko, Alexandre Tartakovsky, and Kevin Cooper. Discrete models of fluids: Spatial averaging, closure, and model reduction. *SIAM Journal on Applied Mathematics*, 74(2):477–515, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Coatleven:2014:MMI

[418] Julien Coatléven, Houssem Haddar, and Jing-Rebecca Li. A macroscopic model including membrane exchange for diffusion MRI. *SIAM Journal on Applied Mathematics*, 74(2):516–546, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Faria:2014:SME

[419] Luiz M. Faria, Aslan R. Kasimov, and Rodolfo R. Rosales. Study of a model

equation in detonation theory. *SIAM Journal on Applied Mathematics*, 74 (2):547–570, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kaiser:2014:AAT

[420] Ralf Kaiser and Andreas Tilgner. The axisymmetric antidynamo theorem revisited. *SIAM Journal on Applied Mathematics*, 74(2):571–597, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2014:HAS

[421] Yiming Zhang and Robert M. Corless. High-accuracy series solution for two-dimensional convection in a horizontal concentric cylinder. *SIAM Journal on Applied Mathematics*, 74 (3):599–619, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ferreira:2014:MMC

[422] J. A. Ferreira, M. Grassi, E. Gudiño, and Paula de Oliveira. A 3D model for mechanistic control of drug release. *SIAM Journal on Applied Mathematics*, 74(3):620–633, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2014:CED

[423] Shengqiang Liu, Xinxin Wang, Lin Wang, and Haitao Song. Competitive exclusion in delayed chemostat models with differential removal rates. *SIAM Journal on Applied Mathematics*, 74(3):634–648, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Calderer:2014:LCE

[424] M. Carme Calderer, Carlos A. Garavito Garzón, and Chong Luo. Liquid crystal elastomers and phase transitions in actin rod networks. *SIAM Journal on Applied Mathematics*, 74 (3):649–675, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Han:2014:RTR

[425] Qunhui Han and Pak-Wing Fok. Reconstructing the transition rate function of a Broadwell random walk from exit times. *SIAM Journal on Applied Mathematics*, 74(3):676–696, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mitchell:2014:ANS

[426] S. L. Mitchell and S. B. G. O'Brien. Asymptotic and numerical solutions of a free boundary problem for the sorption of a finite amount of solvent into a glassy polymer. *SIAM Journal on Applied Mathematics*, 74(3):697–723, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bao:2014:NCE

[427] Gang Bao and Hongyu Liu. Nearly cloaking the electromagnetic fields. *SIAM Journal on Applied Mathematics*, 74(3):724–742, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zheng:2014:MWS

[428] Bo Zheng, Moxun Tang, and Jianshe Yu. Modeling *wolbachia* spread in mosquitoes through delay differential equations. *SIAM Journal on Applied Mathematics*, 74(3):743–770, ????

2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2014:GBM

[429] Hailiang Liu, James Ralston, Olof Runborg, and Nicolay M. Tanushev. Gaussian beam methods for the Helmholtz equation. *SIAM Journal on Applied Mathematics*, 74(3):771–793, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Albi:2014:SAF

[430] G. Albi, D. Balagué, J. A. Carrillo, and J. von Brecht. Stability analysis of flock and mill rings for second order models in swarming. *SIAM Journal on Applied Mathematics*, 74(3):794–818, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zigelman:2014:IES

[431] Anna Zigelman, Amy Novick-Cohen, and Arkady Vilenkin. The influence of the exterior surface on grain boundary mobility measurements. *SIAM Journal on Applied Mathematics*, 74 (3):819–843, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Selen:2014:PFS

[432] Jori Selen, Ivo J. B. F. Adan, and Johan S. H. van Leeuwaarden. Product-form solutions for a class of structured multidimensional Markov processes. *SIAM Journal on Applied Mathematics*, 74(3):844–863, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gourley:2014:MMS

[433] Stephen A. Gourley and Yijun Lou. A mathematical model for the spatial spread and biocontrol of the Asian longhorned beetle. *SIAM Journal on Applied Mathematics*, 74(3):864–884, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2014:SWE

[434] Ruo Li, Tiao Lu, and Zhangpeng Sun. Stationary Wigner equation with inflow boundary conditions: Will a symmetric potential yield a symmetric solution? *SIAM Journal on Applied Mathematics*, 74(3):885–897, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lai:2014:MHV

[435] Xiulan Lai and Xingfu Zou. Modeling HIV-1 virus dynamics with both virus-to-cell infection and cell-to-cell transmission. *SIAM Journal on Applied Mathematics*, 74(3):898–917, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gibson:2014:CSL

[436] Peter C. Gibson. The combinatorics of scattering in layered media. *SIAM Journal on Applied Mathematics*, 74 (4):919–938, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kang:2014:BSI

[437] Hyeonbae Kang, Kyoungsun Kim, Hyundae Lee, Xiaofei Li, and Graeme W. Milton. Bounds on the size of an inclusion using the translation

method for two-dimensional complex conductivity. *SIAM Journal on Applied Mathematics*, 74(4):939–958, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fang:2014:SDA

[438] Jian Fang, Kunquan Lan, Gunog Seo, and Jianhong Wu. Spatial dynamics of an age-structured population model of Asian clams. *SIAM Journal on Applied Mathematics*, 74(4):959–979, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zeng:2014:PSD

[439] Yi Zeng and Martin Z. Bazant. Phase separation dynamics in isotropic ion-intercalation particles. *SIAM Journal on Applied Mathematics*, 74(4):980–1004, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Shklyaev:2014:OLM

[440] Sergey Shklyaev, Alexander A. Nepomnyashchy, and Alexander Oron. Oscillatory longwave Marangoni convection in a binary liquid. Part 2: Square patterns. *SIAM Journal on Applied Mathematics*, 74(4):1005–1024, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Flores:2014:DDW

[441] Gilberto Flores. Dynamics of a damped wave equation arising from MEMS. *SIAM Journal on Applied Mathematics*, 74(4):1025–1035, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mamode:2014:QSS

[442] Malik Mamode. Quasi similarity solutions for one phase Stefan problems with time-dependent boundary conditions. *SIAM Journal on Applied Mathematics*, 74(4):1036–1057, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Guzzo:2014:ETV

[443] Massimiliano Guzzo and Elena Lega. Evolution of the tangent vectors and localization of the stable and unstable manifolds of hyperbolic orbits by fast Lyapunov indicators. *SIAM Journal on Applied Mathematics*, 74(4):1058–1086, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schneider:2014:HOM

[444] Florian Schneider, Graham Alldredge, Martin Frank, and Axel Klar. Higher order mixed-moment approximations for the Fokker–Planck equation in one space dimension. *SIAM Journal on Applied Mathematics*, 74(4):1087–1114, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2014:PFM

[445] Zhen Zhang, Xiao-Ping Wang, and Yongli Mi. Phase-field modeling and simulation of the zone melting purification process. *SIAM Journal on Applied Mathematics*, 74(4):1115–1135, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2014:MAT

[446] Jichun Li, Yunqing Huang, Wei Yang, and Aihua Wood. Mathematical analysis and time-domain finite element simulation of carpet cloak. *SIAM Journal on Applied Mathematics*, 74 (4):1136–1151, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jazar:2014:DSI

[447] M. Jazar and R. Monneau. Derivation of seawater intrusion models by formal asymptotics. *SIAM Journal on Applied Mathematics*, 74(4):1152–1173, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chirove:2014:ACL

[448] Faraimunashe Chirove, Sutimin, Edy Soewono, and Nuning Nuraini. Analysis of combined langerhans and $CD4^+$ T cells HIV infection. *SIAM Journal on Applied Mathematics*, 74(4):1174–1193, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marck:2014:WOS

[449] Gilles Marck, Grégoire Nadin, and Yannick Privat. What is the optimal shape of a fin for one-dimensional heat conduction? *SIAM Journal on Applied Mathematics*, 74(4):1194–1218, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Plociniczak:2014:AEK

[450] Lukasz Plociniczak. Approximation of the Erdélyi–Kober operator with application to the time-fractional porous medium equation. *SIAM Journal on Applied Mathematics*, 74(4):1219–1237, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Pender:2014:GCE

[451] Jamol Pender. Gram Charlier expansion for time varying multiserver queues with abandonment. *SIAM Journal on Applied Mathematics*, 74 (4):1238–1265, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Alarcon:2014:SAR

[452] Tomás Alarcón, Philipp Getto, and Yukihiko Nakata. Stability analysis of a renewal equation for cell population dynamics with quiescence. *SIAM Journal on Applied Mathematics*, 74 (4):1266–1297, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Packwood:2014:MTM

[453] Daniel M. Packwood, Tienan Jin, Takeshi Fujita, Mingwei Chen, and Naoki Asao. Mixing time of molecules inside of nanoporous gold. *SIAM Journal on Applied Mathematics*, 74 (4):1298–1314, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bourne:2014:HPS

[454] D. P. Bourne, M. A. Peletier, and S. M. Roper. Hexagonal patterns in a simplified model for block copolymers. *SIAM Journal on Applied Mathematics*, 74 (5):1315–1337, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hohenegger:2014:DRM

[455] Christel Hohenegger, Steve Cook, and Tamar Shinar. Dimensional reduction of a multiscale continuum model of microtubule gliding assays. *SIAM Journal on Applied Mathematics*, 74 (5):1338–1353, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Garon:2014:TDQ

[456] André Garon and Michel C. Delfour. Three-dimensional quadratic model of paclitaxel release from biodegradable polymer films. *SIAM Journal on Applied Mathematics*, 74(5):1354–1374, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kolokolnikov:2014:BMD

[457] Theodore Kolokolnikov, Juncheng Wei, and Adam Alcolado. Basic mechanisms driving complex spike dynamics in a chemotaxis model with logistic growth. *SIAM Journal on Applied Mathematics*, 74(5):1375–1396, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2014:PSS

[458] Bingtuan Li, Sharon Bewick, Jin Shang, and William F. Fagan. Persistence and spread of a species with a shifting habitat edge. *SIAM Journal on Applied Mathematics*, 74(5):1397–1417, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [590].

Kong:2014:SSA

[459] Jude D. Kong, William Davis, Xiong Li, and Hao Wang. Stability and sensitivity analysis of the iSIR model for indirectly transmitted infectious diseases with immunological threshold. *SIAM Journal on Applied Mathematics*, 74 (5):1418–1441, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2014:CDP

[460] Wenjun Zhang, James Sneyd, and Je-Chiang Tsai. Curvature dependence of propagating velocity for a simplified calcium model. *SIAM Journal on Applied Mathematics*, 74(5):1442–1462, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ainseba:2014:ASM

[461] Bedr'Eddine Ainseba, Houssein Ayoub, and Michel Langlais. An age-structured model for T cell homeostasis in vivo. *SIAM Journal on Applied Mathematics*, 74(5):1463–1485, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jadamba:2014:NCI

[462] B. Jadamba, A. A. Khan, G. Rus, M. Sama, and B. Winkler. A new convex inversion framework for parameter identification in saddle point problems with an application to the elasticity imaging inverse problem of predicting tumor location. *SIAM Journal on Applied Mathematics*, 74(5):1486–1510, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klapper:2014:NPA

[463] Isaac Klapper, Jack Dockery, and Hal Smith. Niche partitioning along an

environmental gradient. *SIAM Journal on Applied Mathematics*, 74(5): 1511–1534, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Iams:2014:FSM

[464] Sarah Iams and John Guckenheimer. Flight stability of mosquitos: a reduced model. *SIAM Journal on Applied Mathematics*, 74(5):1535–1550, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Smith:2014:DSP

[465] M. J. A. Smith, M. H. Meylan, and R. C. McPhedran. Density of states for platonic crystals and clusters. *SIAM Journal on Applied Mathematics*, 74 (5):1551–1570, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Perasso:2014:ABN

[466] Antoine Perasso and Ulrich Razafison. Asymptotic behavior and numerical simulations for an infection load-structured epidemiological model: Application to the transmission of prion pathologies. *SIAM Journal on Applied Mathematics*, 74(5):1571–1597, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ferreira:2014:MTV

[467] J. A. Ferreira, Paula de Oliveira, P. M. da Silva, and Laurent Simon. Molecular transport in viscoelastic materials: Mechanistic properties and chemical affinities. *SIAM Journal on Applied Mathematics*, 74(5):1598–1614, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Aftalion:2014:ORS

[468] Amandine Aftalion and J. Frédéric Bonnans. Optimization of running strategies based on anaerobic energy and variations of velocity. *SIAM Journal on Applied Mathematics*, 74 (5):1615–1636, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Smith:2014:GBD

[469] Steven T. Smith. On Gaussian beams described by Jacobi's equation. *SIAM Journal on Applied Mathematics*, 74 (5):1637–1656, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Faye:2014:PLD

[470] Grégory Faye and Jonathan Touboul. Pulsatile localized dynamics in delayed neural field equations in arbitrary dimension. *SIAM Journal on Applied Mathematics*, 74(5):1657–1690, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chung:2014:CDA

[471] Daewon Chung, Hyeonbae Kang, Kyoungsun Kim, and Hyundae Lee. Cloaking due to anomalous localized resonance in plasmonic structures of confocal ellipses. *SIAM Journal on Applied Mathematics*, 74(5):1691–1707, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hong:2014:CTS

[472] John M. Hong, Chien-Chang Yen, and Bo-Chih Huang. Characterization of the transonic stationary solu-

tions of the hydrodynamic escape problem. *SIAM Journal on Applied Mathematics*, 74(6):1709–1741, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Manevitch:2014:NOA

[473] Leonid I. Manevitch and Alexander F. Vakakis. Nonlinear oscillatory acoustic vacuum. *SIAM Journal on Applied Mathematics*, 74(6):1742–1762, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Song:2014:MII

[474] Xinyu Song, Mingzhan Huang, and Jiaxu Li. Modeling impulsive insulin delivery in insulin pump with time delays. *SIAM Journal on Applied Mathematics*, 74(6):1763–1785, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cai:2014:DMP

[475] Liming Cai, Shangbing Ai, and Jia Li. Dynamics of mosquitoes populations with different strategies for releasing sterile mosquitoes. *SIAM Journal on Applied Mathematics*, 74 (6):1786–1809, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Magpantay:2014:ECI

[476] F. M. G. Magpantay, M. A. Riolo, M. Domenech de Cellès, A. A. King, and P. Rohani. Epidemiological consequences of imperfect vaccines for immunizing infections. *SIAM Journal on Applied Mathematics*, 74(6):1810–1830, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hyvonen:2014:OEP

[477] Nuutti Hyvönen, Aku Seppänen, and Stratos Staboulis. Optimizing electrode positions in electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 74(6):1831–1851, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deLuna:2014:TDW

[478] Manuel Quezada de Luna and David I. Ketcheson. Two-dimensional wave propagation in layered periodic media. *SIAM Journal on Applied Mathematics*, 74(6):1852–1869, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mehats:2014:CQT

[479] Florian Méhats, Yannick Privat, and Mario Sigalotti. On the controllability of quantum transport in an electronic nanostructure. *SIAM Journal on Applied Mathematics*, 74(6):1870–1894, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Carter:2014:MST

[480] Paul Carter, Peter Leth Christiansen, Yuri B. Gaididei, Carlos Gorria, Björn Sandstede, Mads Peter Sørensen, and Jens Starke. Multijam solutions in traffic models with velocity-dependent driver strategies. *SIAM Journal on Applied Mathematics*, 74(6):1895–1918, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Alfaro:2014:ESR

[481] Matthieu Alfaro and Rémi Carles. Explicit solutions for replicator-mutator

equations: Extinction versus acceleration. *SIAM Journal on Applied Mathematics*, 74(6):1919–1934, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Foster:2014:MOP

[482] J. M. Foster, H. J. Snaith, T. Leijtens, and G. Richardson. A model for the operation of perovskite based hybrid solar cells: Formulation, analysis, and comparison to experiment. *SIAM Journal on Applied Mathematics*, 74 (6):1935–1966, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Azevedo:2014:URS

[483] A. V. Azevedo, A. J. de Souza, F. Furtado, and D. Marchesin. Uniqueness of the Riemann solution for three-phase flow in a porous medium. *SIAM Journal on Applied Mathematics*, 74 (6):1967–1997, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2014:MAR

[484] Wenjing Zhang, Lindi M. Wahl, and Pei Yu. Modeling and analysis of recurrent autoimmune disease. *SIAM Journal on Applied Mathematics*, 74 (6):1998–2025, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mu:2015:DRW

[485] Gui Mu, Zhenyun Qin, and Roger Grimshaw. Dynamics of rogue waves on a multisoliton background in a vector nonlinear Schrödinger equation. *SIAM Journal on Applied Mathematics*, 75(1):1–20, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zayed:2015:SEC

[486] Ahmed I. Zayed. Solution of the energy concentration problem in reproducing-kernel Hilbert space. *SIAM Journal on Applied Mathematics*, 75(1):21–37, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hennessy:2015:CTT

[487] Matthew G. Hennessy, Victor M. Burlakov, Alain Goriely, Barbara Wagner, and Andreas Münch. Controlled topological transitions in thin-film phase separation. *SIAM Journal on Applied Mathematics*, 75(1):38–60, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brianzoni:2015:LGD

[488] S. Brianzoni, C. Mammana, and E. Michetti. Local and global dynamics in a neoclassical growth model with nonconcave production function and nonconstant population growth rate. *SIAM Journal on Applied Mathematics*, 75(1):61–74, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2015:EBG

[489] Maoxing Liu, Eduardo Liz, and Gergely Röst. Endemic bubbles generated by delayed behavioral response: Global stability and bifurcation switches in an SIS model. *SIAM Journal on Applied Mathematics*, 75 (1):75–91, ???? 2015. CODEN

SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Barannyk:2015:NDW

[490] Lyudmyla L. Barannyk, Demetrios T. Papageorgiou, Peter G. Petropoulos, and Jean-Marc Vanden-Broeck. Nonlinear dynamics and wall touch-up in unstably stratified multilayer flows in horizontal channels under the action of electric fields. *SIAM Journal on Applied Mathematics*, 75(1):92–113, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ji:2015:ESP

[491] Shuguan Ji, Weishi Liu, and Mingji Zhang. Effects of (small) permanent charge and channel geometry on ionic flows via classical Poisson–Nernst–Planck models. *SIAM Journal on Applied Mathematics*, 75(1):114–135, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Biondini:2015:INM

[492] Gino Biondini and Emily Fagerstrom. The integrable nature of modulational instability. *SIAM Journal on Applied Mathematics*, 75(1):136–163, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cheng:2015:ACT

[493] Lei Z. Cheng and Daniel Phillips. An analysis of chevrons in thin liquid crystal cells. *SIAM Journal on Applied Mathematics*, 75(1):164–188, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Murashige:2015:HOD

[494] Sunao Murashige and Wooyoung Choi. High-order Davies' approximation for a solitary wave solution in Packham's complex plane. *SIAM Journal on Applied Mathematics*, 75(1):189–208, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Park:2015:APM

[495] Won-Kwang Park. Asymptotic properties of MUSIC-type imaging in two-dimensional inverse scattering from thin electromagnetic inclusions. *SIAM Journal on Applied Mathematics*, 75 (1):209–228, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fibich:2015:LAF

[496] Gadi Fibich and Nir Gavish. Large asymmetric first-price auctions — a boundary-layer approach. *SIAM Journal on Applied Mathematics*, 75(1): 229–251, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nakamura:2015:RIC

[497] Gen Nakamura and Haibing Wang. Reconstruction of an impedance cylinder at oblique incidence from the far-field data. *SIAM Journal on Applied Mathematics*, 75(1):252–274, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Egger:2015:ICM

[498] Herbert Egger, Jan-Frederik Pietschmann, and Matthias Schlottbom. Identification of chemotaxis models with volume-filling. *SIAM Journal on Applied Mathematics*, 75(2):275–288, ???? 2015.

CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Black:2015:TDM

[499] J. P. Black, C. J. W. Breward, and P. D. Howell. Two-dimensional modeling of electron flow through a poorly conducting layer. *SIAM Journal on Applied Mathematics*, 75(2):289–312, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2015:TDD

[500] Haibing Wang and Jijun Liu. The two-dimensional direct and inverse scattering problems with generalized oblique derivative boundary condition. *SIAM Journal on Applied Mathematics*, 75 (2):313–334, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Antunes:2015:HCD

[501] N. Antunes, G. Jacinto, and A. Pacheco. Hop count distributions of the furthest and nearest distance routing protocols in mobile ad hoc networks. *SIAM Journal on Applied Mathematics*, 75 (2):335–349, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wilkening:2015:STM

[502] Jon Wilkening and Antoine Cerfon. A spectral transform method for singular Sturm–Liouville problems with applications to energy diffusion in plasma physics. *SIAM Journal on Applied Mathematics*, 75(2):350–392, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Blass:2015:DSS

[503] T. Blass, I. Fonseca, G. Leoni, and M. Morandotti. Dynamics for systems of screw dislocations. *SIAM Journal on Applied Mathematics*, 75 (2):393–419, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jabin:2015:CMR

[504] Pierre-Emmanuel Jabin and Stéphane Junca. A continuous model for ratings. *SIAM Journal on Applied Mathematics*, 75(2):420–442, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Vaidya:2015:AID

[505] Naveen K. Vaidya and Lindi M. Wahl. Avian influenza dynamics under periodic environmental conditions. *SIAM Journal on Applied Mathematics*, 75 (2):443–467, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lorig:2015:AEP

[506] Matthew Lorig, Stefano Pagliarani, and Andrea Pascucci. Analytical expansions for parabolic equations. *SIAM Journal on Applied Mathematics*, 75 (2):468–491, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bao:2015:GSD

[507] Weizhu Bao and Yongyong Cai. Ground states and dynamics of spin-orbit-coupled Bose–Einstein condensates. *SIAM Journal on Applied Mathematics*, 75(2):492–517, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klibanov:2015:RDC

[508] Michael V. Klibanov and Nguyen Trung Thành. Recovering dielectric constants of explosives via a globally strictly convex cost functional. *SIAM Journal on Applied Mathematics*, 75(2):518–537, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lin:2015:CSN

[509] Te-Sheng Lin, Marc Pradas, Serafim Kalliadasis, Demetrios T. Papageorgiou, and Dmitri Tseluiko. Coherent structures in nonlocal dispersive active-dissipative systems. *SIAM Journal on Applied Mathematics*, 75(2):538–563, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bagarello:2015:OVA

[510] Fabio Bagarello. An operator view on alliances in politics. *SIAM Journal on Applied Mathematics*, 75(2):564–584, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Huang:2015:GSS

[511] Shou-Jun Huang, Hui-Hui Dai, and De-Xing Kong. Global structure stability for the wave catching-up phenomenon in a prestressed two-material bar. *SIAM Journal on Applied Mathematics*, 75(2):585–604, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cristiani:2015:MRC

[512] Emiliano Cristiani, Fabio S. Priuli, and Andrea Tosin. Modeling rationality to control self-organization of crowds: an environmental approach. *SIAM Journal on Applied Mathematics*, 75 (2):605–629, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Montiel:2015:EDW

[513] Fabien Montiel, Vernon A. Squire, and Luke G. Bennetts. Evolution of directional wave spectra through finite regular and randomly perturbed arrays of scatterers. *SIAM Journal on Applied Mathematics*, 75(2):630–651, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bressloff:2015:SAT

[514] Paul C. Bressloff and Bin Xu. Stochastic active-transport model of cell polarization. *SIAM Journal on Applied Mathematics*, 75(2):652–678, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Reigstad:2015:EUS

[515] Gunhild A. Reigstad. Existence and uniqueness of solutions to the generalized Riemann problem for isentropic flow. *SIAM Journal on Applied Mathematics*, 75(2):679–702, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Frikel:2015:AID

[516] Jürgen Frikel and Eric Todd Quinto. Artifacts in incomplete data tomography with applications to photoacoustic tomography and sonar. *SIAM Journal on Applied Mathematics*, 75 (2):703–725, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bartsch:2015:CPV

[517] Thomas Bartsch and Angela Pistoia. Critical points of the N-vortex Hamiltonian in bounded planar domains and steady state solutions of the incompressible Euler equations. *SIAM Journal on Applied Mathematics*, 75 (2):726–744, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Menacho:2015:CSS

[518] Joaquín Menacho and J. Solà-Morales. Convergence to steady-state and boundary layer profiles in a linear chromatography system. *SIAM Journal on Applied Mathematics*, 75(2):745–761, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Torres:2015:NAV

[519] C. E. Torres, M. Emelianenko, D. Golovaty, D. Kinderlehrer, and S. Ta'asan. Numerical analysis of the vertex models for simulating grain boundary networks. *SIAM Journal on Applied Mathematics*, 75(2):762–786, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Janssen:2015:NHT

[520] A. J. E. M. Janssen, J. S. H. van Leeuwaarden, and B. W. J. Mathijsen. Novel heavy-traffic regimes for large-scale service systems. *SIAM Journal on Applied Mathematics*, 75 (2):787–812, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fan:2015:HMT

[521] Shimao Fan and Daniel B. Work. A heterogeneous multiclass traffic flow model with creeping. *SIAM Journal on Applied Mathematics*, 75(2):813–835, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Morgan:2015:MMS

[522] C. E. Morgan, C. J. W. Breward, I. M. Griffiths, and P. D. Howell. Mathematical modelling of surfactant self-assembly at interfaces. *SIAM Journal on Applied Mathematics*, 75(2):836–860, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hottovy:2015:TMR

[523] Scott Hottovy and Samuel N. Stechmann. Threshold models for rainfall and convection: Deterministic versus stochastic triggers. *SIAM Journal on Applied Mathematics*, 75(2):861–884, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Barker:2015:VHD

[524] Blake Barker, Jeffrey Humpherys, Gregory Lyng, and Kevin Zumbrun. Viscous hyperstabilization of detonation waves in one space dimension. *SIAM Journal on Applied Mathematics*, 75 (3):885–906, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2015:SCS

[525] Bo Li, Hui Sun, and Shenggao Zhou. Stability of a cylindrical solute-solvent

interface: Effect of geometry, electrostatics, and hydrodynamics. *SIAM Journal on Applied Mathematics*, 75 (3):907–928, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Boubendir:2015:RCF

[526] Yassine Boubendir, Víctor Domínguez, David Levadoux, and Catalin Turc. Regularized combined field integral equations for acoustic transmission problems. *SIAM Journal on Applied Mathematics*, 75(3):929–952, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dobberschutz:2015:EBF

[527] Sören Dobberschütz. Effective behavior of a free fluid in contact with a flow in a curved porous medium. *SIAM Journal on Applied Mathematics*, 75 (3):953–977, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2015:MSN

[528] Zhan Wang and Jean-Marc Vanden-Broeck. Multilump symmetric and nonsymmetric gravity-capillary solitary waves in deep water. *SIAM Journal on Applied Mathematics*, 75 (3):978–998, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Forestier–Coste:2015:DFS

[529] L. Forestier-Coste, S. Göttlich, and M. Herty. Data-fitted second-order macroscopic production models. *SIAM Journal on Applied Mathematics*, 75 (3):999–1014, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2015:MMF

[530] Habib Ammari, Elie Bretin, Pierre Millien, Laurent Seppecher, and Jin-Keun Seo. Mathematical modeling in full-field optical coherence elastography. *SIAM Journal on Applied Mathematics*, 75(3):1015–1030, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2015:MMM

[531] Habib Ammari, Eunjung Lee, Hyeuknam Kwon, Jin Keun Seo, and Eung Je Woo. Mathematical modeling of mechanical vibration-assisted conductivity imaging. *SIAM Journal on Applied Mathematics*, 75(3):1031–1046, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Flores:2015:PSM

[532] Salvador Flores and Silvia Jerez. A parabolic system model for the formation of porous silicon: Existence, uniqueness, and stability. *SIAM Journal on Applied Mathematics*, 75(3): 1047–1064, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ko:2015:IBM

[533] William Ko and John M. Stockie. An immersed boundary model of the cochlea with parametric forcing. *SIAM Journal on Applied Mathematics*, 75 (3):1065–1089, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brenna-Medina:2015:SST

[534] V. F. Brenña-Medina, D. Avitabile, A. R. Champneys, and M. J. Ward. Stripe to spot transition in a plant root hair initiation model. *SIAM Journal on Applied Mathematics*, 75 (3):1090–1119, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Reardon:2015:IWU

[535] Michael Reardon and Jun Yu. Interaction of weakly unstable auto-oscillatory modes in a solid propellant combustion model. *SIAM Journal on Applied Mathematics*, 75(3):1120–1141, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2015:SIT

[536] Wendi Wang and Xiao-Qiang Zhao. Spatial invasion threshold of Lyme disease. *SIAM Journal on Applied Mathematics*, 75(3):1142–1170, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sharma:2015:DWS

[537] Basant Lal Sharma. Diffraction of waves on square lattice by semi-infinite crack. *SIAM Journal on Applied Mathematics*, 75(3):1171–1192, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lindsay:2015:TPC

[538] A. E. Lindsay, M. J. Ward, and T. Kolokolnikov. The transition to a point constraint in a mixed biharmonic eigenvalue problem. *SIAM Journal on Applied Mathematics*, 75 (3):1193–1224, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ghazaryan:2015:SAC

[539] A. Ghazaryan, S. Lafortune, and P. McLarnan. Stability analysis for combustion fronts traveling in hydraulically resistant porous media. *SIAM Journal on Applied Mathematics*, 75(3):1225–1244, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2015:QSC

[540] Hongjie Li, Jingzhi Li, and Hongyu Liu. On quasi-static cloaking due to anomalous localized resonance in $\mathbf{R}^3$. *SIAM Journal on Applied Mathematics*, 75(3):1245–1260, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Savina:2015:SCG

[541] T. V. Savina and A. A. Nepomnyashchy. The shape control of a growing air bubble in a Hele–Shaw cell. *SIAM Journal on Applied Mathematics*, 75(3):1261–1274, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brubaker:2015:TDC

[542] N. D. Brubaker and J. Lega. Two-dimensional capillary origami with pinned contact line. *SIAM Journal on Applied Mathematics*, 75(3):1275–1300, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gosse:2015:LIA

[543] Laurent Gosse. Locally inertial approximations of balance laws arising

in $(1 + 1)$-dimensional general relativity. *SIAM Journal on Applied Mathematics*, 75(3):1301–1328, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Frank:2015:NBE

[544] Martin Frank, Kai Krycki, Edward W. Larsen, and Richard Vasques. The nonclassical Boltzmann equation and diffusion-based approximations to the Boltzmann equation. *SIAM Journal on Applied Mathematics*, 75(3):1329–1345, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fogelson:2015:FEP

[545] Aaron L. Fogelson and James P. Keener. A framework for exploring the post-gelation behavior of Ziff and Stell's polymerization models. *SIAM Journal on Applied Mathematics*, 75 (3):1346–1368, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schmuck:2015:HPN

[546] Markus Schmuck and Martin Z. Bazant. Homogenization of the Poisson–Nernst–Planck equations for ion transport in charged porous media. *SIAM Journal on Applied Mathematics*, 75(3):1369–1401, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Perez-Alvarez:2015:RBT

[547] R. Pérez-Álvarez, R. Pernas-Salomón, and V. R. Velasco. Relations between transfer matrices and numerical stability analysis to avoid the Ωd problem. *SIAM Journal on Applied Mathematics*, 75(4):1403–1423, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tran:2015:PMG

[548] Giang Tran, Hayden Schaeffer, William M. Feldman, and Stanley J. Osher. An L^1 penalty method for general obstacle problems. *SIAM Journal on Applied Mathematics*, 75(4):1424–1444, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Angstmann:2015:GCT

[549] C. N. Angstmann, I. C. Donnelly, B. I. Henry, T. A. M. Langlands, and P. Straka. Generalized continuous time random walks, master equations, and fractional Fokker–Planck equations. *SIAM Journal on Applied Mathematics*, 75(4):1445–1468, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tupper:2015:EDS

[550] P. F. Tupper. Exemplar dynamics and sound merger in language. *SIAM Journal on Applied Mathematics*, 75 (4):1469–1492, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2015:PDI

[551] Habib Ammari, Kyungkeun Kang, Kyounghun Lee, and Jin Keun Seo. A pressure distribution imaging technique with a conductive membrane using electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 75(4):1493–1512, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Constantin:2015:PMC

[552] A. Constantin, K. Kalimeris, and O. Scherzer. A penalization method for calculating the flow beneath traveling water waves of large amplitude. *SIAM Journal on Applied Mathematics*, 75 (4):1513–1535, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cox:2015:RCC

[553] Stephen M. Cox and H. du Toit Mouton. Ripple compensation for a class-D amplifier. *SIAM Journal on Applied Mathematics*, 75(4):1536–1552, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Poll:2015:SMB

[554] Daniel Poll and Zachary P. Kilpatrick. Stochastic motion of bumps in planar neural fields. *SIAM Journal on Applied Mathematics*, 75(4):1553–1577, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gonzalez:2015:TST

[555] O. Gonzalez. A theorem on the surface traction field in potential representations of Stokes flow. *SIAM Journal on Applied Mathematics*, 75 (4):1578–1598, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tittelfitz:2015:ISP

[556] Justin Tittelfitz. An inverse source problem for the elastic wave in the lower half-space. *SIAM Journal on Applied Mathematics*, 75(4):1599–1619, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gourley:2015:AAS

[557] Stephen A. Gourley, Rachel Jennings, and Rongsong Liu. An advection and age-structured approach to modeling bird migration and indirect transmission of avian influenza. *SIAM Journal on Applied Mathematics*, 75 (4):1620–1647, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bruna:2015:DSV

[558] Maria Bruna and S. Jonathan Chapman. Diffusion in spatially varying porous media. *SIAM Journal on Applied Mathematics*, 75(4):1648–1674, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2015:ATE

[559] Peijun Li, Li-Lian Wang, and Aihua Wood. Analysis of transient electromagnetic scattering from a three-dimensional open cavity. *SIAM Journal on Applied Mathematics*, 75(4): 1675–1699, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fei:2015:DNI

[560] Mingwen Fei, Wei Wang, Pingwen Zhang, and Zhifei Zhang. Dynamics of the nematic-isotropic sharp interface for the liquid crystal. *SIAM Journal on Applied Mathematics*, 75 (4):1700–1724, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Estrada:2015:PTC

[561] Ernesto Estrada and Francesca Arrigo. Predicting triadic closure in networks using communicability distance functions. *SIAM Journal on Applied Mathematics*, 75(4):1725–1744, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Troy:2015:EEM

[562] William C. Troy. Existence and exact multiplicity of phaselocked solutions of a Kuramoto model of mutually coupled oscillators. *SIAM Journal on Applied Mathematics*, 75(4):1745–1760, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bialecki:2015:SWS

[563] Slawomir Bialecki, Bogdan Kazmierczak, and Je-Chiang Tsai. Stationary waves on the sphere. *SIAM Journal on Applied Mathematics*, 75(4):1761–1788, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tzella:2015:FFC

[564] Alexandra Tzella and Jacques Vanneste. FKPP fronts in cellular flows: The large-Péclet regime. *SIAM Journal on Applied Mathematics*, 75(4):1789–1816, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Stewart:2015:BLP

[565] I. W. Stewart, M. Vynnycky, S. McKee, and M. F. Tomé. Boundary layers in pressure-driven flow in smectic A liquid crystals. *SIAM Journal on Applied Mathematics*, 75(4):1817–1851, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bertsch:2015:FLA

[566] Michiel Bertsch, Josephus Hulshof, and Valeriy M. Prostokishin. Flow laminarization and acceleration by suspended particles. *SIAM Journal on Applied Mathematics*, 75(4):1852–1883, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tabak:2015:SRI

[567] Gil Tabak and Paul J. Atzberger. Stochastic reductions for inertial fluid-structure interactions subject to thermal fluctuations. *SIAM Journal on Applied Mathematics*, 75(4):1884–1914, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sharma:2015:NTF

[568] Basant Lal Sharma. Near-tip field for diffraction on square lattice by crack. *SIAM Journal on Applied Mathematics*, 75(4):1915–1940, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Muscato:2015:ETS

[569] Orazio Muscato and Vincenza Di Stefano. Electrothermal transport in silicon carbide semiconductors via a hydrodynamic model. *SIAM Journal on Applied Mathematics*, 75(4):1941–1964, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Aalto:2015:ISL

[570] Pekka Aalto and Lasse Leskelä. Information spreading in a large population of active transmitters and passive receivers. *SIAM Journal on Applied Mathematics*, 75(5):1965–1982, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fusi:2015:BLE

[571] Lorenzo Fusi, Angiolo Farina, and Giuseppe Saccomandi. Buckley–Leverett equation with viscosities and relative permeabilities depending on pressure. *SIAM Journal on Applied Mathematics*, 75(5):1983–2000, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cai:2015:FMM

[572] Zhenning Cai, Yuwei Fan, and Ruo Li. A framework on moment model reduction for kinetic equation. *SIAM Journal on Applied Mathematics*, 75 (5):2001–2023, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Touboul:2015:NIC

[573] Jonathan D. Touboul, Martin Krupa, and Mathieu Desroches. Noise-induced Canard and mixed-mode oscillations in large-scale stochastic networks. *SIAM Journal on Applied Mathematics*, 75 (5):2024–2049, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lindstrom:2015:AAM

[574] Michael Lindstrom. Asymptotic analysis of a magnetized target fusion reactor. *SIAM Journal on Applied Mathematics*, 75(5):2050–2071, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2015:DSS

[575] Bo Li and Yuan Liu. Diffused solute-solvent interface with Poisson–Boltzmann electrostatics: Free-energy variation and sharp-interface limit. *SIAM Journal on Applied Mathematics*, 75(5):2072–2092, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chesnel:2015:CIC

[576] Lucas Chesnel, Nuutti Hyvönen, and Stratos Staboulis. Construction of indistinguishable conductivity perturbations for the point electrode model in electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 75(5):2093–2109, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Akbari:2015:CSF

[577] Amir Akbari, Reghan J. Hill, and Theo G. M. van de Ven. Catenoid stability with a free contact line. *SIAM Journal on Applied Mathematics*, 75 (5):2110–2127, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ockendon:2015:ODW

[578] H. Ockendon, J. R. Ockendon, C. L. Farmer, and D. J. Allwright. One-dimensional wave dispersion in layered media. *SIAM Journal on Applied Mathematics*, 75(5):2128–2146, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Smith:2015:TWT

[579] Warren R. Smith and Jan G. Wissink. Traveling waves in two-dimensional plane Poiseuille flow. *SIAM Journal on Applied Mathematics*, 75(5):2147–2169, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ray:2015:UFT

[580] Nadja Ray, Tobias Elbinger, and Peter Knabner. Upscaling the flow and transport in an evolving porous medium with general interaction potentials. *SIAM Journal on Applied Mathematics*, 75(5):2170–2192, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kondratiuk:2015:STP

[581] Pawel Kondratiuk and Piotr Szymczak. Steadily translating parabolic dissolution fingers. *SIAM Journal on Applied Mathematics*, 75(5):2193–2213, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bal:2015:RFA

[582] Guillaume Bal, François Monard, and Gunther Uhlmann. Reconstruction of a fully anisotropic elasticity tensor from knowledge of displacement fields. *SIAM Journal on Applied Mathematics*, 75(5):2214–2231, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rundell:2015:RDS

[583] William Rundell. Recovering the density of a string from only lowest frequency data. *SIAM Journal on Applied Mathematics*, 75(5):2232–2245, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Herschlag:2015:ESS

[584] G. Herschlag, J.-G. Liu, and A. T. Layton. An exact solution for Stokes flow in a channel with arbitrarily large wall permeability. *SIAM Journal on Applied Mathematics*, 75(5):2246–2267, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Choi:2015:CTW

[585] Sun-Ho Choi and Yong-Jung Kim. Chemotactic traveling waves by metric of food. *SIAM Journal on Applied Mathematics*, 75(5):2268–2289, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lin:2015:EFE

[586] Junshan Lin and Fernando Reitich. Electromagnetic field enhancement in small gaps: a rigorous mathematical theory. *SIAM Journal on Applied Mathematics*, 75(5):2290–2310, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Monjarret:2015:LWP

[587] Ronan Monjarret. Local well-posedness of the two-layer shallow water model with free surface. *SIAM Journal on Applied Mathematics*, 75(5):2311–2332, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nicola:2015:ODP

[588] Wilten Nicola, Cheng Ly, and Sue Ann Campbell. One-dimensional population

density approaches to recurrently coupled networks of neurons with noise. *SIAM Journal on Applied Mathematics*, 75(5):2333–2360, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dijkstra:2015:DTQ

[589] Henk Dijkstra, Taylan Sengul, Jie Shen, and Shouhong Wang. Dynamic transitions of quasi-geostrophic channel flow. *SIAM Journal on Applied Mathematics*, 75(5):2361–2378, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2015:EPS

[590] Bingtuan Li, Sharon Bewick, Jin Shang, and William F. Fagan. Erratum to: Persistence and Spread of a Species with a Shifting Habitat Edge. *SIAM Journal on Applied Mathematics*, 75 (5):2379–2380, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [458].

