

A Complete Bibliography of *ACM Transactions on Storage*

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)

WWW URL: <https://www.math.utah.edu/~beebe/>

20 August 2024

Version 1.59

Title word cross-reference

[ADZ20, MT20, MW20]. **2020**
[GZ21, LH21, NW21]. **2021**
[AY21, BL22, CK22, Noh22]. **2022**
[DP22, SZ23]. **2023** [GN24, GN23, WL24].

+ [GSL⁺05]. 3 [GYX⁺22, LWC⁺22,
PDZ⁺23, XWL⁺18, ZWM⁺20]. = [GSL⁺05].
³ [CNJ⁺20]. GF(2^n) [LBOX12].

-D [ZWM⁺20]. **-Tree** [CNJ⁺20].

0 [WXS16, ZZL13].

1394 [HKP09].

2008 [Bak08]. **2009** [SW09]. **2012** [BF12].
2014 [ST14]. **2015** [DH16, SZ15]. **2016**
[BP17, MT17]. **2017**
[DdL18, KW17, PWS17]. **2018**
[AR18, YP19]. **2019**

6 [ES14, LS12, PBV11, XXL⁺11].

Abstractions [GR21]. **Abundant**
[ZCJ⁺21]. **Academic** [CWY⁺15].
Accelerate [SXJ⁺24]. **Accelerates**
[ZHXL23]. **Accelerating**
[LGL22, LSC⁺24, WCC15]. **Acceleration**
[ZT20]. **Access** [CHA⁺11, CSOL18,
DFP⁺15, EHW23, HCL13, JDXD13, LRE22,
WZH⁺20, WCC15, MKLC06]. **Accesses**
[WM16]. **Accessibility** [YCY⁺18].
Accessing [YCY⁺20]. **accountability**
[YC07]. **Accumulative** [ZD21]. **ACE**

[MMP⁺19]. **Achieve** [PKI⁺18, TGL⁺18, WZC⁺24]. **ACID** [HZN⁺19, SBMW17, WSSZ07]. **ACM** [Noh19, YP19]. **across** [GR09]. **Active** [ZWF22]. **Adaptive** [CDW⁺22, FLY21, HWF⁺16, LXC⁺22, LDZZ23, NCP⁺22, PNW⁺24, WLD21, KKZ05, SPP11, WHE12]. **adaptively** [WSZ⁺10]. **Address** [XCR18, ZWH⁺17]. **Addressable** [CST⁺24, CNJ⁺20, WCC15, CYW⁺17]. **administrator** [DRK08]. **Admission** [EFM17, YPU⁺23]. **Adventures** [YZJ⁺17]. **AET** [PWLW21]. **Against** [MTD⁺15, KLK17, SDG10]. **Aggressive** [AWC09]. **Agility** [XCK⁺14]. **AI** [DFB⁺20]. **Algorithm** [LKE18]. **Algorithms** [LYL⁺21, XXL⁺11, BLN09, SZ05]. **Alleviating** [ZWH⁺17]. **Allocation** [LRZ⁺22, PWLW21, KR06, SZS⁺12]. **Almost** [KLE20]. **among** [LCMZ15]. **Amplification** [LKB⁺17, THWD08]. **Analyses** [XWL⁺18]. **Analysis** [ASM12, GAADAD17, LSDW17, LLT⁺20, LWLS23, LZL⁺23, MHL⁺15, XOZ⁺20, YYM⁺18, YCY⁺20, YYR21, YLADAD23, ZZL⁺19a, SKM⁺18, BADAD⁺08]. **Analytic** [Des14]. **Analytics** [KH20, SVG⁺20]. **Annual** [GR19]. **anticipatory** [SZS⁺12]. **App** [JPC⁺20]. **appliances** [AEMWC⁺12]. **Application** [JPB17, MCR18, PAL⁺17, SCJS18, YCY⁺20]. **Applications** [DFB⁺20, DKJS21, RPA⁺21, SXF21, SFW⁺20, LBOX12, QJM⁺09]. **Approach** [LDZZ23, WXH⁺16, XXL⁺11, XMRF⁺13, ZZL13, KR06, MT09, MMR⁺09, THTT08, ZSXZ07]. **Approaches** [KSDC14]. **arbitrary** [LS12]. **Architecture** [HSL⁺18, LBN14, LKE18, WBZ⁺19, YLADAD23]. **Architectures** [WLL⁺22, HWB⁺06]. **Archival** [GNB16, YPLG11, SGMV09]. **Archive** [CWY⁺15]. **Archives** [May22, HM05]. **archiving** [TPM⁺11]. **Ares** [NCP⁺22]. **Array** [GNB16, LS12, MJW⁺12]. **Arrays** [AT13, LPS⁺23, MR16, WXH⁺16, WXS16, WMCJ16, ABLM07, TB09]. **assignment** [XS09]. **Associated** [Noh21]. **Associative** [KCC13]. **assumptions** [XS09]. **Asynchronous** [KDS20, NB13]. **ATC** [CK22, GZ21, MT20, SZ23, WL24]. **ATC'18** [GR19]. **Atomic** [NCP⁺22]. **Attack** [YLRL22]. **Attack-resilient** [YLRL22]. **Attacks** [LLT⁺20]. **Attention** [WBZ⁺19]. **Attention-augmented** [WBZ⁺19]. **augmentations** [TCJ⁺11]. **Augmented** [KLL⁺24, WBZ⁺19]. **Authenticated** [LBY⁺24]. **Authentication** [MNT06]. **Automatic** [BYY⁺22, YV05]. **Auxiliary** [DMS⁺16]. **availability** [SPADAD05, TCJ⁺11]. **Available** [CZD⁺17]. **Aware** [AGL⁺18, CWG⁺19, CKL⁺24, DLW⁺24, EEFM22, HC17, JCG⁺16, KPY17, QLL17, SFW⁺20, ZZW⁺17, BLN09, BBK⁺09, GAADAD21, PWLW21, PDZ⁺23, STC23, WOQ⁺07, WZC⁺24, ZZL⁺24].

B [CNJ⁺20, KSKN18, KLL⁺24, Rod08, RBM13]. **B-Tree** [CNJ⁺20, RBM13, KSKN18]. **B-trees** [Rod08]. **Back** [RBB⁺24]. **Backends** [AWK⁺20]. **Backup** [HBP11, LXNL15, ZDZ⁺21, SHWH12, TCL12, VSV09]. **Balance** [WCY⁺24]. **Balancer** [JGW⁺23]. **Balancing** [IJK⁺17, PNW⁺24, QJM⁺09]. **Bandwidth** [HA13, LJFS17, LFH⁺17, LFJ⁺17, GSL⁺05, WTZ⁺23]. **Barrier** [WOJ⁺18]. **Barrier-Enabled** [WOJ⁺18]. **Based** [AGL⁺18, CWG⁺19, CHL16, CCC⁺18, EKB⁺16, HSL⁺18, HAL⁺23, HWF⁺16, HJW15, IJK⁺17, LSKK16, LSDW17, LXC⁺22, MJW⁺14, SWY18, TXZ⁺24, Tri15, WLW⁺24, WCXY15, WCCZ21, WMCJ16, ZJQ⁺15, ZLL⁺20, ZDZ⁺21, ZWF22, BLN09, CLP09, DRK08, FLY21, GYX⁺22, HWB⁺06, HBL⁺06, IBC⁺21, JSC20, KH10, KLK⁺22, LSZ09, LCR⁺21, LSC⁺24, LZYZ⁺06, MJW⁺12, MRH09, QZL⁺23, RDCS07,

SLZ⁺²³, SCJS18, SXJ⁺²⁴, TCJ⁺¹¹, VJG08, WCJ⁺²⁴, WKC06, WHE12, XXD19, YGJS21, YYC⁺¹⁸, ZWG⁺²³, ZLQ⁺²². **basis** [ST06]. **Batch** [YCY⁺²⁰]. **Batch-file** [YCY⁺²⁰]. **battery** [KH10]. **battery-powered** [KH10]. **Behavior** [ASM12, YLL⁺²⁴]. **Behaviors** [HCO⁺¹⁷]. **benchmarking** [AADAD09, TZJW08]. **BetrFS** [JYZ⁺¹⁵]. **Better** [WKR06, WWJ⁺²³, ZRRW20]. **between** [CCC⁺¹⁸]. **Beyond** [ES14, IV15]. **Bidirectional** [SWY18]. **Big** [SVG⁺²⁰]. **Big-data** [SVG⁺²⁰]. **Billion** [JCB⁺²⁴]. **Billion-Scale** [JCB⁺²⁴]. **Billions** [MBTM⁺²²]. **Binary** [CNJ⁺²⁰]. **bit** [ASS05]. **bit-rate** [ASS05]. **Black** [KCLK21]. **Black-Box** [KCLK21]. **Block** [BCBS23, FCZ⁺²³, HHFD17, KMM⁺¹², LWLS23, LZY⁺²⁴, LV17, RHC15, SBMW17, ZLL⁺²⁰, ZLLH23, AWC09, LCZ05]. **Block-Level** [KMM⁺¹², LZY⁺²⁴]. **Blockchain** [LBY⁺²⁴]. **Blurred** [LSS16]. **Boosting** [EHW23, PDZ⁺²³]. **Both** [CSOL18, DJC07, JDxD13]. **Bottlenecks** [XOZ⁺²⁰]. **Bounded** [IBC⁺²¹]. **bounds** [EA08]. **Box** [KCLK21]. **Bridging** [GSL⁺⁰⁵, JCB⁺²⁴, KDS20, SYK⁺¹¹]. **Bringing** [WOJ⁺¹⁸]. **BTRFS** [RBM13]. **BUD** [MQRY11]. **Buffer** [KPY17, LBN14, SLZ⁺²³, WLC⁺²², DJC07, MQRY11, WHE12]. **Buffer-Controlled** [WLC⁺²²]. **Buffering** [CSOL18]. **buffers** [THTT08]. **Bug** [LZL⁺²³]. **Bugs** [KXK⁺²⁰]. **Building** [LCR⁺²¹, RDCS07, YWH⁺¹⁷, ZYWX22]. **Byte** [CST⁺²⁴, CNJ⁺²⁰, CYW⁺¹⁷, WCC15]. **Byte-Addressable** [CST⁺²⁴, CNJ⁺²⁰, WCC15, CYW⁺¹⁷].

CA [BBK⁺⁰⁹]. **CA-NFS** [BBK⁺⁰⁹]. **Cache** [EFM17, EEFM22, EHW23, FCZ⁺²³, HWZ⁺¹⁸, HWF⁺¹⁶, LBN14, LSDW17, LXC⁺²², PDZ⁺²³, SS14, SLZ⁺²³, STC23, WZH⁺²⁰, WCCZ21, YYR21, DJC07, GB07, PDZ⁺²³]. **Cacheline** [KSKN18]. **Caches** [YPU⁺²³, MTH⁺⁰⁸, VMF⁺⁰⁶]. **CacheSack** [YPU⁺²³]. **Caching** [CDW⁺²², CLZ⁺²¹, HC17, JSC20, KSDC14, LB14, MBTM⁺²², SCJS18, XXD19, CHLK11, CHHH12, WSZ⁺¹⁰]. **caching-oriented** [CHHH12]. **Calibrated** [TSWT22]. **Can** [RPA⁺²¹, WM16]. **Capacities** [HHS⁺²⁰]. **Case** [AWK⁺²⁰, VTHB18, SZS⁺¹²]. **Cases** [KCLK21]. **Causality** [MRH09]. **Causality-based** [MRH09]. **CCFS** [PAL⁺¹⁷]. **CDF** [QFS⁺¹⁷]. **Center** [LCZ⁺¹⁹, SXF21]. **Centers** [BYY⁺²², HLZ⁺¹⁷]. **centric** [BAM⁺²¹, SLXH23]. **CGraph** [ZZL^{+19a}]. **Challenges** [GS06, VTHB18]. **Change** [KSDC14, KPY17, XK24]. **Channel** [KPY17, LSZ19]. **Chaos** [WOJ⁺¹⁸]. **characteristic** [XS09]. **Characteristics** [YGJS21, JHZK08]. **Characterization** [CHA⁺¹¹, GLSB18, JPC⁺²⁰, Kas18, LWC⁺²²]. **Characterizing** [MTD⁺¹⁵, XOZ⁺²⁰, XWL⁺¹⁸]. **Charge** [LWC⁺²²]. **Charge-Trap** [LWC⁺²²]. **Cheap** [HF05]. **Checker** [MDAD⁺¹⁴]. **Checkers** [GZH⁺¹⁸]. **Checking** [FQS⁺¹⁴, TPM⁺¹¹]. **Chief** [Ano23, Noh18]. **Chip** [KCC13, LSC⁺²⁴]. **Chip-Level** [KCC13]. **Choices** [MH22]. **Choosing** [ZXJ11]. **Class** [KAG⁺²², WQR13, JWK⁺¹⁰, STZ10]. **Classification** [WCXY15]. **Classifying** [JAM⁺¹⁶]. **clfB** [KSKN18]. **clfB-tree** [KSKN18]. **Client** [CLZ⁺²¹, HA17, HC17, HCO⁺¹⁷]. **Client-Side** [HA17]. **CLOCK** [LKE18]. **Clones** [ZCJ⁺²¹, Rod08]. **Closed** [ES14, IV15]. **Closed-Form** [ES14, IV15]. **Cloud** [BCQ⁺¹³, CLBB21, HC17, HCO⁺¹⁷, LWLS23, LZY⁺²⁴, LPR⁺¹⁹, MJW⁺¹⁴, VDV17, WZH⁺²⁰, WZC⁺²⁴, WTZ⁺²³, YHJ13, ZLLH23, ZLQ⁺²², ZZL⁺²⁴, VSV09].