Fu:2015:AAP

[591] Y. B. Fu and Z. X. Cai. An asymptotic analysis of the period-doubling secondary bifurcation in a film/substrate bilayer. *SIAM Journal on Applied Mathematics*, 75(6):2381–2395, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jiao:2015:DMT

[592] Feng Jiao, Qiwen Sun, Moxun Tang, Jianshe Yu, and Bo Zheng. Distribution modes and their corresponding parameter regions in stochastic gene transcription. *SIAM Journal on Applied Mathematics*, 75(6):2396–2420, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bonaccorsi:2015:EON

[593] S. Bonaccorsi, S. Ottaviano, D. Mugnolo, and F. De Pellegrini. Epidemic outbreaks in networks with equitable or almost-equitable partitions. *SIAM Journal on Applied Mathematics*, 75 (6):2421–2443, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Thorpe:2015:CMM

[594] Matthew Thorpe, Florian Theil, Adam M. Johansen, and Neil Cade. Convergence of the k-Means Minimization Problem using Γ-convergence. *SIAM Journal on Applied Mathematics*, 75(6):2444–2474, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sandbichler:2015:NCS

[595] M. Sandbichler, F. Krahmer, T. Berer, P. Burgholzer, and M. Haltmeier. A novel compressed sensing scheme for photoacoustic tomography. *SIAM Journal on Applied Mathematics*, 75 (6):2475–2494, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Saumier:2015:OTP

[596] Louis-Philippe Saumier, Boualem Khouider, and Martial Agueh. Optimal transport for particle image velocimetry: Real data and postprocessing algorithms. *SIAM Journal on Applied Mathematics*, 75(6):2495–2514, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

He:2015:MSR

[597] Yuan He, Irene M. Gamba, Heung-Chan Lee, and Kui Ren. On the modeling and simulation of reaction-transfer dynamics in semiconductor-electrolyte solar cells. *SIAM Journal on Applied Mathematics*, 75(6):2515–2539, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Drew:2015:MTS

[598] Donald Drew, Kevin Dolch, and Maury Castro. A model for tempo synchronization in music performance. *SIAM Journal on Applied Mathematics*, 75 (6):2540–2561, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fromion:2015:SMP

[599] Vincent Fromion, Emanuele Leoncini, and Philippe Robert. A stochastic model of the production of multiple proteins in cells. *SIAM Journal on Applied Mathematics*, 75(6):2562–2580, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Stolerman:2015:SNM

[600] Lucas M. Stolerman, Daniel Coombs, and Stefanella Boatto. SIR-network model and its application to dengue fever. *SIAM Journal on Applied Mathematics*, 75(6):2581–2609, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2015:ISP

[601] Yikan Liu, Daijun Jiang, and Masahiro Yamamoto. Inverse source problem for a double hyperbolic equation describing the three-dimensional time cone model. *SIAM Journal on Applied Mathematics*, 75(6):2610–2635, ???? 2015. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Makwana:2016:WMM

[602] M. Makwana, T. Antonakakis, B. Maling, S. Guenneau, and R. V. Craster. Wave mechanics in media pinned at Bravais lattice points. *SIAM Journal on Applied Mathematics*, 76(1):1–26, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Guardasoni:2016:FNP

[603] C. Guardasoni and S. Sanfelici. Fast numerical pricing of barrier options under stochastic volatility and jumps. *SIAM Journal on Applied Mathematics*, 76(1):27–57, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ko:2016:PRS

[604] William Ko and John M. Stockie. Parametric resonance in spherical immersed elastic shells. *SIAM Journal on Applied Mathematics*, 76(1):58–86, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Akbari:2016:SFE

[605] Amir Akbari, Reghan J. Hill, and Theo G. M. van de Ven. Stability and folds in an elastocapillary system. *SIAM Journal on Applied Mathematics*, 76(1):87–109, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rondi:2016:VAI

[606] Luca Rondi, Fadil Santosa, and Zhu Wang. A variational approach to the inverse photolithography problem. *SIAM Journal on Applied Mathematics*, 76(1):110–137, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Choquet:2016:DSD

[607] C. Choquet, M. M. Diédhiou, and C. Rosier. Derivation of a sharp-diffuse interfaces model for seawater intrusion in a free aquifer. Numerical simulations. *SIAM Journal on Applied Mathematics*, 76(1):138–158, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Munnier:2016:DSM

[608] Alexandre Munnier and Karim Ramdani. On the detection of small moving disks in a fluid. *SIAM Journal on Applied Mathematics*, 76(1):159–177, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klibanov:2016:RPT

[609] Michael V. Klibanov and Vladimir G. Romanov. Reconstruction procedures for two inverse scattering problems without the phase information. *SIAM Journal on Applied Mathematics*, 76 (1):178–196, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Adan:2016:STS

[610] Ivo Adan and Bernardo D'Auria. Sojourn time in a single-server queue with threshold service rate control. *SIAM Journal on Applied Mathematics*, 76 (1):197–216, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

GarcIa-Cervera:2016:SPS

[611] Carlos J. GarcÍa-Cervera, Tiziana Giorgi, and Sookyung Joo. Sawtooth profile in smectic A liquid crystals. *SIAM Journal on Applied Mathematics*, 76(1):217–237, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Guiver:2016:SAC

[612] Chris Guiver, Christina Edholm, Yu Jin, Markus Mueller, Jim Powell, Richard Rebarber, Brigitte Tenhumberg, and Stuart Townley. Simple adaptive control for positive linear systems with applications to pest management. *SIAM Journal on Applied Mathematics*, 76(1):238–275, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Benvenuto:2016:RIM

[613] Federico Benvenuto, Houssem Haddar, and Blandine Lantz. A robust inversion method according to a new notion of regularization for Poisson data with an application to nanoparticle volume determination. *SIAM Journal on Applied Mathematics*, 76(1):276–292, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sherratt:2016:IGP

[614] Jonathan A. Sherratt. Invasion generates periodic traveling waves (wavetrains) in predator-prey models with nonlocal dispersal. *SIAM Journal on Applied Mathematics*, 76(1):293–313, ???? 2016. CODEN SMJMAP. ISSN

0036-1399 (print), 1095-712X (electronic).

Roubicek:2016:PPD

[615] Tomás Roubícek and Jan Valdman. Perfect plasticity with damage and healing at small strains, its modeling, analysis, and computer implementation. *SIAM Journal on Applied Mathematics*, 76(1):314–340, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Camacho:2016:ELT

[616] Victor Camacho, Aaron Fogelson, and James Keener. Eulerian–Lagrangian treatment of nondilute two-phase gels. *SIAM Journal on Applied Mathematics*, 76(1):341–367, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chapman:2016:RBC

[617] S. Jonathan Chapman, Radek Erban, and Samuel A. Isaacson. Reactive boundary conditions as limits of interaction potentials for Brownian and Langevin dynamics. *SIAM Journal on Applied Mathematics*, 76(1):368–390, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Anselmi:2016:DPL

[618] J. Anselmi and N. S. Walton. Decentralized proportional load balancing. *SIAM Journal on Applied Mathematics*, 76(1):391–410, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cappelletti:2016:PFP

[619] Daniele Cappelletti and Carsten Wiuf. Product-form Poisson-like distributions and complex balanced reaction systems. *SIAM Journal on Applied Mathematics*, 76(1):411–432, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lee:2016:SIL

[620] Alpha Albert Lee, Andreas Münch, and Endre Süli. Sharp-interface limits of the Cahn–Hilliard equation with degenerate mobility. *SIAM Journal on Applied Mathematics*, 76(2):433–456, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lassas:2016:BEF

[621] Matti Lassas and Ting Zhou. The blow-up of electromagnetic fields in 3-dimensional invisibility cloaking for Maxwell's equations. *SIAM Journal on Applied Mathematics*, 76(2):457–478, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bagarello:2016:ODD

[622] Fabio Bagarello, Anna Maria Cherubini, and Francesco Oliveri. An operatorial description of desertification. *SIAM Journal on Applied Mathematics*, 76(2):479–499, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2016:SBL

[623] Qiming Wang. Stability and breakup of liquid threads and annular layers in a corrugated tube with zero base flow.

SIAM Journal on Applied Mathematics, 76(2):500–524, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Glasner:2016:NSS

[624] Karl Glasner and Jordan Allen-Flowers. Nonlinearity saturation as a singular perturbation of the nonlinear Schrödinger equation. *SIAM Journal on Applied Mathematics*, 76 (2):525–550, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kloosterman:2016:NMS

[625] Matt Kloosterman, Sue Ann Campbell, and Francis J. Poulin. An NPZ model with state-dependent delay due to size-structure in juvenile zooplankton. *SIAM Journal on Applied Mathematics*, 76(2):551–577, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hofbauer:2016:GSS

[626] Josef Hofbauer and Linlin Su. Global stability of spatially homogeneous equilibria in migration-selection models. *SIAM Journal on Applied Mathematics*, 76(2):578–597, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yang:2016:NFH

[627] Jianke Yang. A normal form for Hamiltonian–Hopf bifurcations in nonlinear Schrödinger equations with general external potentials. *SIAM Journal on Applied Mathematics*, 76(2):598–617, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Walton:2016:RSI

[628] Jay R. Walton and Anna Y. Zemlyanova. A rigid stamp indentation into a semiplane with a curvature-dependent surface tension on the boundary. *SIAM Journal on Applied Mathematics*, 76 (2):618–640, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lam:2016:ERL

[629] King-Yeung Lam, Yuan Lou, and Frithjof Lutscher. The emergence of range limits in advective environments. *SIAM Journal on Applied Mathematics*, 76(2):641–662, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2016:TPR

[630] Michael Y. Li, Weishi Liu, Chunhua Shan, and Yingfei Yi. Turning points and relaxation oscillation cycles in simple epidemic models. *SIAM Journal on Applied Mathematics*, 76 (2):663–687, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chiricotto:2016:DSE

[631] Maria Chiricotto, Lorenzo Giacomelli, and Giuseppe Tomassetti. Dissipative scale effects in strain-gradient plasticity: The case of simple shear. *SIAM Journal on Applied Mathematics*, 76 (2):688–704, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Griesmaier:2016:FFS

[632] Roland Griesmaier and John Sylvester. Far field splitting by iteratively

reweighted ℓ^1 minimization. *SIAM Journal on Applied Mathematics*, 76 (2):705–730, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ando:2016:PRF

[633] Kazunori Ando, Hyeonbae Kang, and Hongyu Liu. Plasmon resonance with finite frequencies: a validation of the quasi-static approximation for diametrically small inclusions. *SIAM Journal on Applied Mathematics*, 76(2):731–749, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chapman:2016:HRD

[634] Stephen Jonathan Chapman, Yang Xiang, and Yichao Zhu. Homogenization of a row of dislocation dipoles from discrete dislocation dynamics. *SIAM Journal on Applied Mathematics*, 76 (2):750–775, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gou:2016:ODC

[635] J. Gou and M. J. Ward. Oscillatory dynamics for a coupled membrane-bulk diffusion model with Fitzhugh–Nagumo membrane kinetics. *SIAM Journal on Applied Mathematics*, 76 (2):776–804, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deHoop:2016:CVI

[636] Maarten V. de Hoop, Paul Kepley, and Lauri Oksanen. On the construction of virtual interior point source travel time distances from the hyperbolic Neumann-to-Dirichlet map. *SIAM Journal on Applied Mathematics*, 76 (2):805–825, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ross:2016:ETR

[637] David S. Ross, Kara L. Maki, and Emily K. Holz. Existence theory for the radially symmetric contact lens equation. *SIAM Journal on Applied Mathematics*, 76(3):827–844, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Parnell:2016:TTM

[638] William J. Parnell, Vu-Hieu Nguyen, Raphael Assier, Salah Naili, and I. David Abrahams. Transient thermal mixed boundary value problems in the half-space. *SIAM Journal on Applied Mathematics*, 76(3):845–866, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Barletti:2016:NPP

[639] Luigi Barletti and Francesco Salvarani. On a nonlinear parabolic problem arising in the quantum diffusive description of a degenerate fermion gas. *SIAM Journal on Applied Mathematics*, 76 (3):867–886, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Faria:2016:SME

[640] L. M. Faria, A. R. Kasimov, and R. R. Rosales. Study of a model equation in detonation theory: Multidimensional effects. *SIAM Journal on Applied Mathematics*, 76(3):887–909, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ratz:2016:DIA

[641] Andreas Rätz. Diffuse-interface approximations of osmosis free boundary problems. *SIAM Journal on Applied Mathematics*, 76(3):910–929, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Haddar:2016:MMD

[642] Houssem Haddar, Jing-Rebecca Li, and Simona Schiavi. A macroscopic model for the diffusion MRI signal accounting for time-dependent diffusivity. *SIAM Journal on Applied Mathematics*, 76 (3):930–949, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chremmos:2016:SAO

[643] Ioannis Chremmos and George Fikioris. Spectral asymptotics in one-dimensional periodic lattices with geometric interaction. *SIAM Journal on Applied Mathematics*, 76(3):950–975, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Borum:2016:SCP

[644] Andy Borum and Timothy Bretl. Sufficient conditions for a path-connected set of local solutions to an optimal control problem. *SIAM Journal on Applied Mathematics*, 76(3):976–999, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2016:PPD

[645] Habib Ammari, Yat Tin Chow, and Jun Zou. Phased and phaseless domain reconstructions in the inverse scattering problem via scattering coefficients. *SIAM Journal on Applied Mathematics*, 76(3):1000–1030, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Peron:2016:ETC

[646] V. Péron, K. Schmidt, and M. Duruflé. Equivalent transmission conditions for the time-harmonic Maxwell equations in 3D for a medium with a highly conductive thin sheet. *SIAM Journal on Applied Mathematics*, 76 (3):1031–1052, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Boyer:2016:SDC

[647] Justin Boyer, Jack J. Garzella, and Fernando Guevara Vasquez. On the solvability of the discrete conductivity and Schrödinger inverse problems. *SIAM Journal on Applied Mathematics*, 76 (3):1053–1075, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hu:2016:MCM

[648] Qingwen Hu. A model of cold metal rolling processes with state-dependent delay. *SIAM Journal on Applied Mathematics*, 76(3):1076–1100, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Larsson:2016:GSA

[649] Lisa J. Larsson, Rustum Choksi, and Jean-Christophe Nave. Geometric self-assembly of rigid shapes: a simple Voronoi approach. *SIAM Journal on Applied Mathematics*, 76(3):1101–1125, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bronski:2016:GHS

[650] Jared C. Bronski, Lee DeVille, and Timothy Ferguson. Graph homology and stability of coupled oscillator networks. *SIAM Journal on Applied Mathematics*, 76(3):1126–1151, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Figueiredo:2016:HMA

[651] Isabel N. Figueiredo, Carlos Leal, Giuseppe Romanazzi, and Bjorn Engquist. Homogenization model for aberrant crypt foci. *SIAM Journal on Applied Mathematics*, 76(3):1152–1177, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Karrasch:2016:LTT

[652] Daniel Karrasch. Lagrangian transport through surfaces in volume-preserving flows. *SIAM Journal on Applied Mathematics*, 76(3):1178–1190, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Friesecke:2016:TXR

[653] Gero Friesecke, Richard D. James, and Dominik Jüstel. Twisted X-rays: Incoming waveforms yielding discrete diffraction patterns for helical structures. *SIAM Journal on Applied Mathematics*, 76(3):1191–1218, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Glendinning:2016:GRR

[654] Paul Glendinning. Geometry of refractions and reflections through a biperiodic medium. *SIAM Journal on Applied Mathematics*, 76(4):1219–1238, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Danek:2016:BAU

[655] Tomasz Danek and Michael A. Slawinski. Backus average under random perturbations of layered media. *SIAM Journal on Applied Mathematics*, 76 (4):1239–1249, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Codispoti:2016:IBE

[656] A. Codispoti and N. Pinamonti. Interplay of Boltzmann equation and continuity equation for accelerated electrons in solar flares. *SIAM Journal on Applied Mathematics*, 76(4):1250–1269, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rachinskii:2016:CDR

[657] D. Rachinskii and M. Ruderman. Convergence of direct recursive algorithm for identification of Preisach hysteresis model with stochastic input. *SIAM Journal on Applied Mathematics*, 76 (4):1270–1295, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Majumdar:2016:FPN

[658] Apala Majumdar, Paul A. Milewski, and Amy Spicer. Front propagation at the nematic-isotropic transition temperature. *SIAM Journal on Applied Mathematics*, 76(4):1296–1320, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nachman:2016:WMG

[659] Adrian Nachman, Alexandru Tamasan, and Johann Veras. A weighted minimum gradient problem with complete electrode model boundary conditions for conductivity imaging. *SIAM Journal on Applied Mathematics*, 76(4): 1321–1343, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Atkinson:2016:SMD

[660] Colin Atkinson. A simple model of dynamic cleavage producing constant speed crack propagation in a sample of finite width. *SIAM Journal on Applied Mathematics*, 76(4):1344–1354, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sharma:2016:WPB

[661] Basant Lal Sharma. Wave propagation in bifurcated waveguides of square lattice strips. *SIAM Journal on Applied Mathematics*, 76(4):1355–1381, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dieu:2016:PZS

[662] N. T. Dieu, N. H. Du, H. D. Nguyen, and G. Yin. Protection zones for survival of species in random environment. *SIAM Journal on Applied Mathematics*, 76(4):1382–1402, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Flegg:2016:SRK

[663] Mark B. Flegg. Smoluchowski reaction kinetics for reactions of any order. *SIAM Journal on Applied Mathematics*, 76(4):1403–1432, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Goldsztein:2016:PMA

[664] Guillermo H. Goldsztein. Particles moving around a two-lane circular track in both directions. Avoiding collisions leads to self-organization. *SIAM Journal on Applied Mathematics*, 76 (4):1433–1445, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dullin:2016:IET

[665] Holger R. Dullin, Robert Marangell, and Joachim Worthington. Instability of equilibria for the two-dimensional Euler equations on the torus. *SIAM Journal on Applied Mathematics*, 76 (4):1446–1470, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Aymard:2016:CKB

[666] B. Aymard, F. Clément, D. Monniaux, and M. Postel. Cell-kinetics based calibration of a multiscale model of structured cell populations in ovarian follicles. *SIAM Journal on Applied Mathematics*, 76(4):1471–1491, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lieb:2016:OIW

[667] Anna M. Lieb, Chris H. Rycroft, and Jon Wilkening. Optimizing intermittent water supply in urban pipe distribution networks. *SIAM Journal on Applied Mathematics*, 76(4):1492–1514, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Biello:2016:SSC

[668] Joseph A. Biello, René Samson, and Eugene Sigal. The steady-state convection-diffusion equation at high Péclet numbers for a cluster of spheres: an extension of Levich's theory. *SIAM Journal on Applied Mathematics*, 76 (4):1515–1534, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Erban:2016:CSM

[669] Radek Erban, Jan Haskovec, and Yongzheng Sun. A Cucker–Smale model with noise and delay. *SIAM Journal on Applied Mathematics*, 76 (4):1535–1557, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mihai:2016:GUL

[670] L. Angela Mihai and Alain Goriely. Guaranteed upper and lower bounds on the uniform load of contact problems in elasticity. *SIAM Journal on Applied Mathematics*, 76(4):1558–1576, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Baaijens:2016:EIR

[671] Jasmijn A. Baaijens and Jan Draisma. On the existence of identifiable reparametrizations for linear compartment models. *SIAM Journal on Applied Mathematics*, 76(4):1577–1605, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zabarankin:2016:ASS

[672] Michael Zabarankin. Analytical solution for spheroidal drop under axisymmetric linearized boundary conditions. *SIAM Journal on Applied Mathematics*, 76(4):1606–1632, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fang:2016:CPS

[673] Jian Fang, Yijun Lou, and Jianhong Wu. Can pathogen spread keep pace with its host invasion? *SIAM Journal on Applied Mathematics*, 76(4): 1633–1657, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bressloff:2016:DCS

[674] Paul C. Bressloff. Diffusion in cells with stochastically gated gap junctions. *SIAM Journal on Applied Mathematics*, 76(4):1658–1682, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Albi:2016:ICS

[675] Giacomo Albi, Mattia Bongini, Emiliano Cristiani, and Dante Kalise. Invisible control of self-organizing agents leaving unknown environments. *SIAM Journal on Applied Mathematics*, 76 (4):1683–1710, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hennessy:2016:TPM

[676] Matthew G. Hennessy, Christopher J. W. Breward, and Colin P. Please. A two-phase model for evaporating solvent-polymer mixtures. *SIAM Journal on Applied Mathematics*, 76(4): 1711–1736, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cakoni:2016:SEI

[677] F. Cakoni, D. Colton, S. Meng, and P. Monk. Stekloff eigenvalues in inverse scattering. *SIAM Journal on Applied Mathematics*, 76(4):1737–1763, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lombard:2016:DAT

[678] Bruno Lombard and Denis Matignon. Diffusive approximation of a time-fractional Burger's equation in nonlinear acoustics. *SIAM Journal on Applied Mathematics*, 76(5):1765–1791, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Idiart:2016:MCR

[679] Martín I. Idiart. Multiphase conductors realizing Aleksandrov's mean. *SIAM Journal on Applied Mathematics*, 76(5):1792–1798, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Burger:2016:BMF

[680] Martin Burger, Alexander Lorz, and Marie-Therese Wolfram. On a Boltzmann mean field model for knowledge growth. *SIAM Journal on Applied Mathematics*, 76(5):1799–1818, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gahn:2016:HRD

[681] M. Gahn, M. Neuss-Radu, and P. Knabner. Homogenization of reaction–diffusion processes in a two-component porous medium with nonlinear flux conditions at the interface. *SIAM Journal on Applied Mathematics*, 76 (5):1819–1843, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2016:PDM

[682] Bin Xu and Paul C. Bressloff. A PDE–DDE model for cell polarization in fission yeast. *SIAM Journal on Applied Mathematics*, 76(5):1844–1870, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bruno:2016:WGF

[683] Oscar P. Bruno, Mark Lyon, Carlos Pérez-Arancibia, and Catalin Turc. Windowed Green function method for layered-media scattering. *SIAM Journal on Applied Mathematics*, 76(5): 1871–1898, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Halabi:2016:NQS

[684] Ryan G. Halabi and John K. Hunter. Nonlinear quasi-static surface plasmons. *SIAM Journal on Applied Mathematics*, 76(5):1899–1919, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lessinnes:2016:DSF

[685] Thomas Lessinnes and Alain Goriely. Design and stability of a family of deployable structures. *SIAM Journal on Applied Mathematics*, 76(5):1920–1941, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2016:DSA

[686] Chang Wang, Cameron L. Hall, and Peter D. Howell. Deterministic and stochastic analysis of the lithiation/delithiation dynamics of a cathode nanoparticle. *SIAM Journal on Applied Mathematics*, 76(5):1942–1963, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Saccomandi:2016:LTA

[687] Giuseppe Saccomandi and Luigi Vergori. Large time approximation for shearing motions. *SIAM Journal on Applied Mathematics*, 76(5):1964–1983, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Taylor:2016:SHO

[688] Dane Taylor, Per Sebastian Skardal, and Jie Sun. Synchronization of heterogeneous oscillators under network modifications: Perturbation and optimization of the synchrony alignment function. *SIAM Journal on Applied Mathematics*, 76(5):1984–2008, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Friedrich:2016:GRA

[689] Manuel Friedrich, Paolo Piovano, and Ulisse Stefanelli. The geometry of C_{60}: a rigorous approach via molecular mechanics. *SIAM Journal on Applied Mathematics*, 76(5):2009–2029, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rajan:2016:LSW

[690] Girish K. Rajan and Diane M. Henderson. The linear stability of a wave-train propagating on water of variable depth. *SIAM Journal on Applied Mathematics*, 76(5):2030–2041, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Magal:2016:FSE

[691] Pierre Magal, Ousmane Seydi, and Glenn Webb. Final size of an epidemic for a two-group SIR model. *SIAM Journal on Applied Mathematics*, 76 (5):2042–2059, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Strugarek:2016:RSC

[692] Martin Strugarek and Nicolas Vauchelet. Reduction to a single closed equation for 2-by-2 reaction-diffusion systems of Lotka–Volterra type. *SIAM Journal on Applied Mathematics*, 76(5):2060–2080, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gordon:2016:ACF

[693] Peter V. Gordon, Uday G. Hegde, Michael C. Hicks, and Michael J. Kulis. On autoignition of co-flow laminar jets. *SIAM Journal on Applied Mathematics*, 76(5):2081–2098, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brunton:2016:SSP

[694] B. W. Brunton, S. L. Brunton, J. L. Proctor, and J. N. Kutz. Sparse sensor placement optimization for classification. *SIAM Journal on Applied Mathematics*, 76(5):2099–2122, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deGreef:2016:PSD

[695] Tom de Greef, Saeed Masroor, Mark A. Peletier, and Rudi Pendavingh. Precision and sensitivity in detailed-balance reaction networks. *SIAM Journal on Applied Mathematics*, 76(6):2123–2153, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wagner:2016:OAW

[696] Sven Wagner, Martin Burger, and Carsten H. Wolters. An optimization approach for well-targeted transcranial direct current stimulation. *SIAM Journal on Applied Mathematics*, 76 (6):2154–2174, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Simpson:2016:TED

[697] G. Simpson, M. Luskin, and D. J. Srolovitz. A theoretical examination of diffusive molecular dynamics. *SIAM Journal on Applied Mathematics*, 76 (6):2175–2195, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Moroney:2016:AAD

[698] K. M. Moroney, W. T. Lee, S. B. G. O' Brien, F. Suijver, and J. Marra. Asymptotic analysis of the dominant mechanisms in the coffee extraction process. *SIAM Journal on Applied Mathematics*, 76(6):2196–2217, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lai:2016:EWI

[699] Geng Lai and Wancheng Sheng. Elementary wave interactions to the compressible Euler equations for Chaplygin gas in two dimensions. *SIAM Journal on Applied Mathematics*, 76 (6):2218–2242, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Matsuya:2016:DMM

[700] K. Matsuya, F. Yura, J. Mada, H. Kurihara, and T. Tokihiro. A discrete mathematical model for angiogenesis. *SIAM Journal on Applied Mathematics*, 76 (6):2243–2259, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Calderer:2016:MNE

[701] M. Carme Calderer, Dmitry Golovaty, Oleg Lavrentovich, and Noel J. Walkington. Modeling of nematic electrolytes and nonlinear electroosmosis. *SIAM Journal on Applied Mathematics*, 76(6):2260–2285, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bracken:2016:DEE

[702] A. J. Bracken and L. Bass. Differential equations of electrodiffusion: Constant field solutions, uniqueness, and new formulas of Goldman–Hodgkin–Katz type. *SIAM Journal on Applied Mathematics*, 76(6):2286–2305, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cakoni:2016:NTD

[703] Fioralba Cakoni, Irene de Teresa, Houssem Haddar, and Peter Monk. Nondestructive testing of the delaminated interface between two materials. *SIAM Journal on Applied Mathematics*, 76(6):2306–2332, ???? 2016.

CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Doumic:2016:ASP

[704] Marie Doumic, Sarah Eugène, and Philippe Robert. Asymptotics of stochastic protein assembly models. *SIAM Journal on Applied Mathematics*, 76(6):2333–2352, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2016:MWC

[705] Xianmin Xu. Modified Wenzel and Cassie equations for wetting on rough surfaces. *SIAM Journal on Applied Mathematics*, 76(6):2353–2374, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2016:EDI

[706] Yongxin Chen, Tryphon Georgiou, and Michele Pavon. Entropic and displacement interpolation: a computational approach using the Hilbert metric. *SIAM Journal on Applied Mathematics*, 76(6):2375–2396, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bini:2016:GSP

[707] Dario Bini, Sarah Dendievel, Guy Latouche, and Beatrice Meini. General solution of the Poisson equation for quasi-birth-and-death processes. *SIAM Journal on Applied Mathematics*, 76 (6):2397–2417, ???? 2016. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Alberti:2017:MAU

[708] Giovanni S. Alberti, Habib Ammari, Francisco Romero, and Timothée Wintz. Mathematical analysis of ultrafast ultrasound imaging. *SIAM Journal on Applied Mathematics*, 77(1):1–25, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sprenger:2017:SWD

[709] P. Sprenger and M. A. Hoefer. Shock waves in dispersive hydrodynamics with nonconvex dispersion. *SIAM Journal on Applied Mathematics*, 77 (1):26–50, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Epstein:2017:EDP

[710] Charles L. Epstein and Jon Wilkening. Eigenfunctions and the Dirichlet problem for the classical Kimura diffusion operator. *SIAM Journal on Applied Mathematics*, 77(1):51–81, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ainseba:2017:CST

[711] B. Ainseba, Z. Feng, M. Iannelli, and F. A. Milner. Control strategies for TB epidemics. *SIAM Journal on Applied Mathematics*, 77(1):82–107, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lopez:2017:SBC

[712] Rafael López. Stability and bifurcation of a capillary surface on a cylinder. *SIAM Journal on Applied Mathematics*, 77(1):108–127, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Magi:2017:MBM

[713] R. E. Magi and J. P. Keener. Modelling a biological membrane as a two phase viscous fluid with curvature elasticity. *SIAM Journal on Applied Mathematics*, 77(1):128–153, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Griesmaier:2017:UPI

[714] Roland Griesmaier and John Sylvester. Uncertainty principles for inverse source problems, far field splitting, and data completion. *SIAM Journal on Applied Mathematics*, 77(1):154–180, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2017:PVB

[715] Xiunan Wang and Xiao-Qiang Zhao. A periodic vector-bias malaria model with incubation period. *SIAM Journal on Applied Mathematics*, 77(1):181–201, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hyvonen:2017:PCH

[716] N. Hyvönen, V. Kaarnioja, L. Mustonen, and S. Staboulis. Polynomial collocation for handling an inaccurately known measurement configuration in electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 77(1):202–223, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fazly:2017:IRD

[717] Mostafa Fazly, Mark Lewis, and Hao Wang. On impulsive reaction-diffusion models in higher dimensions. *SIAM Journal on Applied Mathematics*, 77 (1):224–246, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sobral:2017:FAS

[718] Yuri D. Sobral and E. John Hinch. Finite amplitude steady-state one-dimensional waves in fluidized beds. *SIAM Journal on Applied Mathematics*, 77(1):247–266, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Canevari:2017:ORN

[719] Giacomo Canevari, Apala Majumdar, and Amy Spicer. Order reconstruction for nematics on squares and hexagons: a Landau–de Gennes study. *SIAM Journal on Applied Mathematics*, 77 (1):267–293, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Duncan:2017:AAI

[720] Jacob P. Duncan and James A. Powell. Analytic approximation of invasion wave amplitude predicts severity of insect outbreaks. *SIAM Journal on Applied Mathematics*, 77(1):294–314, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mandel:2017:PBG

[721] Rainer Mandel and Wolfgang Reichel. A priori bounds and global bifurcation results for frequency combs modeled by the Lugiato–Lefever equation. *SIAM Journal on Applied Mathematics*, 77(1):315–345, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Coclite:2017:NWA

[722] G. M. Coclite, G. Florio, M. Ligabò, and F. Maddalena. Nonlinear waves in adhesive strings. *SIAM Journal on Applied Mathematics*, 77(2):347–360, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Leonardi:2017:MLR

[723] Emilio Leonardi and Giovanni Luca Torrisi. Modeling LEAST RECENTLY USED caches with shot noise request processes. *SIAM Journal on Applied Mathematics*, 77(2):361–383, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Maretzke:2017:SEL

[724] Simon Maretzke and Thorsten Hohage. Stability estimates for linearized near-field phase retrieval in X-ray phase contrast imaging. *SIAM Journal on Applied Mathematics*, 77(2):384–408, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Coudiere:2017:ATL

[725] Y. Coudière, J. Henry, and S. Labarthe. An asymptotic two-layer monodomain model of cardiac electrophysiology in the atria: Derivation and convergence. *SIAM Journal on Applied Mathematics*, 77(2):409–429, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Angstmann:2017:FOC

[726] Christopher N. Angstmann, Austen M. Erickson, Bruce I. Henry, Anna V. McGann, John M. Murray, and James A. Nichols. Fractional order compartment models. *SIAM Journal on Applied Mathematics*, 77(2):430–446, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

MacNamara:2017:FEL

[727] Shev MacNamara, Bruce Henry, and William McLean. Fractional Euler limits and their applications. *SIAM Journal on Applied Mathematics*, 77 (2):447–469, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2017:MBR

[728] Zhenzhen Chen, Sze-Bi Hsu, and Ya-Tang Yang. The morbidostat: a bio-reactor that promotes selection for drug resistance in bacteria. *SIAM Journal on Applied Mathematics*, 77 (2):470–499, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Garnier:2017:FWT

[729] Josselin Garnier and Knut Sølna. Focusing waves through a randomly scattering medium in the white-noise paraxial regime. *SIAM Journal on Applied Mathematics*, 77(2):500–519, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deHoop:2017:RLM

[730] Maarten V. de Hoop, Gen Nakamura, and Jian Zhai. Reconstruction of Lamé moduli and density at the boundary enabling directional elastic wavefield decomposition. *SIAM Journal on Applied Mathematics*, 77(2):520–536, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Munch:2017:ASU

[731] Andreas Münch, Barbara Wagner, L. Pamela Cook, and Richard J. Braun. Apparent slip for an upper convected Maxwell fluid. *SIAM Journal on Applied Mathematics*, 77(2):537–564, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yao:2017:RDD

[732] Lingxing Yao, M. Carme Calderer, Yoichiro Mori, and Ronald A. Siegel. Rhythmomimetic drug delivery: Modeling, analysis, and numerical simulation. *SIAM Journal on Applied Mathematics*, 77(2):565–592, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mascali:2017:CTG

[733] Giovanni Mascali and Vittorio Romano. Charge transport in graphene including thermal effects. *SIAM Journal on Applied Mathematics*, 77(2): 593–613, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ijioma:2017:TWR

[734] Ekeoma Rowland Ijioma, Hirofumi Izuhara, and Masayasu Mimura. Traveling waves in a reaction-diffusion system describing smoldering combustion. *SIAM Journal on Applied Mathematics*, 77(2):614–637, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Frigaard:2017:CYN

[735] Ian A. Frigaard, José A. Iglesias, Gwenael Mercier, Christiane Pöschl, and Otmar Scherzer. Critical yield numbers of rigid particles settling in Bingham fluids and Cheeger sets. *SIAM Journal on Applied Mathematics*, 77 (2):638–663, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fadai:2017:DRK

[736] Nabil T. Fadai, Michael J. Ward, and Juncheng Wei. Delayed reaction kinetics and the stability of spikes in the Gierer–Meinhardt model. *SIAM Journal on Applied Mathematics*, 77 (2):664–696, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Garde:2017:DRD

[737] Henrik Garde and Kim Knudsen. Distinguishability revisited: Depth dependent bounds on reconstruction quality in electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 77(2):697–720, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marigo:2017:SOH

[738] Jean-Jacques Marigo and Agnès Maurel. Second order homogenization of subwavelength stratified media including finite size effect. *SIAM Journal on Applied Mathematics*, 77(2):721–743, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Canic:2017:DRB

[739] Suncica Canić, Matea Galović, Matko Ljulj, and Josip Tambaca. A dimension-reduction based coupled model of mesh-reinforced shells. *SIAM*

Journal on Applied Mathematics, 77 (2):744–769, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Misawa:2017:BIE

[740] Ryota Misawa, Kazuki Niino, and Naoshi Nishimura. Boundary integral equations for calculating complex eigenvalues of transmission problems. *SIAM Journal on Applied Mathematics*, 77(2):770–788, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Burger:2017:ESS

[741] Raimund Bürger, Julio Careaga, and Stefan Diehl. Entropy solutions of a scalar conservation law modeling sedimentation in vessels with varying cross-sectional area. *SIAM Journal on Applied Mathematics*, 77(2):789–811, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Biondini:2017:GPD

[742] Gino Biondini and Thomas Trogdon. Gibbs phenomenon for dispersive PDEs on the line. *SIAM Journal on Applied Mathematics*, 77(3):813–837, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Neubauer:2017:SVT

[743] Andreas Neubauer and Ronny Ramlau. A singular-value-type decomposition for the atmospheric tomography operator. *SIAM Journal on Applied Mathematics*, 77(3):838–853, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Huang:2017:HCD

[744] Qihua Huang, Hao Wang, and Mark A. Lewis. A hybrid continuous/discrete-time model for invasion dynamics of Zebra mussels in rivers. *SIAM Journal on Applied Mathematics*, 77(3):854–880, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wray:2017:RMT

[745] Alexander W. Wray, Demetrios T. Papageorgiou, and Omar K. Matar. Reduced models for thick liquid layers with inertia on highly curved substrates. *SIAM Journal on Applied Mathematics*, 77(3):881–904, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Barbarossa:2017:SSI