Cloud-of-Clouds [BCQ⁺13]. **Clouds** [BCQ⁺13]. **Cluster** [SVG⁺20, SKM⁺18]. **Clusters** [HZQX13, YYR21, QJM⁺09, WB05]. **Co** [SVG⁺20, TIM⁺18, XXD19]. **Co-Design** [TIM⁺18, SVG⁺20, XXD19]. **code** [LS12, LS12]. **Coded** [HLZ⁺17, HZQX13, ZLL⁺20, Ili23, LYL⁺21, NCP⁺22]. **Codes** [HBP11, JMS22, KSCM23, KYL⁺20, LL14, LFH⁺17, LFJ⁺17, PB14, Tri15, XXL⁺11, YYM⁺18, YFHW20, LSZ09, PBV11, HCL13]. **Coding** [CZD⁺17, ZT20, TB09]. **collaborative** [VMF⁺06]. **Collecting** [DS16]. **Collection** [YLH⁺17]. **Collision** [WWJ⁺23]. **Columnar** [WLL⁺19]. **Commercial** [KLE20]. **Commodity** [KLK⁺22]. **common** [SZS⁺12]. **communication** [GSL⁺05]. **Compaction** [YWH⁺17, ZD21]. **Compactions** [SXJ⁺24]. **Comparative** [LWLS23]. **Complexity** [Tri15]. **compliance** [PB05]. **Composite** [ZRRW20]. **Composite-File** [ZRRW20]. **Compositional** [CNS⁺18]. **Compound** [LSDW17]. **Compounds** [CBH⁺17]. **Comprehensive** [KSL⁺23, LSC⁺24, ZT20, JHZK08]. **Compressed** [May22, YLL⁺24]. **Compression** [JSC20, KMM⁺12, RBB⁺24, TXZ⁺24, XPZ⁺23, SHWH12]. **Computational** [CHA⁺11, KKR20]. **Compute** [CDW⁺22]. **Compute-Storage** [CDW⁺22]. **computer** [HWP⁺06, HBL⁺06, MTH⁺08]. **Computing** [CDW⁺22, DFB⁺20, LZL⁺23]. **Concurrent** [WCW⁺22, ZZL⁺19a]. **Conference** [GR19, YP19]. **congestion** [BBK⁺09]. **congestion-aware** [BBK⁺09]. **Conjunctive** [TLM⁺23]. **conquer** [Tos09]. **Conquest** [WKR06]. **Conscious** [LPG⁺17, ZZS⁺22]. **Consensus** [AGL⁺18]. **Consensus-Based** [AGL⁺18]. **conservation** [CK05]. **Conserve** [HZQX13]. **Considerations** [KSCM23]. **Consistency** [GAADAD21, HZN⁺19, KLE20, LLYS23, MMP⁺19, PAL⁺17, WWW⁺18, FSM⁺12]. **Consistency-aware** [GAADAD21]. **Consistent** [HA13, YV05]. **Consolidated** [ZXJ11]. **Constructing** [VMF⁺06]. **Consumption** [CPW⁺15]. **Container** [LSDW17, LDZZ23, ZDZ⁺21, ZLA⁺24]. **Container-Based** [LSDW17]. **content** [KR10]. **Context** [GHWK15, ZJQ⁺15]. **Context-Based** [ZJQ⁺15]. **Contiguous** [LRZ⁺22]. **Continuous** [CHA⁺11, JGW⁺23]. **Contract** [KLC⁺23, ZZL⁺24]. **Contract-aware** [ZZL⁺24]. **Contributing** [CCB07]. **contributor** [JHZK08]. **Control** [FLY21, KKZ05, ZSW⁺06]. **Controlled** [WLC⁺22]. **Controlling** [ZWG⁺23]. **Cooperative** [LKB⁺17, ZZW⁺17, TCL12]. **Copy** [ZCJ⁺21]. **Copy-on-Abundant-Write** [ZCJ⁺21]. **Core** [FCZ⁺23]. **CORES** [WLL⁺19]. **Correct** [CNS⁺18, LRE22]. **Correction** [QFS⁺17]. **correlations** [LCZ05]. **corruption** [BADAD⁺08]. **CosaFS** [ZZW⁺17]. **Cosmos** [KLP⁺20]. **Cost** [DFB⁺20, HC17, LCR⁺21, ZZL⁺24, TGL⁺18, WZC⁺24]. **Cost-Aware** [HC17]. **Cost-effective** [DFB⁺20, LCR⁺21, ZZL⁺24]. **CostCounter** [WWJ⁺23]. **Countering** [KCMDM20]. **Crash** [CNS⁺18, HZN⁺19, LLYS23, MMP⁺19, PAL⁺17, WKC06]. **CrashMonkey** [MMP⁺19]. **Cross** [WCR⁺06]. **Cross-layer** [WCR⁺06]. **ctFS** [LRZ⁺22]. **Cuckoo** [WWJ⁺23]. **Cumulus** [VSV09]. **Curve** [HWZ⁺18]. **Custom** [AWK⁺20]. **Customizable** [LJFS17]. **CXL** [JCB⁺24].

D [GYX⁺22, LWC⁺22, PDZ⁺23, SPADAD05, XWL⁺18, ZWM⁺20]. **D-GRAID** [SPADAD05]. **D2D** [HM05]. **Data** [ASM12, AT13, BYY⁺22, BAM⁺21, CWG⁺19, CWY⁺15, CLBB21, DFP⁺15, DMS⁺16, EKB⁺16, HLZ⁺17, HCL13,

IJK⁺¹⁷, JSC20, JDXD13, JAM⁺¹⁶, KLK17, KDS20, KH20, LKB⁺¹⁷, LCZ⁺¹⁹, LSC⁺²⁴, LDZZ23, MEK⁺¹⁴, PYY19, SXF21, SSWC14, WCW⁺²², WZC⁺²⁴, WH15, WCY⁺²⁴, YYC⁺¹⁸, YPLG11, ZB16, ZWM⁺²⁰, ZWG⁺²³, ZYLL24, ZCJ⁺²⁰, ZT20, ZYS⁺²², ASS05, ABLM07, BADAD⁺⁰⁸, BFHR09, EM05, EA08, HKC06, LZYK⁺⁰⁶, SZ05, SVG⁺²⁰. **Data-centric** [BAM⁺²¹]. **Data-Intensive** [CWY⁺¹⁵]. **Data-pattern-aware** [WZC⁺²⁴]. **Database** [SWY18, ZZL⁺¹⁹b, DRK08, THTT08]. **databases** [MNT06]. **Datacenter** [SSVG13, YPU⁺²³]. **datasets** [SHWH12, VMF⁺⁰⁶]. **David** [AAADAD12]. **decentralized** [TCL12]. **Decoupled** [LZC⁺¹⁸]. **Decoupling** [ZRRW20]. **Deduplicated** [HHS⁺²⁰, KKD⁺²², NSKY21, ZYS⁺²²]. **Deduplication** [CWG⁺¹⁹, DLW⁺²⁴, LXNL15, LLT⁺²⁰, LDZZ23, MSM⁺¹⁷, MJW⁺¹⁴, PP16, QLL17, RBB⁺²⁴, XPZ⁺²³, YLRL22, ZDZ⁺²¹, ZCL⁺²⁴, ZLA⁺²⁴, SKM⁺¹⁸, MB12, KR10]. **Deduplication-Based** [CWG⁺¹⁹, MJW⁺¹⁴, ZDZ⁺²¹]. **Deep** [STC23, WBZ⁺¹⁹]. **Defenses** [LLT⁺²⁰]. **Deferred** [HZQX13]. **Defined** [LCZ⁺¹⁹]. **Defining** [EA08]. **DEFUSE** [LRE22]. **degradation** [JB05]. **Deletion** [DMS⁺¹⁶]. **Delta** [TXZ⁺²⁴, WTZ⁺²³, XPZ⁺²³, ZLQ⁺²², SHWH12]. **DeltaFS** [ZCJ⁺²⁰]. **Demonstration** [LSC⁺²⁴]. **density** [PBV11, WCY⁺²⁴]. **Dependable** [BCQ⁺¹³]. **Dependent** [SPR19]. **Deployment** [KAG⁺²², WXH⁺¹⁶]. **DepSky** [BCQ⁺¹³]. **depth** [LWLS23]. **Derrick** [JGW⁺²³]. **Descriptive** [LGL22]. **Design** [CCC⁺¹⁸, CPW⁺¹⁵, HWC12, IBC⁺²¹, KSCM23, LSDW17, LCLX19, MH22, QLL17, SS14, SCW⁺²⁰, TXZ⁺²⁴, TIM⁺¹⁸, XPZ⁺²³, YCY⁺²⁰, ZZL13, ZCL⁺²⁴, CHHH12, GS06, SVG⁺²⁰, WKRP06, WKC06, XXD19]. **desktop** [VMF⁺⁰⁶]. **Detection** [LZL⁺²³, LDZZ23, LXZ⁺²³, XPZ⁺²³]. **Determining** [ZWM⁺²⁰]. **Determinism** [KLC⁺²³, LPS⁺²³]. **Development** [CNS⁺¹⁸, DKJS21, ZIJ⁺⁰⁶]. **Device** [KSL⁺²³, LL14, MZLK24, QZL⁺²³, SCJS18, SSHY16, ZXJ11, HBL⁺⁰⁶]. **Devices** [CSY⁺¹⁴, GHWK15, JPC⁺²⁰, KLE20, KLK⁺²², ZWH⁺¹⁷, BLN09, CHLK11, GR09, KH10, LZYK⁺⁰⁶]. **DFS** [JBLF10]. **DIDACache** [SCJS18]. **Differential** [BKPM10]. **Differentiation** [CKL⁺²⁴, KKZ05]. **Diffs** [May22]. **digital** [GSL⁺⁰⁵]. **dimensional** [ZYS⁺²²]. **Direct** [CSOL18]. **Direct-Access** [CSOL18]. **directed** [LLZA05]. **Directories** [ZCJ⁺²⁰]. **Directory** [ZJP⁺¹⁸]. **Disaggregated** [CDW⁺²², LHZ⁺²³, LZS⁺²⁴, ZHZL23]. **Disaggregation** [GLSB18, JCB⁺²⁴]. **Discovery** [LGL22]. **Disk** [ASD15, HWF⁺¹⁶, IHHE11, JDXD13, Kas18, LCZ⁺¹⁹, MTD⁺¹⁵, PB14, SSVG13, SYK⁺¹¹, TGL⁺¹⁸, WXH⁺¹⁶, WLX⁺²², WMCJ16, XXL⁺¹¹, ZWM⁺²⁰, ZWF22, ABLM07, BFHR09, DEH⁺⁰⁸, GW10, GS06, HM05, LS12, MJW⁺¹², MTH⁺⁰⁸, NQX06, SG07, SZ05, TB09, VJG08, WKRP06, WB05]. **Disk-Resident** [WLX⁺²²]. **disk/persistent** [WKRP06]. **disk/persistent-RAM** [WKRP06]. **Disks** [GNB16, JAM⁺¹⁶, STC23, ZHSH23, JHZK08, LLZA05, MQRY11]. **DISP** [EM05]. **Distilling** [ZDZ⁺²¹]. **Distinguished** [Noh19]. **Distributed** [AWK⁺²⁰, AGL⁺¹⁸, GAADAD17, LZL⁺²³, MH22, PP16, TLM⁺²³, XCK⁺¹⁴, YLADAD23, ZZL⁺¹⁹a, ZLL19, ZHZL23, ZZL⁺¹⁹b, ZCW⁺²¹, EM05, HDW⁺⁰⁸, MMR⁺⁰⁹, SCW⁺²⁰]. **Distribution** [LWC⁺²², YZ16, ZWM⁺²⁰]. **Divide** [Tos09, GSL⁺⁰⁵]. **Divide-and-conquer** [Tos09]. **DM** [STC23]. **DM-SMR** [STC23]. **DMA** [LSC⁺²⁴]. **Docker** [ZLA⁺²⁴]. **Does**

[GAADAD17, MR16, SG07]. **dominant** [JHZK08]. **Donag** [May22]. **DPMS** [SCW+20]. **DRAM** [SLZ+23]. **Drive** [LCMZ15, SSVG13, SHDA17, WBZ+19, WCXY15, GS06]. **Drive-Managed** [SHDA17]. **driver** [CHLK11]. **driver-layer** [CHLK11]. **Drives** [CHL16, GYX+22, Kas18, LCZ+19, LXC+22, SLZ+23, WLD21, XCR18, XXD19, ZYWX22, BFHR09, CHHH12, GW10, HM05]. **DudeTx** [LZC+18]. **duplicate** [BJD06]. **Durability** [GAADAD21]. **Durable** [HA17, LZC+18]. **Dynamic** [ABLM07, EKB+16, FLY21, NB13, QJM+09, ZB16, THTT08].

Editor [Ano23, Noh18]. **Editor-in-Chief** [Ano23, Noh18]. **Editorial** [BP11, Lon12, Raj05, BK10]. **Editors** [Noh21]. **effective** [DFB+20, LCR+21, ZZL+24]. **Efficiency** [HA13, HCL13, LLH+18]. **Efficient** [CK05, CWY+15, CZD+17, DFP+15, EFM17, GAADAD21, HKC06, IJK+17, JSC20, KSGP17, KLK17, LXNL15, LCLX19, LBY+24, LLYS23, LZKY+06, LSS16, LBOX12, May22, MRZ+09, MEK+14, PSX+21, PP16, SZ05, SSHY16, SSC+24, TCL12, WLX+22, XPZ+23, XMRF+13, YCM+20, YWH+17, YPLG11, ZJP+18, ZB16, ZLL+20, ZLLH23, DFB+20, EM05, LS12, MQRY11, WKC06, ZSXZ07]. **EIC** [Ano20]. **Elastic** [MZLK24, XCK+14]. **Elimination** [YLH+17, BJD06]. **Empirical** [SLXH23, ZFX+18]. **Empowering** [KSL+23]. **EMPRESS** [LGL22]. **emulate** [CLHK10]. **Emulating** [AAADAD12]. **Emulator** [KSL+23]. **Enabled** [WOJ+18, ZCW+21, SCW+20]. **Enabling** [FCZ+23, LCLX19, SFW+20, TGL+18]. **Enclosures** [ZWM+20]. **Encoding** [FLY21, TXZ+24]. **Encrypted** [DLW+24, LLT+20, QLL17, WTZ+23, YLRL22, ZYLL24]. **Encryption** [TLM+23].

End [PNW+24, YXZ+23, ZLA+24]. **End-to-end** [PNW+24, YXZ+23, ZLA+24]. **Endurance** [BYY+22, JMS22, LCMZ15, PKI+18]. **Energy** [CWY+15, CPW+15, DFB+20, HZQX13, LCMZ15, LLH+18, EA08, LLZA05, MQRY11, STZ10]. **Energy-Efficient** [CWY+15, DFB+20, MQRY11]. **Enforcement** [LJFS17]. **Enhanced** [MZLK24, PWLW21, MJW+12]. **Enhancement** [ZFX+18, CHHH12]. **Enterprise** [Kas18, KCMDM20, KSDC14, MMES21, PKI+18, ZFX+18, NDR08]. **Enterprise-Level** [PKI+18]. **Entry** [ZDZ+21]. **Environments** [WTZ+23]. **Equation** [ES14, IV15]. **Erasure** [CZD+17, HLZ+17, HZQX13, Ili23, LL14, LYL+21, LFJ+17, NCP+22, PB14, YFHW20, ZLL+20, ZT20, LSZ09]. **Erasure-Coded** [HLZ+17, HZQX13, ZLL+20, Ili23, LYL+21]. **Error** [QFS+17]. **Errors** [Ili23, JMHS20, DEH+08, SDG10]. **Evaluating** [KSDC14]. **Evaluation** [Ili23, LCLX19, LYL+21, SSVG13, XXL+11, XMRF+13, ZZL13, ZFX+18]. **Everyone** [KFPS20]. **Everything** [ZZL+19b]. **Evidence** [GSS+18, YZ16]. **Evolution** [DKJS21, LADADL14]. **Evolving** [KH20]. **Exact** [HBP11, MSM+17]. **ExaPlan** [IJK+17]. **Exascale** [SSWC14]. **Exclusion** [WZH+20]. **Exedra** [ASS05]. **existence** [TPM+11]. **Expansion** [ZWG+23]. **Experience** [YS17, YPU+23]. **Exploitation** [WLC+22, WCJ+24]. **Exploiting** [CST+24, GAR+22, HZQX13, JDXD13, JPB17, JWK+10, LSKK16, SWY18, WZC+24, XCR18, DJC07, MKLC06]. **Exploration** [WLC+22]. **Explorations** [WCJ+24]. **Exploratory** [LCZ+19]. **Ext3cow** [PB05]. **Extendible** [ZZS+22]. **Extending** [LPS+23, WSSZ07]. **Extensible** [KXK+20]. **Extensions** [WQR13]. **external**

[GAR⁺22]. **Extract** [GW10]. **Extremely** [YLL⁺24]. **Extremely-Compressed** [YLL⁺24]. **eZNS** [MZLK24].

F2FS [ZCL⁺24]. **Fabrics** [GLSB18]. **face** [JMHS20]. **Fail** [GSS⁺18, LXZ⁺23]. **Fail-Slow** [GSS⁺18, LXZ⁺23]. **Failed** [XXL⁺11]. **Failure** [HGZ⁺22, PB14, ZLL19, ZWF22, JHZK08, SG07]. **Failures** [LL14, MTD⁺15, RPA⁺21, SSVG13, JHZK08]. **Family** [LL14]. **FAST** [AR18, AY21, Bak08, BF12, BP17, DP22, GN23, KW17, MW20, NW21, SZ15, ST14, CST⁺24, CSY⁺14, GAR⁺22, GHWK15, HHK⁺21, HWZ⁺18, KLK⁺22, LRE22, LCR⁺21, MDAD⁺14, SSHY16, TXZ⁺24, TPM⁺11, WXH⁺16, WLX⁺22, WCCZ21, WZC⁺24, XPZ⁺23, YCM⁺20, ZLL19, ZT20, WCJ⁺24, ADAD07, SW09, WTZ⁺23]. **FAST¹⁰** [BK10]. **Fastmove** [LSC⁺24]. **FASTSync** [WTZ⁺23]. **Fault** [GAADAD17, KYL⁺20, ASS05, EM05, LSZ09]. **fault-tolerant** [ASS05, EM05]. **Faults** [GAADAD17, GSS⁺18]. **Feature** [DLW⁺24]. **Feature-Aware** [DLW⁺24]. **Federated** [CLBB21]. **Ffsck** [MDAD⁺14]. **Fidelity** [JCG⁺16]. **Field** [MMES21]. **fields** [LBOX12]. **File** [AEMWC⁺12, CST⁺24, CWG⁺19, CYW⁺17, CSOL18, CCC⁺18, DMS⁺16, GAADAD17, GR09, GZH⁺18, HGZ⁺22, HZN⁺19, JMHS20, JYZ⁺15, JPC⁺20, KXK⁺20, KFPS20, LRE22, LRZ⁺22, LADADL14, LSZ19, MDAD⁺14, MH22, MHS20, MLZG19, MMP⁺19, PNW⁺24, SFW⁺20, SLXH23, VAM⁺19, WCC15, WQR13, YOL⁺18, YZJ⁺17, ZZW⁺17, ZJP⁺18, ZCJ⁺21, ZJQ⁺15, ZRRW20, ZHSH23, ZCW⁺21, ABDL07, AADAD09, AWC09, BBK⁺09, CCB07, FSM⁺12, JB05, JBLF10, JWK⁺10, MKLC06, PB05, STZ10, SSR⁺10, TPM⁺11, TZJW08, THWD08, VFNN10, WKRP06, WSSZ07, WKC06, XS09, YCY⁺20, ZIJ⁺06]. **File-System**

[GAADAD17, MDAD⁺14, MMP⁺19, SFW⁺20, HZN⁺19, ABDL07, AADAD09]. **Files** [YCY⁺20, ZRRW20]. **Filesystem** [RBM13, SVG⁺20, VSV09]. **Finding** [KXK⁺20]. **Findings** [LWLS23]. **Fine** [CYW⁺17]. **Fine-grained** [CYW⁺17]. **Fingerprint** [ZDZ⁺21]. **finite** [LBOX12]. **five** [ABDL07]. **five-year** [ABDL07]. **Flash** [BYY⁺22, CHL16, GYX⁺22, HCCK18, HWC12, HWF⁺16, JSC20, JCG⁺16, KLP⁺20, KCC13, LSKK16, LKB⁺17, LSDW17, LPS⁺23, LGKK22, LWC⁺22, MBTM⁺22, PDZ⁺23, PSX⁺21, PKI⁺18, SCJS18, TIM⁺18, WCXY15, WOJ⁺18, WH15, XWL⁺18, YS17, YYM⁺18, YLH⁺17, YPU⁺23, YOL⁺18, ZWH⁺17, CK05, CLHK10, CLP09, HKC06, JBLF10, LZYK⁺06, SPP11, WKC06, WHE12]. **Flash-Based** [HWF⁺16, LSKK16, JSC20, SCJS18, LZYK⁺06, WHE12]. **flash-memory** [CK05]. **Flash/Network** [TIM⁺18]. **FlashNet** [TIM⁺18]. **Flat** [CST⁺24]. **FlatLSM** [HAL⁺23]. **FlexDPDP** [EKB⁺16]. **Flexible** [HCL13, KLK⁺22, YFHW20, ZHW19]. **Flexible-resizing** [ZHW19]. **Flexlist** [EKB⁺16]. **Flexlist-Based** [EKB⁺16]. **Floating** [XWL⁺18]. **FluidSMR** [WLD21]. **forgery** [HSW09]. **Form** [ES14, IV15]. **Fragmentation** [KCMDM20]. **Framework** [CNS⁺18, GCD⁺22, KXK⁺20, PNW⁺24, STC23, YPLG11, ZJQ⁺15, VJG08]. **FRASH** [JWK⁺10]. **Free** [KLE20, KSGP17, TLM⁺23, ZYWX22]. **Frequency** [LLT⁺20]. **Friendly** [BN16, KSKN18]. **Frog** [ZJQ⁺15]. **FSDedup** [DLW⁺24]. **fsync** [RPA⁺21]. **FTL** [CNS⁺18, KPY17]. **FTP** [AWC09]. **Full** [ZJP⁺18]. **Full-Path-Indexed** [ZJP⁺18]. **Functional** [LFH⁺17]. **Functionality** [LBN14]. **FUSE** [VAM⁺19]. **Fuzzing** [KXK⁺20].

Games [KKD⁺22]. **Garbage**

[DS16, YLH⁺17]. **Gate** [XWL⁺18]. **GC** [ZYWX22]. **GC-free** [ZYWX22]. **GCMix** [KLK17]. **GCTrees** [DS16]. **GDS** [HC17]. **gear** [WOQ⁺07]. **gear-shifting** [WOQ⁺07]. **General** [LL14, LFH⁺17]. **Generalized** [AT13, LS12]. **Generating** [AADAD09, May22]. **Generation** [JMS22, PKI⁺18, DRK08]. **generic** [GSL⁺05]. **geometry** [GW10]. **Glocality** [ZLL19]. **gLSM** [SXJ⁺24]. **goliath** [AAADAD12]. **Google** [YPU⁺23]. **GoSeed** [NSKY21]. **GPGPU** [SXJ⁺24]. **graceful** [JB05]. **GRAID** [SPADAD05]. **grained** [CYW⁺17]. **Graph** [HSL⁺18, SLZ⁺23, ZZL⁺19a]. **Graph-based** [SLZ⁺23]. **GraphOne** [KH20]. **Graphs** [KH20, MHL⁺15, WLX⁺22]. **GRID** [LSZ09]. **Group** [WM16]. **grouping** [EA08]. **Groupings** [WM16]. **Guest** [BP11, BK10].