[746] M. V. Barbarossa, M. Polner, and G. Röst. Stability switches induced by immune system boosting in an SIRS model with discrete and distributed delays. *SIAM Journal on Applied Mathematics*, 77(3):905–923, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chapman:2017:ACP

[747] S. J. Chapman and P. E. Farrell. Analysis of Carrier's problem. *SIAM Journal on Applied Mathematics*, 77 (3):924–950, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lin:2017:SFE

[748] Junshan Lin and Hai Zhang. Scattering and field enhancement of a perfect conducting narrow slit. *SIAM*

Journal on Applied Mathematics, 77 (3):951–976, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brunner:2017:PLD

[749] Hermann Brunner, Stephen A. Gourley, Rongsong Liu, and Yanyu Xiao. Pauses of larval development and their consequences for stage-structured populations. *SIAM Journal on Applied Mathematics*, 77(3):977–994, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tan:2017:VCF

[750] Chee Han Tan, Christel Hohenegger, and Braxton Osting. A variational characterization of fluid sloshing with surface tension. *SIAM Journal on Applied Mathematics*, 77(3):995–1019, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Letson:2017:AIL

[751] Benjamin Letson, Jonathan E. Rubin, and Theodore Vo. Analysis of interacting local oscillation mechanisms in three-timescale systems. *SIAM Journal on Applied Mathematics*, 77(3): 1020–1046, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Maling:2017:RSR

[752] B. Maling, O. Schnitzer, and R. V. Craster. Radiation from structured-ring resonators. *SIAM Journal on Applied Mathematics*, 77(3):1047–1067, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chesnokov:2017:SSS

[753] A. A. Chesnokov, G. A. El, S. L. Gavrilyuk, and M. V. Pavlov. Stability of shear shallow water flows with free surface. *SIAM Journal on Applied Mathematics*, 77(3):1068–1087, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Perneder:2017:MPB

[754] Luc Perneder, Julien Marck, and Emmanuel Detournay. A model of planar borehole propagation. *SIAM Journal on Applied Mathematics*, 77(4): 1089–1114, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

ONeill:2017:ACF

[755] J. O'Neill, Ö. Selsil, S. G. Haslinger, N. V. Movchan, and R. V. Craster. Active cloaking for finite clusters of pins in Kirchhoff plates. *SIAM Journal on Applied Mathematics*, 77 (4):1115–1135, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kilker:2017:SNA

[756] Nathan Kilker, Dmitry Golovaty, Peter V. Gordon, Leonid Kagan, and Gregory I. Sivashinsky. Strongly nonlinear asymptotic model of cellular instabilities in premixed flames with stepwise ignition-temperature kinetics. *SIAM Journal on Applied Mathematics*, 77 (4):1136–1156, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hellander:2017:RAS

[757] Andreas Hellander, Jan Klosa, Per Lötstedt, and Shev MacNamara. Robustness analysis of spatiotemporal models in the presence of extrinsic fluctuations. *SIAM Journal on Applied Mathematics*, 77(4):1157–1183, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gudino:2017:MBC

[758] Elías Gudiño, Cassio M. Oishi, and Adélia Sequeira. Multiscale boundary conditions for non-Fickian diffusion applied to drug-eluting stents. *SIAM Journal on Applied Mathematics*, 77 (4):1184–1203, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2017:TPN

[759] Xinfu Chen and Bard Ermentrout. Traveling pulses in a nonlocal equation arising near a saddle-node infinite cycle bifurcation. *SIAM Journal on Applied Mathematics*, 77(4):1204–1229, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fibich:2017:DNP

[760] G. Fibich. Diffusion of new products with recovering consumers. *SIAM Journal on Applied Mathematics*, 77 (4):1230–1247, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ablowitz:2017:UAR

[761] Mark J. Ablowitz, Yi-Ping Ma, and Igor Rumanov. A universal asymptotic regime in the hyperbolic nonlinear Schrödinger equation. *SIAM Journal on Applied Mathematics*, 77 (4):1248–1268, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lipton:2017:NMS

[762] Robert Lipton, Anthony Polizzi, and Lokendra Thakur. Novel metamaterial surfaces from perfectly conducting subwavelength corrugations. *SIAM Journal on Applied Mathematics*, 77 (4):1269–1291, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bianchi:2017:PSG

[763] Luigi Amedeo Bianchi, Dirk Blömker, and Philipp Wacker. Pattern size in Gaussian fields from spinodal decomposition. *SIAM Journal on Applied Mathematics*, 77(4):1292–1319, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Aftalion:2017:HRM

[764] Amandine Aftalion. How to run 100 meters. *SIAM Journal on Applied Mathematics*, 77(4):1320–1334, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schiefeneder:2017:RTC

[765] Daniela Schiefeneder and Markus Haltmeier. The Radon transform over cones with vertices on the sphere and orthogonal axes. *SIAM Journal on Applied Mathematics*, 77(4):1335–1351, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hoefer:2017:OSD

[766] M. A. Hoefer, G. A. El, and A. M. Kamchatnov. Oblique spatial dispersive shock waves in nonlinear Schrödinger flows. *SIAM Journal on Applied Mathematics*, 77(4):1352–1374, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kokubun:2017:SCW

[767] M. A. Endo Kokubun and A. A. Mailybaev. Singularity of a combustion wave profile: a clue to the MultiComponent theory for liquid-gas filtration. *SIAM Journal on Applied Mathematics*, 77 (4):1375–1396, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mihai:2017:MBH

[768] L. Angela Mihai, Hayley Wyatt, and Alain Goriely. A microstructure-based hyperelastic model for open-cell solids. *SIAM Journal on Applied Mathematics*, 77(4):1397–1416, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nieves:2017:AAS

[769] M. J. Nieves. Asymptotic analysis of solutions to transmission problems in solids with many inclusions. *SIAM Journal on Applied Mathematics*, 77 (4):1417–1443, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Froyland:2017:OME

[770] Gary Froyland and Naratip Santitissadeekorn. Optimal mixing enhancement. *SIAM Journal on Applied Mathematics*, 77(4):1444–1470, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schmuck:2017:RCG

[771] M. Schmuck and S. Kalliadasis. Rate of convergence of general phase field equations in strongly heterogeneous media toward their homogenized limit. *SIAM Journal on Applied Mathematics*, 77 (4):1471–1492, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2017:CFT

[772] Yanning Li, Christian G. Claudel, Benedetto Piccoli, and Daniel B. Work. A convex formulation of traffic dynamics on transportation networks. *SIAM Journal on Applied Mathematics*, 77 (4):1493–1515, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schnitzer:2017:WSV

[773] Ory Schnitzer. Waves in slowly varying band-gap media. *SIAM Journal on Applied Mathematics*, 77(4):1516–1535, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gil:2017:MPC

[774] Marie-Eve Gil, François Hamel, Guillaume Martin, and Lionel Roques. Mathematical properties of a class of integro-differential models from population genetics. *SIAM Journal on Applied Mathematics*, 77(4):1536–1561, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mielke:2017:NET

[775] Alexander Mielke, Robert I. A. Patterson, Mark A. Peletier, and D. R. Michiel Renger. Non-equilibrium thermodynamical principles for chemical reactions with mass-action kinetics. *SIAM Journal on Applied Mathematics*, 77(4):1562–1585, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mikucki:2017:CDM

[776] Michael Mikucki and Y. C. Zhou. Curvature-driven molecular flow on membrane surface. *SIAM Journal on Applied Mathematics*, 77(5):1587–1605, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marshall:2017:EFE

[777] Jonathan S. Marshall. Exact formulae for the effective slip length of a symmetric superhydrophobic channel with flat or weakly curved menisci. *SIAM Journal on Applied Mathematics*, 77 (5):1606–1630, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chapman:2017:ETP

[778] S. Jonathan Chapman and Alex Shabala. Effective transport properties of lattices. *SIAM Journal on Applied Mathematics*, 77(5):1631–1652, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schulz:2017:EMB

[779] Raphael Schulz and Peter Knabner. An effective model for biofilm growth made by chemotactical bacteria in evolving porous media. *SIAM Journal on Applied Mathematics*, 77(5):1653–1677, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hudson:2017:PSD

[780] Thomas Hudson and Marco Morandotti. Properties of screw dislocation dynamics: Time estimates on boundary and interior collisions. *SIAM Journal on Applied Mathematics*, 77 (5):1678–1705, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Katsevich:2017:LAR

[781] Alexander Katsevich. A local approach to resolution analysis of image reconstruction in tomography. *SIAM Journal on Applied Mathematics*, 77 (5):1706–1732, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klibanov:2017:GSC

[782] Michael V. Klibanov, Aleksandr E. Kolesov, Lam Nguyen, and Anders Sullivan. Globally strictly convex cost functional for a 1-D inverse medium scattering problem with experimental data. *SIAM Journal on Applied Mathematics*, 77(5):1733–1755, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Baratchart:2017:RCC

[783] L. Baratchart and C. Gerhards. On the recovery of core and crustal components of geomagnetic potential fields. *SIAM Journal on Applied Mathematics*, 77(5):1756–1780, ???? 2017. CO-

DEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Vaidya:2017:MPH

[784] Naveen K. Vaidya and Libin Rong. Modeling pharmacodynamics on HIV latent infection: Choice of drugs is key to successful cure via early therapy. *SIAM Journal on Applied Mathematics*, 77(5):1781–1804, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2017:DTP

[785] Dong Wang, Xiao-Ping Wang, and Ya-Guang Wang. The dynamics of three-phase triple junction and contact points. *SIAM Journal on Applied Mathematics*, 77(5):1805–1826, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2017:MNF

[786] Habib Ammari, Brian Fitzpatrick, David Gontier, Hyundae Lee, and Hai Zhang. A mathematical and numerical framework for bubble meta-screens. *SIAM Journal on Applied Mathematics*, 77(5):1827–1850, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lewis:2017:RTD

[787] A. H. Lewis, D. G. A. L. Aarts, P. D. Howell, and A. Majumdar. Revisiting the two-dimensional defect-free azimuthal nematic equilibrium on an annulus. *SIAM Journal on Applied Mathematics*, 77(6):1851–1875, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Caubet:2017:OLR

[788] Fabien Caubet, Thibaut Deheuvels, and Yannick Privat. Optimal location of resources for biased movement of species: The 1D case. *SIAM Journal on Applied Mathematics*, 77 (6):1876–1903, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gonzalez:2017:BAV

[789] O. Gonzalez. Bounds on the average velocity of a rigid body in a Stokes fluid. *SIAM Journal on Applied Mathematics*, 77(6):1904–1920, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

McLaughlin:2017:FPS

[790] Joyce R. McLaughlin and Jeong-Rock Yoon. Finite propagation speed of waves in anisotropic viscoelastic media. *SIAM Journal on Applied Mathematics*, 77(6):1921–1936, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dalwadi:2017:MMC

[791] M. P. Dalwadi, D. O'Kiely, S. J. Thomson, T. S. Khaleque, and C. L. Hall. Mathematical modeling of chemical agent removal by reaction with an immiscible cleanser. *SIAM Journal on Applied Mathematics*, 77(6):1937–1961, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lefevre:2017:HED

[792] Victor Lefèvre and Oscar Lopez-Pamies. Homogenization of elastic dielectric composites with rapidly oscillating passive and active source

terms. *SIAM Journal on Applied Mathematics*, 77(6):1962–1988, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bridges:2017:EHT

[793] Thomas J. Bridges and Daniel J. Ratliff. On the elliptic-hyperbolic transition in Whitham modulation theory. *SIAM Journal on Applied Mathematics*, 77(6):1989–2011, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Evans:2017:SDL

[794] J. D. Evans and J. R. King. Stress-dependent local oxidation of silicon. *SIAM Journal on Applied Mathematics*, 77(6):2012–2039, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Etchegaray:2017:ANN

[795] Christèle Etchegaray, Nicolas Meunier, and Raphael Voituriez. Analysis of a nonlocal and nonlinear Fokker–Planck model for cell crawling migration. *SIAM Journal on Applied Mathematics*, 77(6):2040–2065, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Griesmaier:2017:UPT

[796] Roland Griesmaier and John Sylvester. Uncertainty principles for three-dimensional inverse source problems. *SIAM Journal on Applied Mathematics*, 77(6):2066–2092, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bao:2017:SEA

[797] Weizhu Bao, Wei Jiang, David J. Srolovitz, and Yan Wang. Stable equilibria of anisotropic particles on substrates: a generalized winterbottom construction. *SIAM Journal on Applied Mathematics*, 77(6):2093–2118, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schnitzer:2017:BWA

[798] Ory Schnitzer and Richard V. Craster. Bloch waves in an arbitrary two-dimensional lattice of subwavelength Dirichlet scatterers. *SIAM Journal on Applied Mathematics*, 77(6):2119–2135, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bennett:2017:PTW

[799] Jamie J. R. Bennett and Jonathan A. Sherratt. Periodic traveling waves generated by invasion in cyclic predator–prey systems: The effect of unequal dispersal. *SIAM Journal on Applied Mathematics*, 77(6):2136–2155, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Omori:2017:TSS

[800] Ryosuke Omori and Jianhong Wu. Tajima's D and site-specific nucleotide frequency in a population during an infectious disease outbreak. *SIAM Journal on Applied Mathematics*, 77 (6):2156–2171, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Foster:2017:MMM

[801] J. M. Foster, S. J. Chapman, G. Richardson, and B. Protas. A

mathematical model for mechanically-induced deterioration of the binder in lithium-ion electrodes. *SIAM Journal on Applied Mathematics*, 77(6):2172–2198, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Noad:2017:AWE

[802] I. F. Noad and R. Porter. Approximations to wave energy absorption by articulated rafts. *SIAM Journal on Applied Mathematics*, 77(6):2199–2223, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Calvez:2017:TCA

[803] Vincent Calvez, Laurent Gosse, and Monika Twarogowska. Travelling chemotactic aggregates at mesoscopic scale and BiStability. *SIAM Journal on Applied Mathematics*, 77(6):2224–2249, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hyvonen:2017:SCE

[804] Nuutti Hyvönen and Lauri Mustonen. Smoothened complete electrode model. *SIAM Journal on Applied Mathematics*, 77(6):2250–2271, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mitchener:2017:SML

[805] W. Garrett Mitchener. A stochastic model of language change through social structure and prediction-driven instability. *SIAM Journal on Applied Mathematics*, 77(6):2272–2293, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bruna:2017:DPS

[806] Maria Bruna, S. Jonathan Chapman, and Martin Robinson. Diffusion of particles with short-range interactions. *SIAM Journal on Applied Mathematics*, 77(6):2294–2316, ???? 2017. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Isakov:2018:ISI

[807] Victor Isakov and Shuai Lu. Increasing stability in the inverse source problem with attenuation and many frequencies. *SIAM Journal on Applied Mathematics*, 78(1):1–18, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nicholls:2018:NSG

[808] David P. Nicholls. Numerical simulation of grating structures incorporating two-dimensional materials: a high-order perturbation of surfaces framework. *SIAM Journal on Applied Mathematics*, 78(1):19–44, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kisil:2018:IWH

[809] Anastasia V. Kisil. An iterative Wiener–Hopf method for triangular matrix functions with exponential factors. *SIAM Journal on Applied Mathematics*, 78(1):45–62, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tordeux:2018:TPF

[810] Antoine Tordeux, Guillaume Costeseque, Michael Herty, and Armin Seyfried. From traffic and pedestrian follow-the-leader models with reaction

time to first order convection–diffusion flow models. *SIAM Journal on Applied Mathematics*, 78(1):63–79, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Deschner:2018:SSS

[811] Stephan C. Deschner, Tobias F. Illenseer, and Wolfgang J. Duschl. Self-similar solutions to isothermal shock problems. *SIAM Journal on Applied Mathematics*, 78(1):80–103, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ye:2018:DLF

[812] Felix X.-F. Ye, Panos Stinis, and Hong Qian. Dynamic looping of a free-draining polymer. *SIAM Journal on Applied Mathematics*, 78(1):104–123, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Volpert:2018:DDS

[813] V. A. Volpert, A. A. Nepomnyashchy, and Y. Kanevsky. Drug diffusion in a swollen polymer. *SIAM Journal on Applied Mathematics*, 78(1):124–144, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Al-Darabsah:2018:SSM

[814] Isam Al-Darabsah and Yuan Yuan. A stage-structured mathematical model for fish stock with harvesting. *SIAM Journal on Applied Mathematics*, 78(1):145–170, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deHoop:2018:ERP

[815] Maarten V. de Hoop, Paul Kepley, and Lauri Oksanen. An exact redatuming procedure for the inverse boundary value problem for the wave equation. *SIAM Journal on Applied Mathematics*, 78(1):171–192, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Agbanusi:2018:EBM

[816] Ikemefuna Agbanusi and Jared C. Bronski. Emergence of balance from a model of social dynamics. *SIAM Journal on Applied Mathematics*, 78(1):193–225, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2018:MPN

[817] Pei Liu, Xia Ji, and Zhenli Xu. Modified Poisson–Nernst–Planck model with accurate Coulomb correlation in variable media. *SIAM Journal on Applied Mathematics*, 78(1):226–245, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lu:2018:PML

[818] Wangtao Lu, Ya Yan Lu, and Jianliang Qian. Perfectly matched layer boundary integral equation method for wave scattering in a layered medium. *SIAM Journal on Applied Mathematics*, 78(1):246–265, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bernoff:2018:NAD

[819] Andrew J. Bernoff and Alan E. Lindsay. Numerical approximation of diffusive capture rates by planar and

spherical surfaces with absorbing pores. *SIAM Journal on Applied Mathematics*, 78(1):266–290, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Avitabile:2018:SDR

[820] Daniele Avitabile, Victor F. Breña Medina, and Michael J. Ward. Spot dynamics in a reaction–diffusion model of plant root hair initiation. *SIAM Journal on Applied Mathematics*, 78 (1):291–319, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Antipov:2018:SMS

[821] Y. A. Antipov. Slit maps in the study of equal-strength cavities in n-connected elastic planar domains. *SIAM Journal on Applied Mathematics*, 78(1):320–342, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Arne:2018:WEV

[822] Walter Arne, Nicole Marheineke, Miguel Pérez-Saborid, Javier Rivero-Rodríguez, Raimund Wegener, and Manuel Wieland. Whipping of electrified visco-capillary jets in airflows. *SIAM Journal on Applied Mathematics*, 78(1):343–371, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Poignard:2018:SLM

[823] Camille Poignard, Tiago Pereira, and Jan Philipp Pade. Spectra of Laplacian matrices of weighted graphs: Structural genericity properties. *SIAM Journal on Applied Mathematics*, 78 (1):372–394, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Riaza:2018:TBP

[824] Ricardo Riaza. Transcritical bifurcation without parameters in memristive circuits. *SIAM Journal on Applied Mathematics*, 78(1):395–417, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fadai:2018:AAM

[825] Nabil T. Fadai, Colin P. Please, and Robert A. Van Gorder. Asymptotic analysis of a multiphase drying model motivated by coffee bean roasting. *SIAM Journal on Applied Mathematics*, 78(1):418–436, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Greenleaf:2018:SMR

[826] Allan Greenleaf, Henrik Kettunen, Yaroslav Kurylev, Matti Lassas, and Gunther Uhlmann. Superdimensional metamaterial resonators from sub-Riemannian geometry. *SIAM Journal on Applied Mathematics*, 78(1):437–456, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Haltmeier:2018:ALP

[827] Markus Haltmeier, Lukas Neumann, Linh Nguyen, and Simon Rabanser. Analysis of the linearized problem of quantitative photoacoustic tomography. *SIAM Journal on Applied Mathematics*, 78(1):457–478, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ren:2018:NQP