H [WXH⁺16]. **H-Scale** [WXH⁺16]. **Hard** [LCZ⁺19, SSVG13, WBZ⁺19, GW10]. **hardness** [THWD08]. **Hardware** [GSS⁺18, JCB⁺24, KLK⁺22, LRZ⁺22]. **Hardware-based** [KLK⁺22]. **Hash** [QZL⁺23]. **Hash-based** [QZL⁺23]. **Hashing** [LCLX19, WWJ⁺23, ZHW19, ZZS⁺22]. **HBase** [CDW⁺22]. **HDD** [WLC⁺22]. **HDD-Writes** [WLC⁺22]. **HDDs** [RBB⁺24]. **Heap** [HJW15]. **Heap-Based** [HJW15]. **HEAPO** [HJW15]. **Heterogeneous** [GCD⁺22, GR09]. **hfplayer** [HHFD17]. **Hierarchical** [CLZ⁺21, HBP11, LV17, JWK⁺10]. **hierarchy** [MTH⁺08]. **High** [CSY⁺14, FCZ⁺23, HGZ⁺22, JCG⁺16, KPY17, LB14, LHZ⁺23, LFH⁺17, TGL⁺18, WTZ⁺23, WCY⁺24, ZLA⁺24, ZHSH23, ZHW19, DEH⁺08, GSL⁺05, LSZ09]. **High-bandwidth** [WTZ⁺23, GSL⁺05]. **High-density** [WCY⁺24]. **High-Fidelity** [JCG⁺16]. **High-Performance** [CSY⁺14, FCZ⁺23, HGZ⁺22, LB14, LFH⁺17, ZHSH23, LHZ⁺23, ZLA⁺24, ZHW19]. **high-reliability** [DEH⁺08]. **Higher** [TB09]. **Highly** [EFM17]. **HIL** [CNS⁺18]. **HiNFS** [CSOL18]. **Hints** [GCD⁺22, DRK08]. **HintStor** [GCD⁺22]. **Historical** [ASM12]. **History** [JDXD13, HSW09]. **HM** [STC23, ZYWX22]. **HM-SMR** [STC23, ZYWX22]. **Hot** [ZDZ⁺21, HKC06]. **hours** [SG07]. **HPDA** [MJW⁺12]. **Hundreds** [YYR21]. **Hybrid** [CZD⁺17, KCC13, LKE18, LXNL15, LCMZ15, SSC⁺24, VDV17, WXH⁺16, WLC⁺22, WLD21, XXL⁺11, XMRF⁺13, YFHW20, ZLLH23, JWK⁺10, MJW⁺12, SPP11, WKRPO6]. **Hybris** [VDV17]. **Hyper** [ZYS⁺22]. **Hyper-dimensional** [ZYS⁺22].

I/O [CDW⁺22, CBH⁺17, GCD⁺22, HHFD17, HCO⁺17, JPB17, KR10, KDS20, LPS⁺23, LSZ19, MQRY11, MKLC06, PNW⁺24, QJM⁺09, SSHY16, WLX⁺22, WOJ⁺18, WCY⁺24, YXZ⁺23, YLL⁺24, YSEY10, ZXJ11]. **I/O-intensive** [QJM⁺09]. **Identification** [BWV16, BYY⁺22, HKC06]. **Identify** [WM16]. **idleness** [MRZ⁺09]. **IEEE** [HKP09]. **IEEE-1394** [HKP09]. **Image** [LZY⁺24, ZCL⁺21]. **ImmortalGraph** [MHL⁺15]. **Impact** [SSVG13, SXF21, ZWH⁺17]. **Implementation** [HWC12, QLL17, SCW⁺20, Tri15, ZCL⁺24]. **implementations** [AEMWC⁺12, LBOX12]. **Implications** [LWLS23, XOZ⁺20, XWL⁺18, YGJS21, YZ16]. **Imply** [GAADAD17]. **Impressions** [AADAD09]. **Improve** [BYY⁺22, CST⁺24, JPB17, LSKK16, MR16, QFS⁺17, KR10, LCZ05]. **Improved** [WMCJ16]. **Improvement** [LLH⁺18]. **Improving** [AAB⁺23, BJD06, CHA⁺11, DLW⁺24, HA13, HWF⁺16, JMS22, SYK⁺11, SPADAD05, ZDZ⁺21, NQX06]. **In-depth** [LWLS23]. **In-Memory** [CZD⁺17, FCZ⁺23, YYR21]. **In-Storage** [CDW⁺22]. **incremental** [ZIJ⁺06]. **InDe**

[LDZZ23]. **independent** [XS09]. **Index** [DFP⁺15, SSC⁺24, ZHW19]. **Indexed** [ZJP⁺18, ZCJ⁺20]. **Indexes** [WCW⁺22, WLL⁺22]. **Indexing** [LRZ⁺22, WLW⁺24, LZYK⁺06]. **infer** [GW10]. **Information** [LLT⁺20]. **informed** [SHWH12]. **Infrastructure** [CDW⁺22, PP16]. **initialization** [WKC06]. **Inline** [LXNL15, LDZZ23, RBB⁺24, YYC⁺18]. **Inspection** [JPC⁺20]. **INSTalytics** [SVG⁺20]. **Integrate** [XXD19]. **Integrated** [CKL⁺24]. **Integration** [SCJS18]. **Integrity** [FQS⁺14, MNT06]. **Intelligent** [WCR⁺06]. **Intel(R)** [MTH⁺08]. **Intensive** [CWY⁺15, HHFD17, NQX06, QJM⁺09]. **inter** [MKLC06]. **inter-file** [MKLC06]. **Interdisk** [WXS16]. **Interface** [LRE22, LPS⁺23, ZXJ11]. **Interfaces** [GAR⁺22]. **Interference** [KLK17]. **Interleaving** [JPB17, SYK⁺11]. **Internal** [CHL16, XCR18]. **International** [YP19]. **Interrupts** [TSWT22]. **intra** [DEH⁺08]. **intra-disk** [DEH⁺08]. **Intradisk** [IHHE11]. **Introduction** [AR18, AY21, AW23, ADAD07, ADV19, ADZ20, Bak08, BF12, BP17, BL22, CK22, DP22, DH16, DdL18, GZ21, GN24, GN23, GR19, KKR20, KW17, LH21, MT20, MT17, MW20, NW21, Noh22, PWS17, SZ15, SZ23, ST14, SW09, WL24, XS18, YP19]. **IO** [GHWK15, RHC15]. **IS-HBase** [CDW⁺22]. **Isolation** [MZLK24]. **Isotope** [SBMW17]. **Issue** [AR18, BP17, DH16, DdL18, GZ21, KW17, MT17, MW20, PWS17, SZ15, ST14, XS18, YP19, ADAD07, Bak08, BF12, SW09]. **Issues** [GZXZ23, GS06]. **Iterative** [ZZL⁺19a].

JFTL [CLP09]. **Jobs** [ZZL⁺19a]. **journal** [CLP09]. **Journaling** [CYW⁺17, HA17, LBN14]. **Journey** [LXZ⁺23].

Kangaroo [MBTM⁺22]. **Kernel** [GZXZ23, JYZ⁺15]. **Key** [DKJS21, IBC⁺21, JSC20, KAG⁺22, KLC⁺23, LHZ⁺23, PSX⁺21, QZL⁺23, SCJS18, SSC⁺24, SXJ⁺24, WCCZ21, YJR21, YLRL22, YWH⁺17, ZD21, ZYWX22, HF05]. **Key-Value** [PSX⁺21, IBC⁺21, JSC20, KAG⁺22, LHZ⁺23, SCJS18, SXJ⁺24, YJR21]. **Keys** [LPG⁺17]. **Kinesis** [MMR⁺09]. **Kreon** [PSX⁺21]. **KV** [CZD⁺17, HAL⁺23, LCLX19, LCR⁺21, SSC⁺24]. **KV-Store** [CZD⁺17]. **KVRangeDB** [QZL⁺23].

Labels [KDS20]. **Large** [DFB⁺20, DKJS21, GSS⁺18, Hal16, IJK⁺17, MMES21, MEK⁺14, PNW⁺24, WBZ⁺19, YJR21, ZWM⁺20, AWC09, CK05, HDW⁺08, HHK⁺21, LBOX12, SZ05, VMF⁺06]. **Large-Scale** [Hal16, MMES21, MEK⁺14, DFB⁺20, DKJS21, PNW⁺24, WBZ⁺19, YJR21, CK05, HDW⁺08]. **Latencies** [YLH⁺17]. **Latency** [HC17, LGKK22, PKI⁺18, WCY⁺24, ZZL⁺24, EA08, ZSW⁺06]. **Latency-** [HC17]. **Latent** [Ili23, SDG10]. **Launch** [JPB17]. **Layer** [KCC13, WCXY15, CHLK11, CLP09, JGW⁺23, SPP11, WCR⁺06]. **Layering** [HLZ⁺17]. **Layout** [JDXD13]. **Lazy** [HWF⁺16, MSM⁺17]. **LC** [HC17]. **LDJ** [KLE20]. **LDM** [WMCJ16]. **LDPC** [QFS⁺17]. **Leading** [YXZ⁺23]. **Leakage** [LLT⁺20]. **Learned** [LHZ⁺23, WCW⁺22, WCCZ21]. **Learning** [AAB⁺23, ZWF22]. **Lerna** [SPR19]. **Letter** [Noh18]. **Level** [KHW⁺16, KMM⁺12, KCC13, PKI⁺18, ZHW19, LZY⁺24]. **Leveling** [LV17, WXS16, XK24]. **Leveraging** [DMS⁺16, HZN⁺19, LCR⁺21, ZLL19]. **LibPM** [MCR18]. **Lifecycle** [MLZG19]. **Lifetime** [MR16]. **Lightweight** [EEFM22, FLY21, SSWC14, XPZ⁺23, YWH⁺17]. **Like** [HCKK18, SSOT17]. **Line** [LXNL15].

Linear [ZYS⁺22]. **Linux** [GZXZ23, LADADL14, RBM13]. **Liquid** [LPR⁺19]. **Load** [IJK⁺17, PNW⁺24, YHJ13, QJM⁺09, WB05]. **Load-balancing** [PNW⁺24]. **loading** [NDR08]. **local** [NQX06]. **Localities** [LSKK16, DJC07]. **Locality** [KYL⁺20, PWLW21, ZYS⁺22]. **Locality-aware** [PWLW21]. **Localized** [ZHZZ23]. **Locally** [KSCM23, KYL⁺20]. **Location** [SSWC14]. **Log** [BN16, KLC⁺23, WZC⁺24, WMCJ16, ZD21, ZYL⁺19b, WKC06]. **log-based** [WKC06]. **Log-Structured** [KLC⁺23, ZD21, ZYL⁺19b]. **Logging** [HGZ⁺22, MT09]. **LoneStar** [GNB16]. **Long** [ASM12, YYC⁺18, SKM⁺18, SGMV09]. **Long-Term** [ASM12, JAM⁺16, YYC⁺18, SKM⁺18, SGMV09]. **Loops** [SPR19]. **Loves** [KFPS20]. **Low** [LGKK22, TGL⁺18, Tri15, WZC⁺24, ZYL⁺24]. **Low-Complexity** [Tri15]. **Low-cost** [TGL⁺18, WZC⁺24]. **LRCs** [KSCM23]. **LSM** [HAL⁺23, IBC⁺21, KLL⁺24, LCR⁺21, SSC⁺24, SXJ⁺24, TGL⁺18, WLW⁺24, ZYL⁺24]. **LSM-Based** [WLW⁺24]. **LSM-Tree** [HAL⁺23, TGL⁺18]. **LSM-tree-based** [IBC⁺21, LCR⁺21, SXJ⁺24]. **Lustre** [CLZ⁺21]. **LVMT** [LBY⁺24].