[828] Kui Ren and Rongting Zhang. Nonlinear quantitative photoacoustic tomography with two-photon absorption. *SIAM Journal on Applied Mathematics*, 78(1):479–503, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Laurencot:2018:HDP

[829] Philippe Laurençot and Christoph Walker. Heterogeneous dielectric properties in models for microelectromechanical systems. *SIAM Journal on Applied Mathematics*, 78(1):504–530, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Juang:2018:ACC

[830] Jonq Juang and Yu-Hao Liang. Avoiding collisions in Cucker–Smale flocking models under group-hierarchical multileadership. *SIAM Journal on Applied Mathematics*, 78(1):531–550, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

McCuan:2018:FEL

[831] John McCuan and Ray Treinen. On floating equilibria in a laterally finite container. *SIAM Journal on Applied Mathematics*, 78(1):551–570, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Choi:2018:VIF

[832] Yung-Sze Choi and Eun Heui Kim. A variational inequality formulation for transonic compressible steady potential flows: Radially symmetric transonic shock. *SIAM Journal on Applied Mathematics*, 78(1):571–590, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marcotte:2018:OHT

[833] Florence Marcotte, Charles R. Doering, Jean-Luc Thiffeault, and William R. Young. Optimal heat transfer and optimal exit times. *SIAM Journal on Applied Mathematics*, 78(1):591–608, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kettunen:2018:AEA

[834] Henrik Kettunen, Matti Lassas, and Petri Ola. On absence and existence of the anomalous localized resonance without the quasi-static approximation. *SIAM Journal on Applied Mathematics*, 78(1):609–628, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jin:2018:TCN

[835] Suoqin Jin, Dingjie Wang, and Xiufen Zou. Trajectory control in nonlinear networked systems and its applications to complex biological systems. *SIAM Journal on Applied Mathematics*, 78(1):629–649, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Facca:2018:TSM

[836] Enrico Facca, Franco Cardin, and Mario Putti. Towards a stationary Monge–Kantorovich dynamics: The *Physarum Polycephalum* experience. *SIAM Journal on Applied Mathematics*, 78(2):651–676, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Borcea:2018:LBI

[837] Liliana Borcea and Josselin Garnier. Laser beam imaging from the speckle pattern of the off-axis scattered intensity. *SIAM Journal on Applied Mathematics*, 78(2):677–704, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gordon:2018:EMA

[838] Peter V. Gordon, Uday G. Hegde, and Michael C. Hicks. An elementary model for autoignition of free round turbulent jets. *SIAM Journal on Applied Mathematics*, 78(2):705–718, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bressloff:2018:DSP

[839] Paul C. Bressloff and Bhargav R. Karamched. Doubly stochastic Poisson model of flagellar length control. *SIAM Journal on Applied Mathematics*, 78(2):719–741, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brander:2018:MEM

[840] Tommi Brander, Bastian Harrach, Manas Kar, and Mikko Salo. Monotonicity and enclosure methods for the p-Laplace equation. *SIAM Journal on Applied Mathematics*, 78(2):742–758, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Freistuhler:2018:NWP

[841] Heinrich Freistühler and Jan Fuhrmann. Nonlinear waves and polarization in diffusive directed particle flow. *SIAM Journal on Applied Mathematics*, 78 (2):759–773, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Haddar:2018:UTD

[842] Houssem Haddar, Jing-Rebecca Li, and Simona Schiavi. Understanding the time-dependent effective diffusion coefficient measured by diffusion MRI: the intracellular case. *SIAM Journal on Applied Mathematics*, 78(2):774–800, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brunner:2018:RPP

[843] James D. Brunner and Gheorghe Craciun. Robust persistence and permanence of polynomial and power law dynamical systems. *SIAM Journal on Applied Mathematics*, 78(2):801–825, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Qu:2018:MTW

[844] Zhuolin Qu, Ling Xue, and James M. Hyman. Modeling the transmission of *Wolbachia* in mosquitoes for controlling mosquito-borne diseases. *SIAM Journal on Applied Mathematics*, 78 (2):826–852, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tudisco:2018:NLE

[845] Francesco Tudisco, Francesca Arrigo, and Antoine Gautier. Node and layer eigenvector centralities for multiplex networks. *SIAM Journal on Applied Mathematics*, 78(2):853–876, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cumberbatch:2018:CVC

[846] Ellis Cumberbatch and Stefan G. Llewellyn Smith. Current/voltage characteristics of the short-channel double-gate transistor. Part I. *SIAM Journal on Applied Mathematics*, 78(2):877–896, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2018:NEC

[847] Zichao Li, Peter J. Mucha, and Dane Taylor. Network-ensemble comparisons with stochastic rewiring and von Neumann entropy. *SIAM Journal on Applied Mathematics*, 78(2):897–920, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Abbasi:2018:ADC

[848] Bilal Abbasi, Jeff Calder, and Adam M. Oberman. Anomaly detection and classification for streaming data using PDEs. *SIAM Journal on Applied Mathematics*, 78(2):921–941, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lawley:2018:PAV

[849] Sean D. Lawley. A probabilistic analysis of volume transmission in the brain. *SIAM Journal on Applied Mathematics*, 78(2):942–962, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Doschoris:2018:ISD

[850] Michael Doschoris, Panayiotis Vafeas, and George Fragoyiannis. The influence of surface deformations on the forward magnetoencephalographic problem. *SIAM Journal on Applied Mathematics*, 78(2):963–976, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dai:2018:PSV

[851] Qianhui Dai, Björn Gebhard, and Thomas Bartsch. Periodic solutions of N-vortex type Hamiltonian systems near the domain boundary. *SIAM Journal on Applied Mathematics*, 78 (2):977–995, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Devitt-Lee:2018:NDW

[852] Adrian Devitt-Lee, Hongyan Wang, Jie Li, and Bruce Boghosian. A nonstandard description of wealth concentration in large-scale economies. *SIAM Journal on Applied Mathematics*, 78 (2):996–1008, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Coman:2018:WSR

[853] Ciprian D. Coman and Andrew P. Bassom. Wrinkling structures at the Rim of an initially stretched circular thin plate subjected to transverse pressure. *SIAM Journal on Applied Mathematics*, 78(2):1009–1029, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Filbet:2018:VMS

[854] Francis Filbet, Tao Xiong, and Eric Sonnendrücker. On the Vlasov–Maxwell system with a strong magnetic field. *SIAM Journal on Applied Mathematics*, 78(2):1030–1055, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

daMota:2018:MTW

[855] Jesus C. da Mota and Aparecido J. de Souza. Multiple traveling waves for dry forward combustion through a porous medium. *SIAM Journal on Applied Mathematics*, 78(2):1056–1077, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Carrillo:2018:ZNC

[856] José A. Carrillo, Yanghong Huang, and Markus Schmidtchen. Zoology of a nonlocal cross-diffusion model for two species. *SIAM Journal on Applied Mathematics*, 78(2):1078–1104, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Banaji:2018:INM

[857] Murad Banaji and Casian Pantea. The inheritance of nondegenerate multistationarity in chemical reaction networks. *SIAM Journal on Applied Mathematics*, 78(2):1105–1130, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2018:AMF

[858] Xuejiao Liu, Yu Qiao, and Benzhuo Lu. Analysis of the mean field free energy functional of electrolyte solution with nonhomogeneous boundary conditions and the generalized PB/PNP equations with inhomogeneous dielectric permittivity. *SIAM Journal on Applied Mathematics*, 78(2):1131–1154, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Estrada-Rodriguez:2018:FPK

[859] Gissell Estrada-Rodriguez, Heiko Gimperlein, and Kevin J. Painter. Fractional Patlak–Keller–Segel equations for chemotactic superdiffusion. *SIAM Journal on Applied Mathematics*, 78 (2):1155–1173, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sloman:2018:AAS

[860] Benjamin M. Sloman, Colin P. Please, and Robert A. Van Gorder. Asymptotic analysis of a silicon furnace model. *SIAM Journal on Applied Mathematics*, 78(2):1174–1205, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lazzaroni:2018:ADP

[861] Giuliano Lazzaroni and Lorenzo Nardini. Analysis of a dynamic peeling test with speed-dependent toughness. *SIAM Journal on Applied Mathematics*, 78(2):1206–1227, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bennett:2018:MMM

[862] Thomas P. Bennett, Giampaolo D'Alessandro, and Keith R. Daly. Multiscale models of metallic particles in nematic liquid crystals. *SIAM Journal on Applied Mathematics*, 78(2):1228–1255, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Poblet-Puig:2018:BAF

[863] Jordi Poblet-Puig and Andrey V. Shanin. A boundary algebraic formulation for plane strain elastodynamic scattering. *SIAM Journal on Applied Mathematics*, 78(2):1256–1282, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Vasquez:2018:AHW

[864] Fernando Guevara Vasquez and China Mauck. Approximation by Herglotz wave functions. *SIAM Journal on Applied Mathematics*, 78(3):1283–1299, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dalwadi:2018:UDT

[865] Mohit P. Dalwadi, Yanming Wang, John R. King, and Nigel P. Minton. Upscaling diffusion through first-order volumetric sinks: a homogenization of bacterial nutrient uptake. *SIAM Journal on Applied Mathematics*, 78 (3):1300–1329, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Torrejon:2018:GME

[866] Diego Torrejon and Maria Emelianenko. Generalized master equations for random walks with time-dependent jump sizes. *SIAM Journal on Applied Mathematics*, 78(3):1330–1349, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bosch:2018:GDI

[867] Jessica Bosch, Steffen Klamt, and Martin Stoll. Generalizing diffuse interface methods on graphs: Nonsmooth potentials and hypergraphs. *SIAM Journal on Applied Mathematics*, 78 (3):1350–1377, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ferreira:2018:DRV

[868] J. A. Ferreira, P. de Oliveira, M. Grassi, and G. Romanazzi. Drug release from viscoelastic swelling polymeric platforms. *SIAM Journal on Applied Mathematics*, 78(3):1378–1401, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mizerski:2018:LSH

[869] Krzysztof A. Mizerski. Large-scale hydromagnetic dynamo by Lehnert waves in nonresistive plasma. *SIAM Journal on Applied Mathematics*, 78(3): 1402–1421, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gilman:2018:DFR

[870] Mikhail Gilman and Semyon Tsynkov. Differential Faraday rotation and polarimetric SAR. *SIAM Journal on Applied Mathematics*, 78(3):1422–1449, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ferrillo:2018:CCF

[871] Francesca Ferrillo, Renato Spigler, and Moreno Concezzi. Comparing Cattaneo and fractional derivative models for heat transfer processes. *SIAM Journal on Applied Mathematics*, 78 (3):1450–1469, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Arredondo:2018:MDN

[872] R. Arredondo and John P. McHugh. Mean displacement near an interface in a nonlinear string. *SIAM Journal on Applied Mathematics*, 78(3):1470–1488, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fibich:2018:REL

[873] Gadi Fibich, Arieh Gavious, and Nir Gavish. Revenue equivalence of large asymmetric auctions. *SIAM Journal on Applied Mathematics*, 78(3):1489–1510, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chang:2018:MTN

[874] Shyr-Shea Chang and Marcus Roper. Minimal transport networks with general boundary conditions. *SIAM Journal on Applied Mathematics*, 78(3): 1511–1535, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Du:2018:SND

[875] Qiang Du and Xiaochuan Tian. Stability of nonlocal Dirichlet integrals and implications for peridynamic correspondence material modeling. *SIAM Journal on Applied Mathematics*, 78 (3):1536–1552, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Etling:2018:OED

[876] Tommy Etling and Roland Herzog. Optimum experimental design by shape optimization of specimens in linear elasticity. *SIAM Journal on Applied Mathematics*, 78(3):1553–1576, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Choi:2018:CEP

[877] Doo Sung Choi, Johan Helsing, and Mikyoung Lim. Corner effects on the perturbation of an electric potential. *SIAM Journal on Applied Mathematics*, 78(3):1577–1601, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sun:2018:ESE

[878] Mengfeng Sun, Michael Small, Shui Shan Lee, and Xinchu Fu. An exploration and simulation of epidemic spread and its control in multiplex networks. *SIAM Journal on Applied Mathematics*, 78 (3):1602–1631, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jin:2018:BSP

[879] Hai-Yang Jin, Yong-Jung Kim, and Zhi-An Wang. Boundedness, stabilization, and pattern formation driven by density-suppressed motility. *SIAM Journal on Applied Mathematics*, 78 (3):1632–1657, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ibanez:2018:SST

[880] Santiago Ibáñez and Miguel Hermanns. On the steady-state thermal response of slender geothermal boreholes. *SIAM Journal on Applied Mathematics*, 78 (3):1658–1681, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2018:VVO

[881] Yongxin Chen, Tryphon T. Georgiou, and Allen Tannenbaum. Vector-valued optimal mass transport. *SIAM Journal on Applied Mathematics*, 78(3): 1682–1696, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Adan:2018:QSV

[882] Ivo Adan, Onno Boxma, Dieter Claeys, and Offer Kella. A queueing system with vacations after a random amount of work. *SIAM Journal on Applied Mathematics*, 78(3):1697–1711, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nardini:2018:ISF

[883] John T. Nardini and D. M. Bortz. Investigation of a structured Fisher's equation with applications in biochemistry. *SIAM Journal on Applied Mathematics*, 78(3):1712–1736, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2018:UISa

[884] Xiaoxu Xu, Bo Zhang, and Haiwen Zhang. Uniqueness in inverse scattering problems with phaseless far-field data at a fixed frequency. *SIAM Journal on Applied Mathematics*, 78 (3):1737–1753, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fogelson:2018:AMF

[885] Ben Fogelson and Alex Mogilner. Actin-myosin force generation and symmetry breaking in the model contractile fiber. *SIAM Journal on Applied Mathematics*, 78(3):1754–1777, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Stepien:2018:TWG

[886] Tracy L. Stepien, Erica M. Rutter, and Yang Kuang. Traveling waves of a go-or-grow model of glioma growth. *SIAM Journal on Applied Mathematics*, 78 (3):1778–1801, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ji:2018:AAD

[887] Lijie Ji, Pei Liu, Zhenli Xu, and Shenggao Zhou. Asymptotic analysis on dielectric boundary effects of modified Poisson–Nernst–Planck equations. *SIAM Journal on Applied Mathematics*, 78(3):1802–1822, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brown:2018:SCL

[888] Elisabeth Brown and Michael Shearer. A scalar conservation law for plume migration in carbon sequestration. *SIAM Journal on Applied Mathematics*, 78 (3):1823–1841, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Pan:2018:SIA

[889] Yingli Pan, Jian Fang, and Junjie Wei. Seasonal influence on age-structured invasive species with yearly generation. *SIAM Journal on Applied Mathematics*, 78(3):1842–1862, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Conway:2018:EHI

[890] Jessica M. Conway and Alan S. Perelson. Early HIV infection predictions: Role of viral replication errors. *SIAM Journal on Applied Mathematics*, 78 (4):1863–1890, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mercier:2018:ALM

[891] J.-F. Mercier. Accuracy of a low Mach number model for time-harmonic acoustics. *SIAM Journal on Applied Mathematics*, 78(4):1891–1912, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Huang:2018:CHC

[892] Yuting Huang, Immaculada Iglesias, and Antonio L. Sánchez. Conductive heating of a confined gas. *SIAM Journal on Applied Mathematics*, 78 (4):1913–1930, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deHoop:2018:RSM

[893] Maarten V. de Hoop, Paul Kepley, and Lauri Oksanen. Recovery of a smooth metric via wave field and coordinate transformation reconstruction. *SIAM Journal on Applied Mathematics*, 78 (4):1931–1953, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhao:2018:STD

[894] Guangyu Zhao and Shigui Ruan. Spatial and temporal dynamics of a nonlocal viral infection model. *SIAM Journal on Applied Mathematics*, 78 (4):1954–1980, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kolb:2018:POC

[895] Oliver Kolb, Guillaume Costeseque, Paola Goatin, and Simone Göttlich. Pareto-optimal coupling conditions for the Aw–Rascle–Zhang traffic flow model at junctions. *SIAM Journal on Applied Mathematics*, 78(4):1981–2002, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Essadki:2018:HOM

[896] Mohamed Essadki, Stephane de Chaisemartin, Frédérique Laurent, and Marc Massot. High order moment model for polydisperse evaporating sprays towards interfacial geometry description. *SIAM Journal on Applied Mathematics*, 78(4):2003–2027, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Janbek:2018:ANA

[897] Bebart Maisar Janbek and John M. Stockie. Asymptotic and numerical analysis of a porous medium model for transpiration-driven sap flow in trees. *SIAM Journal on Applied Mathematics*, 78(4):2028–2056, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bonnet:2018:MTS

[898] Marc Bonnet, Rémi Cornaggia, and Bojan B. Guzina. Microstructural topological sensitivities of the second-order macroscopic model for waves in periodic media. *SIAM Journal on Applied Mathematics*, 78(4):2057–2082, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Linton:2018:EWT

[899] C. M. Linton and I. Thompson. Elastic waves trapped above a cylindrical cavity. *SIAM Journal on Applied Mathematics*, 78(4):2083–2104, ???? 2018.

CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gotoda:2018:UAE

[900] Takeshi Gotoda and Takashi Sakajo. Universality of the anomalous enstrophy dissipation at the collapse of three point vortices on Euler–Poincaré models. *SIAM Journal on Applied Mathematics*, 78(4):2105–2128, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2018:DSI

[901] Huicong Li, Rui Peng, and Zhi an Wang. On a diffusive susceptible-infected-susceptible epidemic model with mass action mechanism and birth-death effect: Analysis, simulations, and comparison with other mechanisms. *SIAM Journal on Applied Mathematics*, 78(4):2129–2153, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Farmer:2018:WPA

[902] Chris L. Farmer, Hilary Ockendon, and John R. Ockendon. Wave propagation along periodic layers. *SIAM Journal on Applied Mathematics*, 78 (4):2154–2175, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chesnel:2018:IPR

[903] Lucas Chesnel, Sergei A. Nazarov, and Vincent Pagneux. Invisibility and perfect reflectivity in waveguides with finite length branches. *SIAM Journal on Applied Mathematics*, 78(4):2176–2199, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hohenegger:2018:RCF

[904] Christel Hohenegger and Scott A. McKinley. Reconstructing complex fluid properties from the behavior of fluctuating immersed particles. *SIAM Journal on Applied Mathematics*, 78 (4):2200–2226, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Debarnot:2018:CNR

[905] Valentin Debarnot, Jérôme Fehrenbach, Frédéric de Gournay, and Léo Martire. The case of Neumann, Robin, and periodic lateral conditions for the semi-infinite generalized Graetz problem and applications. *SIAM Journal on Applied Mathematics*, 78(4):2227–2251, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Herty:2018:MMM

[906] Michael Herty, Salissou Moutari, and Giuseppe Visconti. Macroscopic modeling of multilane motorways using a two-dimensional second-order model of traffic flow. *SIAM Journal on Applied Mathematics*, 78(4):2252–2278, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Monter:2018:SDA

[907] Sergio A. Almada Monter, Amarjit Budhiraja, and Jan Hannig. Source detection algorithms for dynamic contaminants based on the analysis of a hydrodynamic limit. *SIAM Journal on Applied Mathematics*, 78(5):2279–2297, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klika:2018:DSD

[908] Václav Klika, Michal Kozák, and Eamonn A. Gaffney. Domain size driven instability: Self-organization in systems with advection. *SIAM Journal on Applied Mathematics*, 78(5):2298–2322, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kim:2018:DVS

[909] Hyunjoong Kim and Paul C. Bressloff. Direct vs. synaptic coupling in a mathematical model of cytoneme-based morphogen gradient formation. *SIAM Journal on Applied Mathematics*, 78 (5):2323–2347, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Boujlida:2018:ATE

[910] H. Boujlida, H. Haddar, and M. Khenissi. The asymptotic of transmission eigenvalues for a domain with a thin coating. *SIAM Journal on Applied Mathematics*, 78(5):2348–2369, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tong:2018:DMM

[911] Jiajun Tong and Michael J. Shelley. Directed migration of microscale swimmers by an array of shaped obstacles: Modeling and shape optimization. *SIAM Journal on Applied Mathematics*, 78(5):2370–2392, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tudisco:2018:CDN

[912] Francesco Tudisco, Pedro Mercado, and Matthias Hein. Community detection in networks via nonlinear modularity eigenvectors. *SIAM Journal on Applied Mathematics*, 78(5):2393–2419, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xiang:2018:CAV

[913] Tian Xiang. Chemotactic aggregation versus logistic damping on boundedness in the 3D minimal Keller–Segel model. *SIAM Journal on Applied Mathematics*, 78(5):2420–2438, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Boyd:2018:SEL

[914] Zachary M. Boyd, Egil Bae, Xue-Cheng Tai, and Andrea L. Bertozzi. Simplified energy landscape for modularity using total variation. *SIAM Journal on Applied Mathematics*, 78 (5):2439–2464, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Andrade:2018:TDS

[915] David Andrade and André Nachbin. Two-dimensional surface wave propagation over arbitrary ridge-like topographies. *SIAM Journal on Applied Mathematics*, 78(5):2465–2490, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Veprauskas:2018:SDD

[916] A. Veprauskas. Synchrony and the dynamic dichotomy in a class of matrix population models. *SIAM Journal on Applied Mathematics*, 78(5):2491–2510, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Miles:2018:ANM

[917] Christopher E. Miles, Sean D. Lawley, and James P. Keener. Analysis of non-processive molecular motor transport using renewal reward theory. *SIAM Journal on Applied Mathematics*, 78 (5):2511–2532, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Griesmaier:2018:MIM

[918] Roland Griesmaier and Bastian Harrach. Monotonicity in inverse medium scattering on unbounded domains. *SIAM Journal on Applied Mathematics*, 78(5):2533–2557, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [1071].