M [LKE18]. **M-CLOCK** [LKE18]. **Machine** [AAB⁺23, ZCL⁺21]. **Made** [LZC⁺18]. **Main** [DLW⁺24, LLZA05]. **mainstream** [MTH⁺08]. **Maintaining** [ZYS⁺22]. **Making** [SZS⁺12]. **Managed** [SHDA17, JGW⁺23]. **Management** [CKL⁺24, EEFM22, LGL22, LKB⁺17, LXC⁺22, PKI⁺18, SLZ⁺23, WLX⁺22, WLD21, YLRL22, YHJ13, ZCL⁺21, CK05, CHHH12, DJC07, GR09, HBL⁺06, LLZA05, MRZ⁺09, NDR08, TCL12, WB05, WHE12]. **Managing** [GR21, HF05]. **Manycores** [KHW⁺16]. **MAP** [WCXY15]. **Mapped** [PSX⁺21, SSHY16]. **Mapping** [ZRRW20]. **Massive** [GNB16, PWS17, YCY⁺20, ZCJ⁺20]. **Maximizing** [CBH⁺17]. **mean** [SG07]. **Measurements** [EHW23]. **Mechanism** [CWY⁺15, WLW⁺24]. **Mechanisms** [FQS⁺14]. **Media** [LB14, RBB⁺24, GSL⁺05, RDCS07, VJG08]. **Membrane** [SSR⁺10]. **Memories** [ZHSH23]. **Memory** [BAM⁺21, CNJ⁺20, CHL16, CZD⁺17, CSOL18, CCC⁺18, DLW⁺24, FCZ⁺23, GYX⁺22, HSL⁺18, HCCK18, HWC12, JCB⁺24, JCG⁺16, KAG⁺22, KSDC14, KLL⁺24, KCC13, LBN14, LKE18, LRZ⁺22, LHZ⁺23, LWC⁺22, LSS16, LZS⁺24, MCR18, MTH⁺08, PWLW21, PSX⁺21, SCW⁺20, SSHY16, SWY18, WLL⁺22, WCC15, WQR13, WH15, XK24, YCM⁺20, ZD21, ZCL⁺21, ZHZZ23, ZCW⁺21, CK05, CLP09, GZXZ23, HKC06, JWK⁺10, LLZA05, SZS⁺12, WKC06, YJR21]. **Memory-Based** [CHL16]. **Memory-Disaggregated** [LZS⁺24]. **Memory-Mapped** [PSX⁺21, SSHY16]. **MEMS** [BLN09, HWB⁺06, HBL⁺06, KH10, RDCS07]. **MEMS-based** [BLN09, HWB⁺06, HBL⁺06, KH10, RDCS07]. **Merge** [KLC⁺23, ZD21, SPP11]. **Message** [Ano20, Ano23]. **Metadata** [CST⁺24, CYW⁺17, LGL22, WCC15, ZRRW20, ABDL07]. **Method** [QFS⁺17, WWJ⁺23, ZWF22]. **MFTL** [HWC12]. **Microarchitecture** [JCG⁺16]. **Microarchitecture-Aware** [JCG⁺16]. **Migration** [KKD⁺22, LKE18, LV17, MHS20, ZWG⁺23, SZ05]. **Migration-optimized** [LKE18]. **Milestones** [LXZ⁺23]. **Minimum** [PBV11]. **Mining** [LCZ05]. **Mirroring** [WMCJ16]. **misbehaviors** [YSEY10]. **Miss** [HWZ⁺18]. **Missteps** [LXZ⁺23]. **Mitigating** [LSZ19]. **Mitigation** [WWJ⁺23]. **Mixed** [PB14, TGL⁺18, VJG08]. **mixed-media**

[VJG08]. **MLC** [HCCK18, HWC12]. **Mobile** [JPC⁺20, KH10]. **Modeling** [HWZ⁺18, KCLK21, NQX06, SHDA17, HBL⁺06]. **Models** [Des14, YLADAD23]. **Modern** [JMHS20, GW10]. **Modes** [PB14]. **Monitoring** [MTD⁺15, WBZ⁺19, YXZ⁺23]. **MOSFETs** [ST06]. **Movement** [JAM⁺16, LSC⁺24]. **MSST** [DH16, MT17]. **MTTDL** [IV15, ES14]. **MTTF** [SG07]. **Multi** [CLBB21, KPY17]. **Multi-Channel** [KPY17]. **Multi-objective** [CLBB21]. **Multicollective** [MKLC06]. **Multicore** [WCW⁺22]. **MultiLanes** [KHW⁺16]. **Multiresolution** [GGE⁺05]. **Multistream** [HA13, GB07]. **Mutations** [ZJP⁺18].

Namespace [CST⁺24, MZLK24, WDG⁺06]. **NAND** [CLHK10, JCG⁺16, LSKK16, LWC⁺22, PDZ⁺23, PKI⁺18, XWL⁺18, YLH⁺17]. **NANDFlashSim** [JCG⁺16]. **Nap** [WLL⁺22]. **NCQ** [YSEY10]. **NDP** [SXF21]. **Near** [LJFS17, LFH⁺17, SXF21, YLH⁺17]. **Near-Data** [SXF21]. **Near-Optimal** [LFH⁺17]. **Near-Perfect** [YLH⁺17]. **Near-Precise** [LJFS17]. **Nearest** [JCB⁺24]. **Need** [WZH⁺20]. **Neighbor** [JCB⁺24]. **Nested** [WLL⁺19]. **Network** [JB05, SSOT17, TIM⁺18, WTZ⁺23, BBK⁺09, GSL⁺05, YC07]. **networks** [GGE⁺05]. **Next** [JMS22, PKI⁺18]. **Next-Generation** [PKI⁺18]. **NFS** [BBK⁺09, CBH⁺17]. **Nil** [GAR⁺22]. **Nil-external** [GAR⁺22]. **Nimble** [ZCJ⁺21]. **nine** [TZJW08]. **Niobe** [MTJ⁺08]. **Node** [SKM⁺18]. **Non** [BAM⁺21, DLW⁺24, YCM⁺20]. **Non-Volatile** [DLW⁺24, YCM⁺20, BAM⁺21]. **Nondeterministic** [SSWC14]. **Nonvolatile** [KLL⁺24, LBN14, MTH⁺08, WCC15]. **NOR** [CLHK10]. **note** [Lon12]. **Novel** [HSL⁺18]. **NUMA** [WLL⁺22]. **NVLSM** [ZD21]. **NVM** [CYW⁺17, LKB⁺17, LSC⁺24, WWW⁺18, XS18]. **NVM-based** [LSC⁺24]. **NVMe** [GLSB18, KSL⁺23, LCR⁺21, LPS⁺23, LLYS23, LGKK22]. **NVMe-over-Fabrics** [GLSB18]. **NVMeVirt** [KSL⁺23]. **NVMM** [CLZ⁺21]. **NVMM-Oriented** [CLZ⁺21]. **NVMs** [CST⁺24]. **NVRAM** [KSKN18, LV17].

O [CDW⁺22, CBH⁺17, GCD⁺22, HHFD17, HCO⁺17, JPB17, KR10, KDS20, LPS⁺23, LSZ19, MQR11, MKLC06, PNW⁺24, SSHY16, WLX⁺22, WOJ⁺18, WCY⁺24, YXZ⁺23, YLL⁺24, YSEY10, ZXJ11]. **O-intensive** [QJM⁺09]. **Oasis** [ZWG⁺23]. **Object** [HJW15, ZWG⁺23]. **Object-based** [ZWG⁺23]. **objective** [CLBB21]. **Objects** [LSDW17, MBTM⁺22]. **Observations** [XWL⁺18]. **Obtaining** [GW10]. **Octopus** [ZCW⁺21]. **off** [NDR08]. **off-loading** [NDR08]. **Offline** [GNB16]. **Offloading** [CDW⁺22]. **Offs** [LCMZ15]. **On-Chip** [LSC⁺24]. **One** [WZH⁺20, ZRRW20, ZZS⁺22]. **One-sided** [ZZS⁺22]. **One-Time-Access-Exclusion** [WZH⁺20]. **One-to-One** [ZRRW20]. **Online** [KMM⁺12, TCJ⁺11]. **only** [ZSZ⁺12]. **Open** [LSZ19]. **Open-Channel** [LSZ19]. **OpenSSD** [KLP⁺20]. **Operating** [SSR⁺10]. **Operation** [ASD15, TB09]. **Operations** [YCY⁺20]. **Optical** [YYC⁺18]. **Optimal** [AT13, GB07, HLZ⁺17, LFH⁺17, LFJ⁺17, NSKY21, Tos09, WSZ⁺10]. **Optimality** [KYL⁺20]. **Optimization** [CLBB21, JYZ⁺15, KCC13, MJW⁺14, STC23, YPU⁺23, YZJ⁺17, HDW⁺08, WCR⁺06]. **Optimize** [YCY⁺20]. **Optimized** [CDW⁺22, EKB⁺16, HAL⁺23, WLL⁺19, YFHW20, KAG⁺22, LKE18, SHWH12]. **Optimizing** [CYW⁺17, KH10, RBB⁺24, STZ10, SYK⁺11, TSWT22, DRK08]. **Oracle** [KFPS20]. **OrcFS** [YOL⁺18]. **Orchestrated** [YOL⁺18]. **Order** [WOJ⁺18]. **Ordered** [WCCZ21]. **Organization** [TB09]. **Oriented** [CLZ⁺21, CHHH12, LHZ⁺23].

OS-Level [KHW⁺16]. **OSDI** [BL22, GN24, LH21, AW23]. **OSDI'18** [ADV19]. **Other** [YZJ⁺17]. **Ouroboros** [LV17]. **Out-of-Core** [FCZ⁺23]. **Out-of-Line** [LXNL15]. **Output** [XOZ⁺20]. **Outsourced** [DFP⁺15, ZYLL24, MNT06]. **Overhead** [LSZ19]. **Owner** [TLM⁺23]. **Owner-free** [TLM⁺23].

P [BLN09]. **P/PA** [BLN09]. **P/PA-SPTF** [BLN09]. **P2P** [HBP11]. **PA-SPTF** [BLN09]. **Page** [KLK17, LKE18, PDZ⁺23, YYM⁺18]. **Page-state-aware** [PDZ⁺23]. **Paired** [KLK17]. **Pannier** [LSDW17]. **PARAID** [WOQ⁺07]. **Parallel** [HGZ⁺22, KCC13, PNW⁺24, MQRY11]. **Parallelism** [BLN09, CHL16, XCR18]. **Parallelism-aware** [BLN09]. **Parallelizing** [SPR19]. **Parity** [WCJ⁺24, MJW⁺12, TCJ⁺11]. **Parity-based** [WCJ⁺24, MJW⁺12, TCJ⁺11]. **Partial** [ZLL⁺20]. **Partitioning** [WZC⁺24]. **Patches** [May22]. **Path** [DMS⁺16, ZJP⁺18]. **Pattern** [KPY17, LXC⁺22, WZC⁺24]. **Pattern-Based** [LXC⁺22]. **Pattern-Change-Aware** [KPY17]. **Patterns** [SKM⁺18, MKLC06]. **PBS** [ZLL⁺20]. **PCIe** [LLYS23]. **PCM** [LLH⁺18]. **Penalty** [PWLW21]. **Penalty-** [PWLW21]. **Per-File** [DMS⁺16]. **Perfect** [YLH⁺17]. **Performance** [CST⁺24, CBH⁺17, CSY⁺14, CKL⁺24, Des14, DLW⁺24, EHW23, FCZ⁺23, GSS⁺18, GLSB18, HGZ⁺22, HCO⁺17, JPB17, KKZ05, KPY17, KCLK21, KCC13, LB14, LSKK16, LLZA05, LCMZ15, LCLX19, LZL⁺23, LFH⁺17, LWC⁺22, MJW⁺14, MZLK24, PDZ⁺23, PAL⁺17, QFS⁺17, SHDA17, SYK⁺11, TSWT22, TGL⁺18, VAM⁺19, WMCJ16, XXL⁺11, XCK⁺14, YGJS21, YFHW20, ZXJ11, ZRRW20, ZDZ⁺21, ZHSH23, CHHH12, JB05, KR10, LCZ05, LHZ⁺23, MJW⁺12, STZ10, WKRP06, ZSW⁺06, ZLA⁺24, ZHW19]. **Perseid** [WLW⁺24]. **Persistence** [LSS16]. **Persistent** [CNJ⁺20, CSOL18, CCC⁺18, CLZ⁺21, GZXZ23, HJW15, KSKN18, LRZ⁺22, LSS16, MCR18, SCW⁺20, WLL⁺22, ZD21, ZCL⁺21, ZHZL23, ZHSH23, ZCW⁺21, ZHW19]. **Persistent-memory-related** [GZXZ23]. **persistent-RAM** [WKRP06]. **Persisting** [WWW⁺18]. **Perspective** [CPW⁺15, HCO⁺17, SLXH23, WWW⁺18]. **Phase** [KSDC14, XK24]. **Pipelining** [LYL⁺21]. **Placement** [CLBB21, IJK⁺17, MEK⁺14, SSC⁺24, MMR⁺09]. **Plan** [NSKY21]. **Platform** [PYY19]. **PM** [HAL⁺23]. **PM-Based** [HAL⁺23]. **Policy** [EFM17, WZH⁺20, CHLK11, WSZ⁺10]. **Polling** [WCY⁺24]. **Portable** [AEMWC⁺12]. **Portably** [THWD08]. **Possession** [EKB⁺16, ZB16]. **possible** [GS06]. **Post** [XPZ⁺23]. **Post-Deduplication** [XPZ⁺23]. **postal** [GSL⁺05]. **POTSHARDS** [SGMV09]. **Power** [KAG⁺22, YHJ13, NDR08, WOQ⁺07]. **power-aware** [WOQ⁺07]. **Power-optimized** [KAG⁺22]. **powered** [KH10]. **Practical** [KSCM23, KCLK21, LXZ⁺23, MHS20, NDR08, MTJ⁺08, MB12, EM05]. **Practice** [HLZ⁺17, MBTM⁺22]. **PRE** [MQRY11]. **PRE-BUD** [MQRY11]. **Precise** [LJFS17]. **Predictable** [LGKK22]. **Predicting** [Hal16]. **Prediction** [YLL⁺24, ZWF22]. **Predictive** [EA08, WM16]. **Prefetching** [JDXD13, LXC⁺22, GB07, MQRY11]. **presence** [DEH⁺08]. **Preservation** [YYC⁺18]. **PRESIDIO** [YPLG11]. **Preventing** [HSW09, YSEY10]. **Primary** [PP16, RBB⁺24]. **Principled** [YLADAD23]. **Priorities** [DKJS21]. **Priority** [CKL⁺24]. **Priority-Aware** [CKL⁺24]. **Private** [DFP⁺15]. **Proactively** [MTD⁺15].

Process [SWY18]. **Process-in-Memory** [SWY18]. **Processing** [FCZ⁺23, HSL⁺18, PYY19, SXF21, ZZL⁺19a, HDW⁺08]. **Processing-in-Memory** [HSL⁺18]. **Production** [GSS⁺18, XOZ⁺20]. **Programming** [GR21, HCCK18, LPS⁺23]. **Programs** [FCZ⁺23]. **protect** [SDG10]. **Protecting** [MTD⁺15]. **Protection** [KLK17]. **Protocol** [AGL⁺18, MTJ⁺08]. **Protocol-Aware** [AGL⁺18]. **Prototype** [KLP⁺20, SS14]. **Provable** [EKB⁺16, ZB16]. **Provably** [CNS⁺18]. **Provably-Correct** [CNS⁺18]. **Provenance** [XMRF⁺13, HSW09]. **Provide** [HZN⁺19]. **Providing** [KHW⁺16]. **Provisioning** [IJK⁺17]. **PSA** [PDZ⁺23]. **PSA-Cache** [PDZ⁺23]. **Pumping** [LLH⁺18]. **Pyramid** [HCL13].

QoS [HKP09]. **Queries** [QZL⁺23, TLM⁺23, Tos09]. **Query** [SWY18]. **Queueing** [IJK⁺17]. **Queueing-Based** [IJK⁺17]. **quFiles** [VFNN10]. **Quick** [MHS20]. **quickly** [GW10].

RACE [ZZS⁺22]. **paces** [THWD08]. **Rack** [YYC⁺18]. **Rack-based** [YYC⁺18]. **Radix** [LZS⁺24]. **RAID** [IV15, BKPM10, DEH⁺08, ES14, GNB16, HHK⁺21, HM05, IHHE11, KZZ07, LS12, MR16, PBV11, PB14, Tri15, WXS16, WOQ⁺07, XXL⁺11, ZZL13]. **RAID-0** [WXS16, ZZL13]. **RAID-6** [IV15, LS12, PBV11, XXL⁺11]. **RAIDs** [TCJ⁺11, WCJ⁺24]. **RAIDShield** [MTD⁺15]. **RAIL** [LGKK22]. **RAM** [CCC⁺18, WKRP06, ZLL19]. **RAM-Based** [CCC⁺18]. **Random** [MEK⁺14, WLX⁺22]. **randomization** [WB05]. **Range** [QZL⁺23, Tos09]. **Rapid** [KLP⁺20]. **rate** [ASS05]. **rates** [SG07]. **Ratio** [HWZ⁺18]. **RB** [WWW⁺18]. **RB-Tree** [WWW⁺18]. **RDMA** [LHZ⁺23, LLYS23, SCW⁺20, WCCZ21, ZCW⁺21, ZZS⁺22].

RDMA-Based [WCCZ21]. **RDMA-conscious** [ZZS⁺22]. **RDMA-Enabled** [ZCW⁺21, SCW⁺20]. **RDMA-oriented** [LHZ⁺23]. **Reactions** [GAADAD17]. **Read** [CKL⁺24, KPY17, MJW⁺14, QFS⁺17, TGL⁺18]. **Read-Performance** [MJW⁺14]. **Read-Write** [KPY17]. **Read/Write** [TGL⁺18]. **ReadGuard** [CKL⁺24]. **Real** [KH20, WCR⁺06]. **Real-time** [KH20, WCR⁺06]. **realistic** [AADAD09]. **Realizing** [KLC⁺23]. **reallocation** [ABLM07]. **Rebuttal** [IV15]. **Reclamation** [KSGP17]. **Recon** [FSM⁺12]. **Reconfigurable** [NCP⁺22, SXF21]. **Records** [WLL⁺19]. **Recover** [RPA⁺21]. **Recoverable** [KSCM23, YCM⁺20, SGMV09]. **Recovery** [AGL⁺18, CNS⁺18, HGZ⁺22, HHK⁺21, XXL⁺11, YFHW20, ZLL19, HF05, WKC06]. **Redis** [PWLW21]. **Reduce** [JAM⁺16]. **Reducing** [HBP11, LKB⁺17, WZH⁺20]. **Reduction** [LLH⁺18, ZYLL24, EA08]. **Redundancies** [HZQX13]. **Redundancy** [FLY21, GAADAD17, IHHE11, ZYLL24, DEH⁺08]. **redundant** [TB09]. **Reed** [Tri15]. **Regenerating** [HBP11, LFH⁺17]. **regeneration** [YV05]. **REGISTOR** [PYY19]. **Registries** [ZLA⁺24]. **regulatory** [PB05]. **Rekeying** [QLL17]. **Rekeying-Aware** [QLL17]. **related** [GZXZ23]. **Reliability** [ES14, Hal16, HM05, IV15, Ili23, JMHS20, LWC⁺22, MMES21, WMCJ16, BKPM10, DEH⁺08, MJW⁺12, TB09]. **Reliable** [CWY⁺15, HCL13]. **remapping** [CLP09]. **Remote** [WCCZ21, ZB16]. **removable** [CHLK11]. **Removing** [ZYLL24]. **Reordering** [JPB17, AWC09]. **Reorganization** [ZCJ⁺20]. **Repair** [HLZ⁺17, HBP11, LYL⁺21, LFH⁺17, LFJ⁺17]. **Repairable** [KYL⁺20]. **Reparo** [HHK⁺21]. **Replacement** [HWF⁺16, LKE18, SZ05]. **Replacing**

[LRZ⁺22]. **Replay** [HHFD17]. **replica** [MMR⁺09, YV05]. **Replicated** [AT13, GAR⁺22]. **Replication** [CZD⁺17, NB13, SSC⁺24, EA08, MTJ⁺08, SHWH12]. **Repositories** [ASM12]. **Reprogramming** [GYX⁺22]. **Request** [SYK⁺11, ZFX⁺18, BLN09]. **ReRAM** [HSL⁺18]. **ReRAM-Based** [HSL⁺18]. **Research** [KSL⁺23]. **Resemblance** [XPZ⁺23]. **Resident** [WLX⁺22]. **resilient** [YLRL22]. **resizing** [ZHW19]. **Resource** [CCC⁺18, VAM⁺19, CK05]. **Response** [AT13]. **restartable** [SSR⁺10]. **Rethinking** [AWC09, BKPM10]. **Retrieval** [AT13, Tos09]. **Reuse** [YYM⁺18]. **Reviewers** [Noh19, Noh21]. **Revisiting** [KAU12]. **Right** [YZJ⁺17, VFNN10]. **robin** [ZSXZ07]. **Robust** [EEFM22, GZH⁺18, VDV17]. **RocksDB** [DKJS21]. **ROS** [YYC⁺18]. **round** [ZSXZ07]. **round-robin** [ZSXZ07]. **RRAM** [SWY18]. **RRAM-Based** [SWY18]. **runtime** [FSM⁺12].

SAN [CSY⁺14]. **Sanitization** [WCY⁺24]. **SATA** [HM05]. **Scalability** [JGW⁺23]. **Scalable** [ASS05, DFB⁺20, HHFD17, KLK⁺22, MEK⁺14, WLX⁺22, XK24, YHJ13]. **Scale** [GSS⁺18, Hal16, JCB⁺24, MMES21, MEK⁺14, SSVG13, VTHB18, WXH⁺16, ZCJ⁺20, CK05, DFB⁺20, DKJS21, HDW⁺08, PNW⁺24, WBZ⁺19, YYR21, WXH⁺16]. **Scaling** [ZZL13, ZSXZ07]. **Scan** [WLL⁺19]. **Scan-Optimized** [WLL⁺19]. **Schedulability** [YLADAD23]. **scheduler** [YSEY10]. **Scheduling** [ZFX⁺18, BLN09, VJG08]. **Scheme** [HCCK18, HHK⁺21, HC17, JSC20, JDXD13, KLK17, PDZ⁺23, WTZ⁺23, ZLA⁺24, DEH⁺08, DJC07, Tos09, WHE12]. **Schemes** [HCL13]. **Science** [CHA⁺11]. **Scientific** [ASM12, LGL22, VMF⁺06]. **SCMFS** [WQR13]. **Scrubbing** [IHHE11]. **SD** [PB14]. **Search** [JCB⁺24, GGE⁺05]. **Searchable** [TLM⁺23]. **Secondary** [WLW⁺24]. **Section** [AY21, AW23, ADV19, ADZ20, BL22, CK22, DP22, GN24, GN23, GR19, KKR20, LH21, MT20, NW21, Noh22, SZ23, WL24]. **Sector** [LL14, PB14, GW10, SDG10]. **Sector-Disk** [PB14]. **Secure** [BCQ⁺13, DMS⁺16, YCM⁺20, EM05, HSW09, LBOX12, MT09, SGMV09]. **Security** [SLXH23, WCY⁺24, HM05, NQX06]. **Seeding** [NSKY21]. **Seek** [SYK⁺11]. **Seek-Optimizing** [SYK⁺11]. **Selecting** [WSZ⁺10]. **Selective** [DLW⁺24]. **Self** [CDW⁺22, JGW⁺23, HF05, THTT08]. **Self-Adaptive** [CDW⁺22]. **Self-managed** [JGW⁺23]. **self-managing** [HF05]. **self-tuning** [THTT08]. **Semantics** [KDS20, WDG⁺06, WSSZ07]. **Semi** [ZWF22, BFHR09]. **semi-structured** [BFHR09]. **Semi-supervised** [ZWF22]. **sensor** [GGE⁺05, LZYK⁺06]. **Separating** [LPG⁺17]. **Sequential** [LSKK16, GB07]. **Server** [FLY21, MHS20, WLC⁺22, ASS05, STZ10]. **Server-based** [FLY21]. **server-class** [STZ10]. **Servers** [SXF21]. **Service** [CLBB21, LZY⁺24, SSWC14, ZXJ11, ZLLH23, KFPS20]. **Services** [ZLQ⁺22, VJG08]. **Serving** [DKJS21]. **shadowing** [Rod08]. **Shared** [HA17, ZZL⁺19b, GB07, VJG08, WB05]. **shared-disk** [WB05]. **Shared-Everything** [ZZL⁺19b]. **Sharing** [CCC⁺18]. **ShieldNVM** [YCM⁺20]. **shifting** [PB05, WOQ⁺07]. **Shingle** [ZZW⁺17]. **Shingle-Aware** [ZZW⁺17]. **Shingled** [ASD15, JAM⁺16]. **Shipping** [SSC⁺24]. **Shuffle** [DFP⁺15]. **Side** [HA17]. **sided** [ZZS⁺22]. **similarity** [KR10]. **Simplifying** [MCR18]. **Simulation** [JCG⁺16]. **Single** [KPY17, SKM⁺18]. **Single-Node** [SKM⁺18]. **Size** [EEFM22, LS12]. **Sketching** [HHS⁺20]. **Skew** [YZ16].