Harrach:2018:LCE

[919] Bastian Harrach, Yi-Hsuan Lin, and Hongyu Liu. On localizing and concentrating electromagnetic fields. *SIAM Journal on Applied Mathematics*, 78 (5):2558–2574, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Faye:2018:TFP

[920] Grégory Faye and Zachary P. Kilpatrick. Threshold of front propagation in neural fields: an interface dynamics approach. *SIAM Journal on Applied Mathematics*, 78(5):2575–2596, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Roubicek:2018:TEP

[921] Tomás Roubícek and Ulisse Stefanelli. Thermodynamics of elastoplastic porous rocks at large strains towards earthquake modeling. *SIAM Journal on Applied Mathematics*, 78 (5):2597–2625, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chen:2018:SIT

[922] Ke Chen, Qin Li, and Li Wang. Stability of inverse transport equation in diffusion scaling and Fokker–Planck limit. *SIAM Journal on Applied Mathematics*, 78(5):2626–2647, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Antunes:2018:HPD

[923] Manuella de Oliveira Antunes and Fernando Pigeard de Almeida Prado. A housing price dynamics model using heterogeneous interacting agents. *SIAM Journal on Applied Mathematics*, 78(5):2648–2671, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bao:2018:THA

[924] Gang Bao, Guanghui Hu, and Tao Yin. Time-harmonic acoustic scattering from locally perturbed half-planes. *SIAM Journal on Applied Mathematics*, 78(5):2672–2691, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Anderson:2018:SNC

[925] David F. Anderson and Jinsu Kim. Some network conditions for positive recurrence of stochastically modeled reaction networks. *SIAM Journal on Applied Mathematics*, 78(5):2692–2713, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Barcelo:2018:NCA

[926] Juan A. Barceló, C. Castro, T. Luque, and Mari Cruz Vilela. A new convergent algorithm to approximate potentials from fixed angle scattering data. *SIAM Journal on Applied Mathematics*, 78(5):2714–2736, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See corrigendum [1068].

Herty:2018:HSK

[927] Michael Herty, Andrea Tosin, Giuseppe Visconti, and Mattia Zanella. Hybrid stochastic kinetic description of two-dimensional traffic dynamics. *SIAM Journal on Applied Mathematics*, 78 (5):2737–2762, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deTeresa:2018:RTI

[928] Irene de Teresa and Fatemeh Pourahmadian. Real-time imaging of interfacial damage in heterogeneous composites. *SIAM Journal on Applied Mathematics*, 78(5):2763–2790, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yoo:2018:MFD

[929] JaeJun Yoo, Abdul Wahab, and Jong Chul Ye. A mathematical framework for deep learning in elastic source imaging. *SIAM Journal on Applied Mathematics*, 78(5):2791–2818, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nowack:2018:ETV

[930] Shane Nowack and Isaac Klapper. Exclusion in a temporally varying chemostat system: Dependence on tradeoffs. *SIAM Journal on Applied Mathematics*, 78(5):2819–2839, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wittsten:2018:PTS

[931] Jens Wittsten, Fredrik Andersson, Johan Robertsson, Dirk-Jan van Manen, and Lasse Amundsen. Perturbations of time shifts in signal apparition. *SIAM Journal on Applied Mathematics*, 78 (5):2840–2864, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Agaltsov:2018:MIG

[932] Alexey D. Agaltsov, Thorsten Hohage, and Roman G. Novikov. Monochromatic identities for the Green function and uniqueness results for passive imaging. *SIAM Journal on Applied Mathematics*, 78(5):2865–2890, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Borsche:2018:NDV

[933] R. Borsche and A. Klar. A nonlinear discrete velocity relaxation model for traffic flow. *SIAM Journal on Applied Mathematics*, 78(5):2891–2917, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chupin:2018:GSS

[934] Laurent Chupin. Global strong solutions for some differential viscoelastic models. *SIAM Journal on Applied Mathematics*, 78(6):2919–2949, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bourgeois:2018:SPI

[935] Adèle Bourgeois, Victor LeBlanc, and Frithjof Lutscher. Spreading phenomena in integrodifference equations with nonmonotone growth functions. *SIAM Journal on Applied Mathematics*, 78 (6):2950–2972, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ciotti:2018:LTE

[936] Benjamin Ciotti and Bo Li. Legendre transforms of electrostatic free-energy functionals. *SIAM Journal on Applied Mathematics*, 78(6):2973–2995, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ferreira:2018:TPO

[937] J. A. Ferreira, Paula de Oliveira, P. M. da Silva, and R. Silva. Toward a precision ophthalmology: Targeting the retina. *SIAM Journal on Applied Mathematics*, 78(6):2996–3023, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2018:UISb

[938] Xiaoxu Xu, Bo Zhang, and Haiwen Zhang. Uniqueness in inverse scattering problems with phaseless far-field data at a fixed frequency. II. *SIAM Journal on Applied Mathematics*, 78 (6):3024–3039, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kuzmin:2018:POC

[939] Dmitri Kuzmin. Planar and orthotropic closures for orientation tensors in fiber suspension flow models. *SIAM Journal on Applied Mathematics*, 78(6):3040–3059, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schweizer:2018:LDL

[940] Ben Schweizer and Florian Theil. Lattice dynamics on large time scales and dispersive effective equations. *SIAM Journal on Applied Mathematics*, 78 (6):3060–3086, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sherratt:2018:HDN

[941] Jonathan A. Sherratt. How does nonlocal dispersal affect the selection and stability of periodic traveling waves? *SIAM Journal on Applied Mathematics*, 78(6):3087–3102, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sultanov:2018:SAA

[942] Oskar Sultanov. Stability and asymptotic analysis of the autoresonant capture in oscillating systems with combined excitation. *SIAM Journal on Applied Mathematics*, 78(6):3103–3118, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Mercier:2018:SCA

[943] J.-F. Mercier. A sufficient condition for the absence of two-dimensional instabilities of an elastic plate in a duct with compressible flow. *SIAM Journal on Applied Mathematics*, 78 (6):3119–3144, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Howell:2018:AAD

[944] P. D. Howell. Asymptotic analysis of a dynamical system arising in thermoelastic contact. *SIAM Journal on Applied Mathematics*, 78(6):3145–3167, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yu:2018:MMP

[945] Jianshe Yu. Modeling mosquito population suppression based on delay differential equations. *SIAM Journal on Applied Mathematics*, 78(6):3168–3187, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kaiser:2018:AAA

[946] Ralf Kaiser. Approximately axisymmetric antidynamo theorems. *SIAM Journal on Applied Mathematics*, 78 (6):3188–3212, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Carter:2018:TSK

[947] Paul Carter and Arjen Doelman. Traveling stripes in the Klausmeier model of vegetation pattern formation. *SIAM Journal on Applied Mathematics*, 78 (6):3213–3237, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kuwamura:2018:DLU

[948] Masataka Kuwamura, Sungrim Seirin-Lee, and Shin ichiro Ei. Dynamics of localized unimodal patterns in reaction–diffusion systems for cell polarization by extracellular signaling. *SIAM Journal on Applied Mathematics*, 78(6): 3238–3257, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Champredon:2018:EED

[949] David Champredon, Jonathan Dushoff, and David J. D. Earn. Equivalence of the Erlang-distributed SEIR epidemic model and the renewal equation. *SIAM Journal on Applied Mathematics*, 78 (6):3258–3278, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Schaeffer:2018:ESH

[950] Hayden Schaeffer, Giang Tran, and Rachel Ward. Extracting sparse high-dimensional dynamics from limited data. *SIAM Journal on Applied Mathematics*, 78(6):3279–3295, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Garnier:2018:NIT

[951] Josselin Garnier and Knut Sølna. Noninvasive imaging through random media. *SIAM Journal on Applied Mathematics*, 78(6):3296–3315, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ammari:2018:SLM

[952] Habib Ammari, Brian Fitzpatrick, Erik Orvehed Hiltunen, and Sanghyeon Yu. Subwavelength localized modes for acoustic waves in bubbly crystals with a defect. *SIAM Journal on Applied Mathematics*, 78(6):3316–3335, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klibanov:2019:CIP

[953] Michael V. Klibanov, Dinh-Liem Nguyen, and Loc H. Nguyen. A coefficient inverse problem with a single measurement of phaseless scattering data. *SIAM Journal on Applied Mathematics*, 79(1):1–27, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Glasner:2019:ECB

[954] Karl Glasner. Evolution and competition of block copolymer nanoparticles. *SIAM Journal on Applied Mathematics*, 79(1):28–54, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ke:2019:CBR

[955] Min Ke, Zhou Fang, and Chuanhou Gao. Complex balancing reconstructed to the asymptotic stability of mass-action chemical reaction networks with conservation laws. *SIAM Journal on Applied Mathematics*, 79(1):55–74, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2019:IDE

[956] Feng-Bin Wang, Stephen Gourley, and Yanyu Xiao. An integro-differential equation with variable delay arising in machine tool vibration. *SIAM Journal on Applied Mathematics*, 79(1):75–94, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cucker:2019:FUS

[957] Felipe Cucker and Jiu-Gang Dong. On flocks under switching directed interaction topologies. *SIAM Journal on Applied Mathematics*, 79(1):95–110, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sun:2019:FTF

[958] Yongzheng Sun, Wang Li, Hongjun Shi, Donghua Zhao, and Sandro Azaele. Finite-time and fixed-time consensus of multiagent networks with pinning control and noise perturbation. *SIAM Journal on Applied Mathematics*, 79(1):111–130, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Tzella:2019:CFP

[959] Alexandra Tzella and Jacques Vanneste. Chemical front propagation in periodic flows: FKPP versus G. *SIAM Journal on Applied Mathematics*, 79 (1):131–152, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2019:NFI

[960] Xiaoli Liu, Bo Zhang, and Haiwen Zhang. Near-field imaging of an unbounded elastic rough surface with a direct imaging method. *SIAM Journal on Applied Mathematics*, 79(1):153–176, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sloman:2019:HSC

[961] Benjamin M. Sloman, Colin P. Please, and Robert A. Van Gorder. Homogenization of a shrinking core model for Gas–Solid reactions in granular particles. *SIAM Journal on Applied Mathematics*, 79(1):177–206, ???? 2019.

CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Clement:2019:ACL

[962] Frédérique Clément, Frédérique Robin, and Romain Yvinec. Analysis and calibration of a linear model for structured cell populations with unidirectional motion: Application to the morphogenesis of ovarian follicles. *SIAM Journal on Applied Mathematics*, 79 (1):207–229, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hermanns:2019:TRS

[963] Miguel Hermanns and Santiago Ibáñez. Thermal response of slender geothermal boreholes to subannual harmonic excitations. *SIAM Journal on Applied Mathematics*, 79(1):230–256, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Adam:2019:OMP

[964] Lukás Adam, Michael Hintermüller, Dirk Peschka, and Thomas M. Surowiec. Optimization of a multiphysics problem in semiconductor laser design. *SIAM Journal on Applied Mathematics*, 79(1):257–283, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Magal:2019:BRN

[965] Pierre Magal, Glenn F. Webb, and Yixiang Wu. On the basic reproduction number of reaction–diffusion epidemic models. *SIAM Journal on Applied Mathematics*, 79(1):284–304, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Komatsu:2019:PCR

[966] Hirokazu Komatsu and Hiroyuki Nakajima. Persistence in chemical reaction networks with arbitrary time delays. *SIAM Journal on Applied Mathematics*, 79(1):305–320, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kuniya:2019:GBM

[967] Toshikazu Kuniya. Global behavior of a multi-group SIR epidemic model with age structure and an application to the chlamydia epidemic in Japan. *SIAM Journal on Applied Mathematics*, 79(1):321–340, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lai:2019:QDS

[968] Ru-Yu Lai and Daniel Spirn. Quench detection on a superconducting radio-frequency cavity. *SIAM Journal on Applied Mathematics*, 79(1):341–355, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2019:HIP

[969] Wei Li, Yang Yang, and Yimin Zhong. A hybrid inverse problem in the fluorescence ultrasound modulated optical tomography in the diffusive regime. *SIAM Journal on Applied Mathematics*, 79(1):356–376, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Aldebert:2019:TDB

[970] Clement Aldebert, Bob W. Kooi, David Nerini, Mathias Gauduchon, and Jean-Christophe Poggiale. Three-dimensional bifurcation analysis of a

predator-prey model with uncertain formulation. *SIAM Journal on Applied Mathematics*, 79(1):377–395, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kang:2019:CWN

[971] Hyeonbae Kang and Xiaofei Li. Construction of weakly neutral inclusions of general shape by imperfect interfaces. *SIAM Journal on Applied Mathematics*, 79(1):396–414, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Caubet:2019:NMD

[972] Fabien Caubet, Marc Dambrine, and Helmut Harbrecht. A new method for the data completion problem and application to obstacle detection. *SIAM Journal on Applied Mathematics*, 79 (1):415–435, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ivanenko:2019:PAO

[973] Yevhen Ivanenko, Mats Gustafsson, B. L. G. Jonsson, Annemarie Luger, Börje Nilsson, Sven Nordebo, and Joachim Toft. Passive approximation and optimization using B-splines. *SIAM Journal on Applied Mathematics*, 79(1):436–458, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Falle:2019:SSD

[974] Samuel A. Falle and Robin J. Williams. Shock structures described by hyperbolic balance laws. *SIAM Journal on Applied Mathematics*, 79(1):459–476, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hakkaev:2019:GSK

[975] Sevdzhan Hakkaev, Milena Stanislavova, and Atanas G. Stefanov. On the generation of stable Kerr frequency combs in the Lugiato–Lefever model of periodic optical waveguides. *SIAM Journal on Applied Mathematics*, 79(2):477–505, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Vanel:2019:AMP

[976] A. L. Vanel, R. V. Craster, and O. Schnitzer. Asymptotic modeling of phononic Box crystals. *SIAM Journal on Applied Mathematics*, 79 (2):506–524, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Harrach:2019:GUL

[977] Bastian Harrach and Houcine Meftahi. Global uniqueness and Lipschitz-stability for the inverse Robin transmission problem. *SIAM Journal on Applied Mathematics*, 79(2):525–550, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lawley:2019:EFT

[978] Sean D. Lawley and James P. Keener. Electrodiffusive flux through a stochastically gated ion channel. *SIAM Journal on Applied Mathematics*, 79 (2):551–571, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Brubaker:2019:TDC

[979] Nicholas D. Brubaker. Two-dimensional capillary origami with inextensibility and free triple-contact points. *SIAM Journal on Applied Mathematics*, 79 (2):572–593, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cavallo:2019:RDS

[980] James C. Cavallo and Mark B. Flegg. Reversible Doi and Smoluchowski kinetics for high-order reactions. *SIAM Journal on Applied Mathematics*, 79 (2):594–618, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Rebolledo:2019:OSA

[981] Rolando Rebolledo, Sergio A. Navarrete, Sonia Kéfi, Sergio Rojas, and Pablo A. Marquet. An open-system approach to complex biological networks. *SIAM Journal on Applied Mathematics*, 79(2):619–640, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liard:2019:WPS

[982] Thibault Liard and Benedetto Piccoli. Well-posedness for scalar conservation laws with moving flux constraints. *SIAM Journal on Applied Mathematics*, 79(2):641–667, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Meadows:2019:GAS

[983] T. Meadows, M. Weedermann, and G. S. K. Wolkowicz. Global analysis of a simplified model of anaerobic digestion and a new result for the chemostat. *SIAM Journal on Applied Mathematics*, 79(2):668–689, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cherednichenko:2019:TDB

[984] Kirill Cherednichenko, Yulia Ershova, and Alexander V. Kiselev. Time-dispersive behavior as a feature of critical-contrast media. *SIAM Journal on Applied Mathematics*, 79(2):690–715, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jiang:2019:MGD

[985] Danhua Jiang, King-Yeung Lam, Yuan Lou, and Zhi-Cheng Wang. Monotonicity and global dynamics of a nonlocal two-species phytoplankton model. *SIAM Journal on Applied Mathematics*, 79(2):716–742, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Blyth:2019:NAF

[986] M. G. Blyth and E. I. Parau. The nonlocal Ablowitz–Fokas–Musslimani water-wave method for cylindrical geometry. *SIAM Journal on Applied Mathematics*, 79(3):743–753, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bal:2019:TRT

[987] Guillaume Bal, Mathias Fink, and Olivier Pinaud. Time-reversal by time-dependent perturbations. *SIAM Journal on Applied Mathematics*, 79 (3):754–780, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Arrigo:2019:NBA

[988] Francesca Arrigo, Desmond J. Higham, and Vanni Noferini. Non-backtracking alternating walks. *SIAM Journal on Applied Mathematics*, 79(3):781–801, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Arnold:2019:MEC

[989] D. J. Arnold, D. Fernandez, R. Jia, C. Parkinson, D. Tonne, Y. Yaniv, A. L. Bertozzi, and S. J. Osher. Modeling environmental crime in protected areas using the level set method. *SIAM Journal on Applied Mathematics*, 79 (3):802–821, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Aquino:2019:AEC

[990] Wilkins Aquino and Marc Bonnet. Analysis of the error in constitutive equation approach for time-harmonic elasticity imaging. *SIAM Journal on Applied Mathematics*, 79(3):822–849, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hu:2019:DSP

[991] Yi Hu, Petia M. Vlahovska, and Michael J. Miksis. Dielectric spherical particle on an interface in an applied electric field. *SIAM Journal on Applied Mathematics*, 79(3):850–875, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Planella:2019:ESP

[992] Ferran Brosa Planella, Colin P. Please, and Robert A. Van Gorder. Extended Stefan problem for solidification of binary alloys in a finite planar domain. *SIAM Journal on Applied Mathematics*, 79(3):876–913, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fibich:2019:BED

[993] Gadi Fibich, Tomer Levin, and Oren Yakir. Boundary effects in the discrete Bass model. *SIAM Journal on Applied Mathematics*, 79(3):914–937, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Pramanik:2019:CIC

[994] Satyajit Pramanik and John S. Wettlaufer. Confinement-induced control of similarity solutions in premelting dynamics and other thin film problems. *SIAM Journal on Applied Mathematics*, 79(3):938–958, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bertoglio:2019:JMD

[995] Cristóbal Bertoglio, Carlos Conca, David Nolte, Grigory Panasenko, and Konstantinas Pileckas. Junction of models of different dimension for flows in tube structures by Womersley-type interface conditions. *SIAM Journal on Applied Mathematics*, 79(3):959–985, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ogura:2019:OCE

[996] Masaki Ogura, Victor M. Preciado, and Naoki Masuda. Optimal containment of epidemics over temporal activity-driven networks. *SIAM Journal on Applied Mathematics*, 79(3):986–1006,

???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Herbach:2019:SGE

[997] Ulysse Herbach. Stochastic gene expression with a multistate promoter: Breaking down exact distributions. *SIAM Journal on Applied Mathematics*, 79(3):1007–1029, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Elad:2019:FDE

[998] Doron Elad and Nir Gavish. Finite domain effects in steady state solutions of Poisson–Nernst–Planck equations. *SIAM Journal on Applied Mathematics*, 79(3):1030–1050, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wilson:2019:TMP

[999] Josh Wilson, Fadil Santosa, and P. A. Martin. Temporally manipulated plasmons on graphene. *SIAM Journal on Applied Mathematics*, 79(3):1051–1074, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wu:2019:SIB

[1000] Ruiwen Wu and Xiao-Qiang Zhao. Spatial invasion of a birth pulse population with nonlocal dispersal. *SIAM Journal on Applied Mathematics*, 79 (3):1075–1097, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Breward:2019:MSS

[1001] Christopher J. Breward and Peter Howell. Modeling surfactant systems out of thermodynamic equilibrium. *SIAM Journal on Applied Mathematics*, 79(3):1098–1123, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lawley:2019:HRS

[1002] Sean D. Lawley and Christopher E. Miles. How receptor surface diffusion and cell rotation increase association rates. *SIAM Journal on Applied Mathematics*, 79(3):1124–1146, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Vynnycky:2019:VRF

[1003] M. Vynnycky and M. Assunção. The vanadium redox flow battery: an asymptotic perspective. *SIAM Journal on Applied Mathematics*, 79(4): 1147–1172, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hoessly:2019:SDC

[1004] Linard Hoessly and Christian Mazza. Stationary distributions and condensation in autocatalytic reaction networks. *SIAM Journal on Applied Mathematics*, 79(4):1173–1196, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gottlich:2019:LDM

[1005] Simone Göttlich and Stephan Knapp. Load-dependent machine failures in production network models. *SIAM Journal on Applied Mathematics*, 79 (4):1197–1217, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Boullu:2019:MMS

[1006] Loïs Boullu, Laurent Pujo-Menjouet, and Jianhong Wu. A model for megakaryopoiesis with state-dependent delay. *SIAM Journal on Applied Mathematics*, 79(4):1218–1243, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marusic-Paloka:2019:EFB

[1007] Eduard Marusić-Paloka. Effective fluid behavior in domain with rough boundary and the Darcy–Weisbach law. *SIAM Journal on Applied Mathematics*, 79(4):1244–1270, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kuehn:2019:PND

[1008] Christian Kuehn and Sebastian Throm. Power network dynamics on graphons. *SIAM Journal on Applied Mathematics*, 79(4):1271–1292, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2019:PEP

[1009] Yan Wang and Junping Shi. Persistence and extinction of population in reaction–diffusion–advection model with weak Allee effect growth. *SIAM Journal on Applied Mathematics*, 79 (4):1293–1313, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2019:ORN

[1010] Yiwei Wang, Giacomo Canevari, and Apala Majumdar. Order reconstruction for nematics on squares with isotropic inclusions: a Landau–de Gennes study. *SIAM Journal on Applied Mathematics*, 79(4):1314–1340, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wetzel:2019:DFE

[1011] Alfredo N. Wetzel, Leslie M. Smith, and Samuel N. Stechmann. Discontinuous fronts as exact solutions to precipitating quasi-geostrophic equations. *SIAM Journal on Applied Mathematics*, 79(4):1341–1366, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Davies:2019:MIP

[1012] Penny J. Davies, Eric Barnhill, and Ingolf Sack. The MRE inverse problem for the elastic shear modulus. *SIAM Journal on Applied Mathematics*, 79 (4):1367–1388, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Krupp:2019:IFL

[1013] A. U. Krupp, I. M. Griffiths, and C. P. Please. Inferring filtration laws from the spreading of a liquid modelled by the porous medium equation. *SIAM Journal on Applied Mathematics*, 79 (4):1389–1404, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fogelson:2019:TFR

[1014] Ben Fogelson and James P. Keener. Transport facilitated by rapid binding to elastic tethers. *SIAM Journal on Applied Mathematics*, 79(4):1405–1422, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gross:2019:LCM

[1015] Elizabeth Gross, Heather Harrington, Nicolette Meshkat, and Anne Shiu. Linear compartmental models: Input-output equations and operations that preserve identifiability. *SIAM Journal on Applied Mathematics*, 79(4): 1423–1447, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cakoni:2019:SBH

[1016] Fioralba Cakoni, Bojan B. Guzina, Shari Moskow, and Tayler Pangburn. Scattering by a bounded highly oscillating periodic medium and the effect of boundary correctors. *SIAM Journal on Applied Mathematics*, 79 (4):1448–1474, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gomes:2019:PEM

[1017] Susana N. Gomes, Andrew M. Stuart, and Marie-Therese Wolfram. Parameter estimation for macroscopic pedestrian dynamics models from microscopic data. *SIAM Journal on Applied Mathematics*, 79(4):1475–1500, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Choi:2019:DBO

[1018] Beomjun Choi and Yong-Jung Kim. Diffusion of biological organisms: Fickian and Fokker–Planck type diffusions. *SIAM Journal on Applied Mathematics*, 79(4):1501–1527, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Moyles:2019:ARP

[1019] Iain R. Moyles, Matthew G. Hennessy, Timothy G. Myers, and Brian R. Wetton. Asymptotic reduction of a porous electrode model for lithium-ion batteries. *SIAM Journal on Applied Mathematics*, 79(4):1528–1549, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Sachak-Patwa:2019:HAR

[1020] Rahil Sachak-Patwa, Nabil Fadai, and Robert A. Van Gorder. A homogenization approach for the roasting of an array of coffee beans. *SIAM Journal on Applied Mathematics*, 79 (4):1550–1580, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gao:2019:TFI

[1021] Daozhou Gao. Travel frequency and infectious diseases. *SIAM Journal on Applied Mathematics*, 79(4):1581–1606, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Katsevich:2019:ARD

[1022] Alexander Katsevich. Analysis of reconstruction from discrete Radon transform data in $\mathbf{R}^3$ when the function has jump discontinuities. *SIAM Journal on Applied Mathematics*, 79 (4):1607–1626, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Alldredge:2019:REB

[1023] Graham W. Alldredge, Martin Frank, and Cory D. Hauck. A regularized

entropy-based moment method for kinetic equations. *SIAM Journal on Applied Mathematics*, 79(5):1627–1653, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2019:DLN

[1024] Zhen Zhang and Weiqing Ren. Distinguished limits of the Navier slip model for moving contact lines in Stokes flow. *SIAM Journal on Applied Mathematics*, 79(5):1654–1674, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Qu:2019:GHR

[1025] Zhuolin Qu and James M. Hyman. Generating a hierarchy of reduced models for a system of differential equations modeling the spread of *Wolbachia* in mosquitoes. *SIAM Journal on Applied Mathematics*, 79(5):1675–1699, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yereniuk:2019:GDA

[1026] Michael A. Yereniuk and Sarah D. Olson. Global density analysis for an off-lattice agent-based model. *SIAM Journal on Applied Mathematics*, 79 (5):1700–1721, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Klibanov:2019:CIT

[1027] Michael V. Klibanov, Jingzhi Li, and Wenlong Zhang. Convexification for the inversion of a time dependent wave front in a heterogeneous medium. *SIAM Journal on Applied Mathematics*, 79(5):1722–1747, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Monache:2019:TRU

[1028] Maria Laura Delle Monache, Thibault Liard, Benedetto Piccoli, Raphael Stern, and Dan Work. Traffic reconstruction using autonomous vehicles. *SIAM Journal on Applied Mathematics*, 79(5):1748–1767, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zabarankin:2019:LDD

[1029] Michael Zabarankin. A leaky dielectric drop with conical ends in an electric field. *SIAM Journal on Applied Mathematics*, 79(5):1768–1796, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Davit:2019:DDA

[1030] Yohan Davit, Fabrice Golfier, Jean-Claude Latché, and Michel Quintard. A domain decomposition approach to finite-epsilon homogenization of scalar transport in porous media. *SIAM Journal on Applied Mathematics*, 79 (5):1797–1822, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lejay:2019:AES

[1031] Antoine Lejay, Lionel Lenôtre, and Géraldine Pichot. Analytic expressions of the solutions of advection–diffusion problems in one dimension with discontinuous coefficients. *SIAM Journal on Applied Mathematics*, 79 (5):1823–1849, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Delfour:2019:TDD

[1032] Michel C. Delfour, André Garon, and Steven Lamontagne. Three-dimensional drug release in the stent-polymer-wall-lumen of a blood vessel. *SIAM Journal on Applied Mathematics*, 79(5):1850–1871, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Antunes:2019:BCP

[1033] P. R. S. Antunes, D. Buoso, and P. Freitas. On the behavior of clamped plates under large compression. *SIAM Journal on Applied Mathematics*, 79 (5):1872–1891, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wilson:2019:DTP

[1034] Daniel B. Wilson, Ruth E. Baker, and Francis G. Woodhouse. Displacement of transport processes on networked topologies. *SIAM Journal on Applied Mathematics*, 79(5):1892–1915, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cheney:2019:DBW

[1035] Margaret Cheney, Louis Scharf, Pooria Pakrooh, Andrew Homan, and Matthew Ferrara. Detection of backscattered waves from a target in clutter from a rotating scatterer. *SIAM Journal on Applied Mathematics*, 79 (5):1916–1939, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

vanMeurs:2019:DCL

[1036] Patrick van Meurs and Marco Morandotti. Discrete-to-continuum limits of particles with an annihilation rule. *SIAM Journal on Applied Mathematics*, 79(5):1940–1966, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Goatin:2019:MMT

[1037] Paola Goatin and Elena Rossi. A multilane macroscopic traffic flow model for simple networks. *SIAM Journal on Applied Mathematics*, 79(5):1967–1989, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bellomo:2019:OVA

[1038] Nicola Bellomo, Kevin J. Painter, Youshan Tao, and Michael Winkler. Occurrence vs. absence of taxis-driven instabilities in a May–Nowak model for virus infection. *SIAM Journal on Applied Mathematics*, 79(5):1990–2010, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chaplain:2019:DAE

[1039] Mark A. J. Chaplain, Chiara Giverso, Tommaso Lorenzi, and Luigi Preziosi. Derivation and application of effective interface conditions for continuum mechanical models of cell invasion through thin membranes. *SIAM Journal on Applied Mathematics*, 79 (5):2011–2031, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Hsu:2019:AMM

[1040] Sze-Bi Hsu, Yi Wang, and Hui Zhou. Analysis of a mathematical model arising from barnacle–algae–mussel interactions. *SIAM Journal on Applied*

Mathematics, 79(5):2032–2053, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Antipov:2019:RTM

[1041] Y. A. Antipov. Rapid transient motion of a thin rigid body in an elastic medium. *SIAM Journal on Applied Mathematics*, 79(5):2054–2079, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Robert:2019:ADN

[1042] Philippe Robert and Wen Sun. On the asymptotic distribution of nucleation times of polymerization processes. *SIAM Journal on Applied Mathematics*, 79(5):2080–2106, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Morrow:2019:MBP

[1043] Liam C. Morrow, John R. King, Timothy J. Moroney, and Scott W. McCue. Moving boundary problems for quasi-steady conduction limited melting. *SIAM Journal on Applied Mathematics*, 79(5):2107–2131, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bachmann:2019:BII

[1044] Sven Bachmann, Richard Froese, and Eric N. Cytrynbaum. A buckling instability and its influence on microtubule orientation in plant cells. *SIAM Journal on Applied Mathematics*, 79 (5):2132–2149, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zabarankin:2019:SDA

[1045] Michael Zabarankin. Small deformation analysis for stationary toroidal drops in a compressional flow. *SIAM Journal on Applied Mathematics*, 79 (5):2150–2167, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dullin:2019:STD

[1046] Holger R. Dullin and Joachim Worthington. Stability theory of the 3-dimensional Euler equations. *SIAM Journal on Applied Mathematics*, 79 (5):2168–2191, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2019:DBT

[1047] Xiaoyue Li, Guoting Song, Yang Xia, and Chenggui Yuan. Dynamical behaviors of the tumor-immune system in a stochastic environment. *SIAM Journal on Applied Mathematics*, 79 (6):2193–2217, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2019:ALD

[1048] Zhuanzhuan Liu, Zhongwei Shen, Hao Wang, and Zhen Jin. Analysis of a local diffusive SIR model with seasonality and nonlocal incidence of infection. *SIAM Journal on Applied Mathematics*, 79(6):2218–2241, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Peron:2019:AMI

[1049] Victor Péron. Asymptotic models and impedance conditions for highly conductive sheets in the time-harmonic

eddy current model. *SIAM Journal on Applied Mathematics*, 79(6):2242–2264, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Deng:2019:HPH

[1050] Keng Deng and Qihua Huang. A hybrid parabolic and hyperbolic equation model for a population with separate dispersal and stationary stages: Well-posedness and population persistence. *SIAM Journal on Applied Mathematics*, 79(6):2265–2287, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Marshall:2019:SME

[1051] Jonathan S. Marshall. On sets of multiple equally strong holes in an infinite elastic plate: Parameterization and existence. *SIAM Journal on Applied Mathematics*, 79(6):2288–2312, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

McCurdy:2019:CCF

[1052] Matthew McCurdy, Nicholas Moore, and Xiaoming Wang. Convection in a coupled free flow-porous media system. *SIAM Journal on Applied Mathematics*, 79(6):2313–2339, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lai:2019:IPS

[1053] Ru-Yu Lai, Qin Li, and Gunther Uhlmann. Inverse problems for the stationary transport equation in the diffusion scaling. *SIAM Journal on Applied Mathematics*, 79(6):2340–2358, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

deHoop:2019:URP

[1054] Maarten V. de Hoop, Gen Nakamura, and Jian Zhai. Unique recovery of piecewise analytic density and stiffness tensor from the elastic-wave Dirichlet-to-Neumann map. *SIAM Journal on Applied Mathematics*, 79(6):2359–2384, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dominguez:2019:RJE

[1055] Sebastián Domínguez, Nilima A. Nigam, and Jiguang Sun. Revisiting the Jones eigenproblem in fluid-structure interaction. *SIAM Journal on Applied Mathematics*, 79(6):2385–2408, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Skardal:2019:SNC

[1056] Per Sebastian Skardal, Dane Taylor, and Jie Sun. Synchronization of network-coupled oscillators with uncertain dynamics. *SIAM Journal on Applied Mathematics*, 79(6):2409–2433, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Saez:2019:NLE

[1057] Meritxell Sáez, Carsten Wiuf, and Elisenda Feliu. Nonnegative linear elimination for chemical reaction networks. *SIAM Journal on Applied Mathematics*, 79(6):2434–2455, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bernardes:2019:FOB

[1058] R. Bernardes, J. A. Ferreira, M. Grassi, M. Nhangumbe, and P. de Oliveira. Fighting opportunistic bacteria in drug delivery medical devices. *SIAM Journal on Applied Mathematics*, 79(6): 2456–2478, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2019:DPB

[1059] Fuxiang Li and Xiao-Qiang Zhao. Dynamics of a periodic bluetongue model with a temperature-dependent incubation period. *SIAM Journal on Applied Mathematics*, 79(6):2479–2505, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kawano:2019:DPS

[1060] Alexandre Kawano and Antonino Morassi. Detecting a prey in a spider orb web. *SIAM Journal on Applied Mathematics*, 79(6):2506–2529, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Granero-Belinchon:2019:MDW

[1061] Rafael Granero-Belinchón and Stefano Scrobogna. Models for damped water waves. *SIAM Journal on Applied Mathematics*, 79(6):2530–2550, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2019:ACA

[1062] Xianmin Xu, Yinyu Zhao, and Xiaoping Wang. Analysis for contact angle hysteresis on rough surfaces by a phase-field model with a relaxed boundary condition. *SIAM Journal on Applied Mathematics*, 79(6):2551–2568, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gower:2019:MWP

[1063] Artur L. Gower, William J. Parnell, and I. David Abrahams. Multiple waves propagate in random particulate materials. *SIAM Journal on Applied Mathematics*, 79(6):2569–2592, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Corli:2019:CCR

[1064] Andrea Corli and Massimiliano D. Rosini. Coherence of coupling Riemann solvers for gas flows through flux-maximizing valves. *SIAM Journal on Applied Mathematics*, 79(6):2593–2614, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

George:2019:PIM

[1065] Jithin D. George, David I. Ketcheson, and Randall J. LeVeque. A path-integral method for solution of the wave equation with continuously varying coefficients. *SIAM Journal on Applied Mathematics*, 79(6):2615–2638, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kirsch:2019:IPA

[1066] Andreas Kirsch and Andreas Rieder. Inverse problems for abstract evolution equations II: Higher order differentiability for viscoelasticity. *SIAM Journal on Applied Mathematics*, 79 (6):2639–2662, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [1070].

Borcea:2019:SPW

[1067] Liliana Borcea, Josselin Garnier, and Knut Sølna. Sound propagation in a weakly turbulent flow in a waveguide. *SIAM Journal on Applied Mathematics*, 79(6):2663–2687, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Barcelo:2019:CNC

[1068] Juan A. Barceló, Carlos Castro, Teresa Luque, and Mari Cruz Vilela. Corrigendum: A New Convergent Algorithm to Approximate Potentials from Fixed Angle Scattering Data. *SIAM Journal on Applied Mathematics*, 79 (6):2688–2691, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [926].

Jiang:2020:EAS

[1069] Yu Jiang, Hiroshi Fujiwara, and Gen Nakamura. Erratum for "Approximate Steady State Models for Magnetic Resonance Elastography". *SIAM Journal on Applied Mathematics*, 80(4):2001, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [182].

Kirsch:2021:EIP

[1070] Andreas Kirsch and Andreas Rieder. Erratum: Inverse Problems for Abstract Evolution Equations II: Higher Order Differentiability for Viscoelasticity. *SIAM Journal on Applied Mathematics*, 81(1):282–283, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [1066].

Griesmaier:2021:EMI

[1071] Roland Griesmaier and Bastian Harrach. Erratum: Monotonicity in inverse medium scattering on unbounded domains. *SIAM Journal on Applied Mathematics*, 81(3):1332–1337, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [918].