Skylight [ASD15]. **SLAS** [ZSXZ07]. **SLC** [HCCK18]. **SLC-Like** [HCCK18]. **Slicing** [MEK+14]. **SlimCache** [JSC20]. **SLO** [LJFS17]. **Slow** [GSS+18, LXZ+23]. **Small** [SYK+11]. **Smart** [GHWK15]. **SmartCon** [GHWK15]. **SmartFVM** [KLK+22]. **smartphones** [KAU12]. **SMR** [SHDA17, STC23, WLD21, XXD19, ZYWX22]. **SMR-aware** [STC23]. **Snapshots** [DS16]. **soft** [WCR+06]. **Software** [JCB+24, LCZ+19, LBOX12]. **Software-Defined** [LCZ+19]. **Software-Hardware** [JCB+24]. **SolarDB** [ZZL+19b]. **Solid** [CHL16, GYX+22, LXC+22, SS14, SLZ+23, WCXY15, XCR18, ZWH+17, CHHH12]. **Solid-State** [CHL16, LXC+22, SS14, WCXY15, XCR18, SLZ+23, CHHH12]. **Solomon** [Tri15]. **Solution** [TGL+18]. **Solutions** [VTHB18, GS06]. **solving** [THWD08]. **SOPA** [WSZ+10]. **Sorting** [WH15]. **SOSP** [ADZ20, Noh22]. **Space** [HCL13, KSGP17, LRE22, VAM+19]. **spatial** [DJC07]. **Special** [AR18, AY21, AW23, ADV19, ADZ20, BP17, BL22, CK22, DP22, DH16, DdL18, GZ21, GN24, GN23, GR19, KKR20, KW17, LH21, MT20, MT17, MW20, NW21, Noh22, SZ15, SZ23, ST14, WL24, XS18, YP19, ADAD07, Bak08, BF12, SW09, PWS17]. **Spectrum** [VTHB18]. **Speculation** [SPR19]. **Speculative** [ZLL+20]. **Spiffy** [SFW+20]. **Spikes** [ZZL+24]. **Spin** [ST06]. **spintronics** [ST06]. **SPTF** [BLN09]. **SQL** [SWY18]. **SSD** [BKPM10, CKL+24, Des14, JMHS20, JMS22, KPY17, LPG+17, MR16, PYY19, QFS+17, WXS16, WLC+22, WMCJ16, YGJS21]. **SSD-Based** [WMCJ16, YGJS21]. **SSD-Conscious** [LPG+17]. **SSDPlayer** [YS17]. **SSDs** [CPW+15, HHK+21, IBC+21, KCLK21, LSKK16, LCR+21, LSZ19, MMES21, RBB+24, SPP11, WCJ+24, WHE12, WCY+24, XXD19, YLH+17, YLL+24]. **Stack** [SSOT17, TIM+18, WOJ+18, BADAD+08]. **STAIR** [LL14]. **State** [CHL16, GYX+22, LXC+22, SS14, WCXY15, XCR18, ZWH+17, CHHH12, HF05, PDZ+23, SLZ+23]. **Statistical** [WM16]. **Status** [WBZ+19]. **Storage** [AWK+20, AAB+23, AGL+18, AT13, BWV16, BN16, BCQ+13, CDW+22, CHA+11, CWY+15, CCC+18, CLBB21, CSY+14, DFB+20, FLY21, GAADAD17, GAR+22, GR09, GCD+22, GR21, GHWK15, GLSB18, Hal16, HHS+20, HA13, HA17, HDW+08, HC17, HCO+17, HWC12, HWZ+18, HZQX13, HCL13, IHHE11, IJK+17, Ili23, KHW+16, KLE20, KAG+22, KCMDM20, KSDC14, KKR20, KSL+23, KMM+12, KDS20, KFPS20, KLP+20, KLK+22, LB14, LKB+17, LXNL15, LJFS17, LCLX19, LYL+21, LWLS23, LZL+23, LSC+24, LBY+24, LFJ+17, LPG+17, LPR+19, MMES21, MJW+14, MHL+15, MEK+14, NSKY21, NCP+22, PSX+21, PWS17, PP16, PYY19, QLL17, RBB+24, SBMW17, SCW+20, SSHY16, SSOT17, SSWC14, SWY18, SFW+20, TSWT22, TXZ+24, VTHB18, VDV17, WBZ+19, WCW+22, WLC+22, WLW+24, WZC+24, WLL+19, WM16, WOJ+18, WQR13, WTZ+23, XMRF+13, XXD19, XCK+14, XS18, YP19, YYC+18, YLADAD23, YOL+18, YPLG11, YHJ13, ZSW+06, ZXJ11, ZZL+19a]. **Storage** [ZLL19, ZLL+20, ZLLH23, ZWG+23, ZYLL24, ZLA+24, ZLQ+22, ZFX+18, ZT20, ZZL+24, ZZL+19b, AAADAD12, BLN09, BADAD+08, BJD06, CK05, CHLK11, CCB07, DEH+08, DRK08, EM05, GGE+05, GSL+05, HWB+06, HBL+06, HKC06, HKP09, HM05, JB05, JHZK08, JBLF10, JWK+10, KR06, KKZ05, KH10, KAU12, LCZ05, LSZ09, LBOX12, MMR+09, MTH+08, MRZ+09, NDR08, RDCS07, SPADAD05, SGMV09, TZJW08, VMF+06,

WCR⁺⁰⁶, YC07]. **Storage-as-a-Service** [CLBB21]. **Store** [CZD⁺¹⁷, DKJS21, HJW15, KH20, LCR⁺²¹, LHZ⁺²³, PSX⁺²¹, WCCZ21, ZD21, ZYWX22, ZZL⁺²⁴]. **Stores** [HAL⁺²³, KAG⁺²², KLC⁺²³, SSC⁺²⁴, SXJ⁺²⁴, YWH⁺¹⁷]. **Storing** [BFHR09]. **Strategies** [LB14]. **Strategy** [WXS16, CLHK10, XS09]. **Stream** [BYY⁺²², HDW⁺⁰⁸, SHWH12]. **stream-informed** [SHWH12]. **stream-processing** [HDW⁺⁰⁸]. **Streaming** [ZCJ⁺²⁰, ASS05, RDCS07]. **strictly** [Tos09]. **Strip** [LSZ09]. **Strip-based** [LSZ09]. **Stripe** [WXH⁺¹⁶]. **striped** [ZSXZ07]. **Strong** [GAADAD21, KLC⁺²³, YC07]. **Structure** [SWY18, ZHW19]. **Structured** [KLC⁺²³, WXS16, ZD21, ZZL^{+19b}, BFHR09]. **Structures** [ZYS⁺²², LZYZ⁺⁰⁶]. **Study** [GCD⁺²², HGZ⁺²², KSDC14, LCZ⁺¹⁹, LSC⁺²⁴, LADADL14, MMES21, SLXH23, VTHB18, ZT20, ABDL07, JHZK08, MB12, TZJW08]. **Subsumes** [LBN14]. **subsystem** [JHZK08]. **Subsystems** [SYK⁺¹¹, HKP09, SZ05]. **Summary** [LWC⁺²²]. **SUPA** [KPY17]. **Supercomputer** [XOZ⁺²⁰]. **Supercomputers** [YXZ⁺²³]. **supervised** [ZWF22]. **supplementary** [TCJ⁺¹¹]. **Support** [RBB⁺²⁴, ASS05, SSR⁺¹⁰]. **Supporting** [TLM⁺²³]. **Survey** [MH22]. **SWANS** [WXS16]. **Swap** [BCBS23]. **Switching** [GHWK15]. **Symmetric** [TLM⁺²³]. **Sync** [WTZ⁺²³, ZLQ⁺²²]. **Synchronous** [LSZ19, NB13, SYK⁺¹¹]. **Synchronous/Asynchronous** [NB13]. **System** [CST⁺²⁴, CWG⁺¹⁹, CSOL18, CCC⁺¹⁸, GAADAD17, GZH⁺¹⁸, JYZ⁺¹⁵, KCMDM20, LRE22, LADADL14, MDAD⁺¹⁴, MH22, MHL⁺¹⁵, MMP⁺¹⁹, QLL17, SFW⁺²⁰, WCC15, WM16, WQR13, YYC⁺¹⁸, YCM⁺²⁰, YOL⁺¹⁸, YZJ⁺¹⁷, ZZW⁺¹⁷, ZJP⁺¹⁸, ZCJ⁺²¹, ZZL^{+19a}, ZRRW20, ZLL⁺²⁰, ZHSH23, ZFX⁺¹⁸, ZCW⁺²¹, AEMWC⁺¹², ABDL07, AADAD09, BBK⁺⁰⁹, CCB07, FSM⁺¹², HZN⁺¹⁹, JBLF10, JWK⁺¹⁰, NQX06, PB05, STZ10, SPADAD05, SGMV09, SSR⁺¹⁰, TZJW08, WKRP06, WSSZ07, ZIJ⁺⁰⁶, GR09, SCW⁺²⁰]. **Systematic** [LFJ⁺¹⁷]. **Systematically** [MMP⁺¹⁹]. **Systems** [AWK⁺²⁰, AAB⁺²³, BN16, CWY⁺¹⁵, CYW⁺¹⁷, CCC⁺¹⁸, GR21, GNB16, GSS⁺¹⁸, Hal16, HGZ⁺²², HWC12, HBP11, HCL13, IHHE11, IJK⁺¹⁷, Ili23, JMHS20, KSDC14, KXK⁺²⁰, KSL⁺²³, KKD⁺²², KLP⁺²⁰, LHZ⁺²³, LZL⁺²³, LSC⁺²⁴, LSZ19, MMES21, MJW⁺¹⁴, MEK⁺¹⁴, PWS17, PNW⁺²⁴, PB14, SSWC14, SLXH23, TXZ⁺²⁴, VAM⁺¹⁹, VTHB18, WBZ⁺¹⁹, WLW⁺²⁴, YP19, YLADAD23, YHJ13, ZJQ⁺¹⁵, ZDZ⁺²¹, ZWG⁺²³, ZLA⁺²⁴, AAADAD12, BJD06, CK05, DEH⁺⁰⁸, HDW⁺⁰⁸, HWB⁺⁰⁶, HBL⁺⁰⁶, HKC06, HM05, KR06, KKZ05, KH10, LSZ09, MMR⁺⁰⁹, MQRY11, MTH⁺⁰⁸, MRZ⁺⁰⁹, RDCS07, SSR⁺¹⁰, TPM⁺¹¹, WKC06]. **SYSTOR** [YP19, DdL18].

Tail [LGKK22, YLH⁺¹⁷]. **Tails** [IBC⁺²¹]. **Tarazu** [PNW⁺²⁴]. **Targets** [PKI⁺¹⁸]. **TDDFS** [CWG⁺¹⁹]. **Technical** [GR19]. **Technique** [XK24, MKLC06]. **Techniques** [WM16, ZT20]. **Technology** [PWS17]. **Temperature** [SSVG13]. **Templates** [ZWM⁺²⁰]. **Temporal** [LSKK16, MHL⁺¹⁵, DJC07]. **Term** [ASM12, JAM⁺¹⁶, YYC⁺¹⁸, SKM⁺¹⁸, SGMV09]. **Testing** [MMP⁺¹⁹]. **TH** [SCW⁺²⁰]. **TH-DPMS** [SCW⁺²⁰]. **Thanking** [Noh21]. **Their** [YGJS21]. **them** [SDG10]. **Theory** [HLZ⁺¹⁷, MBTM⁺²², YPU⁺²³]. **Thermal** [GS06]. **Thread** [YLADAD23]. **Three** [JGW⁺²³]. **Three-layer** [JGW⁺²³]. **Threshold** [LWC⁺²²]. **throughput** [ZSW⁺⁰⁶]. **Tier** [CWG⁺¹⁹]. **Tier-Aware** [CWG⁺¹⁹]. **Tiered** [GR21, IJK⁺¹⁷, ZHSH23]. **Tiering**

[KSDC14, XXD19]. **Time** [AT13, EHW23, WZH⁺20, KH20, PB05, VFNN10, WCR⁺06]. **time-shifting** [PB05]. **Tiny** [MBTM⁺22, YLH⁺17]. **Tiny-Tail** [YLH⁺17]. **TinyLFU** [EFM17]. **TLC** [GYX⁺22]. **Tolerance** [GAADAD17, KYL⁺20, LSZ09]. **tolerant** [ASS05, EM05]. **Tolerating** [LL14]. **Tools** [Hal16]. **TOS** [Noh19, Noh21]. **TPFS** [ZSH23]. **Tracing** [VTHB18]. **Trade** [HCL13, LCMZ15]. **Trade-Offs** [LCMZ15]. **Tradeoffs** [CPW⁺15]. **Traffic** [HBP11, WZH⁺20]. **Transactional** [FQS⁺14]. **Transactions** [HZN⁺19, LZC⁺18, LSS16, SBMW17, ZHZL23]. **transfers** [AWC09]. **Translation** [KCC13, LRZ⁺22, WCXY15, XCR18, ZWH⁺17, CLP09, SPP11]. **Transparent** [FCZ⁺23, KMM⁺12, CCB07]. **Trap** [LWC⁺22]. **Traversal** [HSL⁺18]. **Treating** [SSOT17]. **Tree** [CNJ⁺20, HAL⁺23, KLL⁺24, LZS⁺24, RBM13, YWH⁺17, ZD21, IBC⁺21, KSKN18, LCR⁺21, SXJ⁺24, TGL⁺18, CNJ⁺20, WWW⁺18, KSKN18]. **Trees** [ZB16, Rod08]. **Triage** [KKZ05]. **TriCache** [FCZ⁺23]. **TrueErase** [DMS⁺16]. **trust** [TCL12]. **Tunable** [WB05, YLRL22]. **tuning** [THTT08]. **Turbo** [MTH⁺08]. **Twitter** [YYR21]. **Twizzler** [BAM⁺21]. **Two** [SXF21, YS17]. **TxFs** [HZN⁺19].

Ultra [CST⁺24, HHK⁺21, WCJ⁺24]. **Ultra-Fast** [CST⁺24, WCJ⁺24]. **Ultra-large** [HHK⁺21]. **Umbrella** [GR09]. **un-Block** [BCBS23]. **Understanding** [CHA⁺11, GZXZ23, HCO⁺17, SG07, SDG10, SXF21, ZWH⁺17]. **unexpected** [YSEY10]. **unification** [WDG⁺06]. **Unified** [KPY17, LBN14, VJG08]. **Union** [CCC⁺18]. **UnistorFS** [CCC⁺18]. **Universal** [STC23]. **Unix** [WDG⁺06]. **unrecoverable** [DEH⁺08]. **Unstructured** [PYY19]. **Update** [ZB16]. **Updates** [LCLX19, SYK⁺11]. **upgrades** [TCJ⁺11].

Ursa [YHJ13]. **Usage** [JPC⁺20, MCR18]. **Use** [KCLK21]. **USENIX** [AR18, AY21, AW23, ADAD07, Bak08, BF12, BP17, BL22, CK22, DP22, GZ21, GN24, GN23, GR19, KW17, LH21, MT20, MW20, NW21, SZ15, SZ23, ST14, WL24]. **User** [BN16, FCZ⁺23, LRE22, VAM⁺19]. **User-Friendly** [BN16]. **User-Space** [VAM⁺19]. **User-Transparent** [FCZ⁺23]. **Using** [AAB⁺23, HWB⁺06, HBL⁺06, KAG⁺22, KDS20, LV17, PWLW21, SPR19, SXJ⁺24, WCCZ21, XXL⁺11, YLADAD23, ZD21, CCB07, HKP09, HM05, JMS22, KKZ05, SHWH12]. **utility** [VJG08]. **utility-based** [VJG08]. **Utilization** [LDZZ23, MZLK24, VAM⁺19, ZDZ⁺21, DRK08]. **Utilizing** [KR10].

v [JMS22]. **Valid** [LDZZ23]. **Validation** [ZHZL23]. **Value** [KLC⁺23, PSX⁺21, QZL⁺23, SSC⁺24, WCCZ21, YWH⁺17, ZD21, DKJS21, IBC⁺21, JSC20, KAG⁺22, LHZ⁺23, SCJS18, SXJ⁺24, YYR21, ZYWX22]. **Values** [LPG⁺17]. **variable** [ASS05]. **VDO** [RBB⁺24]. **Vectorized** [CBH⁺17]. **Verifying** [FSM⁺12]. **Versatile** [LCMZ15]. **Versatility** [WDG⁺06]. **Version** [KLE20]. **versioning** [MRH09]. **Versus** [IHHE11]. **Vertical** [WZC⁺24]. **via** [LBN14, LCLX19, LLT⁺20, LDZZ23, LLH⁺18, WXH⁺16, WZH⁺20, WLX⁺22, YWH⁺17, ZSW⁺06, ZB16, ZDZ⁺21]. **Viewer** [BN16]. **Virtual** [ZCL⁺21, AEMWC⁺12, KR06]. **Virtualization** [KHW⁺16, KLK⁺22, ZSW⁺06]. **Virtualized** [KHW⁺16, JBLF10]. **Visibility** [SLZ⁺23]. **Visualizing** [RHC15, YS17]. **vNFS** [CBH⁺17]. **Volatile** [DLW⁺24, YCM⁺20, BAM⁺21]. **Voltage** [LWC⁺22]. **Volume** [HHS⁺20, ZLLH23]. **volumes** [ZSXZ07]. **vs** [YSEY10]. **Vulnerability** [SLXH23].

Vulnerability-centric [SLXH23].

WAFL [KSGP17]. **Walks** [WLX+22].

WAN [SHWH12]. **WAN-optimized**

[SHWH12]. **War** [SLXH23]. **Wear**

[LV17, WXS16, XK24]. **Wear-Leveling**

[WXS16]. **WebAssembly** [ZLQ+22].

WebAssembly-based [ZLQ+22]. **Wide**

[KSCM23]. **Window** [ASD15]. **WiscKey**

[LPG+17]. **WOM** [JMS22, YYM+18].

WOM-v [JMS22]. **Workflows** [GR21].

Workload [ASM12, BWV16, DRK08,

Kas18, WCXY15, YGJS21, WCR+06, XS09].

Workload-based [DRK08]. **Workloads**

[HHFD17, LWLS23, RHC15, TGL+18,

NQX06, STZ10]. **Write**

[Des14, HAL+23, JYZ+15, JAM+16, KPY17,

LKB+17, LLH+18, NDR08, TGL+18,

WZH+20, YZ16, ZCJ+21, NQX06, WHE12].

write-intensive [NQX06].

Write-Optimization [JYZ+15].

Write-Optimized [HAL+23]. **Writes**

[HZQX13, WLC+22, YZJ+17, ZLL+20].

Wrought [YZJ+17].

X [LS12]. **X-code** [LS12]. **XStore**

[WCCZ21].

year [ABDL07, TZJW08]. **Years** [YS17].

YouChoose [ZXJ11].

Z [WCXY15]. **Z-MAP** [WCXY15]. **Zipf**

[YZ16].

ZN-Swap [BCBS23]. **Zone** [WCXY15, XXD19].

Zone-Based [WCXY15, XXD19]. **Zoned**

[KZZ07, MZLK24]. **Zoned-RAID** [KZZ07].

ZoneFS [ZYWX22]. **ZoneTier** [XXD19].

References

Agrawal:2012:EGS

[AAADAD12] Nitin Agrawal, Leo Arulraj, Andrea C. Arpaci-Dusseau,

and Remzi H. Arpaci-Dusseau. Emulating goliath storage systems with David. *ACM Transactions on Storage*, 7(4):12:1–12:??, January 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Akgun:2023:ISS

[AAB+23]

Ibrahim Umit Akgun, Ali Selman Aydin, Andrew Burford, Michael McNeill, Michael Arkhangelskiy, and Erez Zadok. Improving storage systems using machine learning. *ACM Transactions on Storage*, 19(1):9:1–9:30, February 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3568429>.

Agrawal:2009:GRI

[AADAD09]

Nitin Agrawal, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Generating realistic *Impressions* for file-system benchmarking. *ACM Transactions on Storage*, 5(4):16:1–16:??, December 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Agrawal:2007:FYS

[ABDL07]

Nitin Agrawal, William J. Bolosky, John R. Douceur, and Jacob R. Lorch. A five-year study of file-system metadata. *ACM Transactions on Storage*, 3(3):9:1–9:??, October 2007. CODEN ???? ISSN

- 1553-3077 (print), 1553-3093 (electronic).
- [ABLM07] Ron Arnan, Eitan Bachmat, Tao Kai Lam, and Ruben Michel. Dynamic data reallocation in disk arrays. *ACM Transactions on Storage*, 3(1):??, March 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ADAD07] Andrea Arpaci-Dusseau and Remzi Arpaci-Dusseau. Introduction to special issue USENIX FAST 2007. *ACM Transactions on Storage*, 3(3):7:1–7:??, October 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ADV19] Andrea Arpaci-Dusseau and Geoffrey M. Voelker. Introduction to the special section on OSDI’18. *ACM Transactions on Storage*, 15(2):12:1–12:??, June 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3322101.
- [ADZ20] Remzi H. Arpaci-Dusseau and Yuanyuan (YY) Zhou. Introduction to the special section on SOSP 2019. *ACM Transactions on Storage*, 16(2):8:1, June 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3395778>.
- [AEMWC⁺12] Michael Abd-El-Malek, Matthew Wachs, James Cipar, Karan Sanghi, Gregory R. Ganger, Garth A. Gibson, and Michael K. Reiter. File system virtual appliances: Portable file system implementations. *ACM Transactions on Storage*, 8(3):9:1–9:??, September 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [AGL⁺18] Ramnathan Alagappan, Aishwarya Ganesan, Eric Lee, Aws Albarghouthi, Vijay Chidambaram, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Protocol-aware recovery for consensus-based distributed storage. *ACM Transactions on Storage*, 14(3):21:1–21:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Ano20] Anonymous. EIC message. *ACM Transactions on Storage*, 15(4):1–2, February 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3372345>.

- [Ano23] **Anonymous:2023:ECM**
 Anonymous. Editor-in-Chief message. *ACM Transactions on Storage*, 19(1):1:1, February 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3574325>.
- [AR18] **Agrawal:2018:ISI**
 Nitin Agrawal and Raju Rangaswami. Introduction to the special issue on USENIX FAST 2018. *ACM Transactions on Storage*, 14(3):20:1–20:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ASD15] **Aghayev:2015:SWS**
 Abutalib Aghayev, Mansour Shafaei, and Peter Desnoyers. Skylight — a window on shingled disk operation. *ACM Transactions on Storage*, 11(4):16:1–16:??, November 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ASM12] **Adams:2012:AWB**
 Ian F. Adams, Mark W. Storer, and Ethan L. Miller. Analysis of workload behavior in scientific and historical long-term data repositories. *ACM Transactions on Storage*, 8(2):6:1–6:??, May 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ASS05] **Anastasiadis:2005:SFT**
 Stergios V. Anastasiadis, Kenneth C. Sevcik, and Michael Stumm. Scalable and fault-tolerant support for variable bit-rate data in the Exedra streaming server. *ACM Transactions on Storage*, 1(4):419–456, November 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [AT13] **Altiparmak:2013:GOR**
 Nihat Altiparmak and Ali Saman Tosun. Generalized optimal response time retrieval of replicated data from storage arrays. *ACM Transactions on Storage*, 9(2):5:1–5:??, July 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [AW23] **Aguilera:2023:ISS**
 Marcos K. Aguilera and Hakim Weatherspoon. Introduction to the special section on USENIX OSDI 2022. *ACM Transactions on Storage*, 19(2):14:1, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3584363>.
- [AWC09] **Anastasiadis:2009:RFA**
 Stergios V. Anastasiadis, Rajiv G. Wickremesinghe, and Jeffrey S. Chase. Rethinking FTP: Aggressive block re-ordering for large file transfers.

ACM Transactions on Storage, 4(4):13:1–13:??, January 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Aghayev:2020:CCS

[AWK⁺20] Abutalib Aghayev, Sage Weil, Michael Kuchnik, Mark Nelson, Gregory R. Ganger, and George Amvrosiadis. The case for custom storage backends in distributed storage systems. *ACM Transactions on Storage*, 16(2):9:1–9:31, June 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3386362>.

Aguilera:2021:ISS

[AY21] Marcos K. Aguilera and Gala Yadgar. Introduction to the special section on USENIX FAST 2021. *ACM Transactions on Storage*, 17(4):25:1, November 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3485449>.

Bairavasundaram:2008:ADC

[BADAD⁺08] Lakshmi N. Bairavasundaram, Andrea C. Arpaci-Dusseau, Remzi H. Arpaci-Dusseau, Garth R. Goodson, and Bianca Schroeder. An analysis of data corruption in the storage stack. *ACM Transactions on Storage*, 4(3):8:1–8:??, November 2008. CODEN

???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Baker:2008:ISI

[Bak08] Mary Baker. Introduction to special issue of USENIX FAST 2008. *ACM Transactions on Storage*, 4(3):6:1–6:??, November 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Bittman:2021:TDC

[BAM⁺21] Daniel Bittman, Peter Alvaro, Pankaj Mehra, Darrell D. E. Long, and Ethan L. Miller. Twizzler: a data-centric OS for non-volatile memory. *ACM Transactions on Storage*, 17(2):11:1–11:31, June 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3454129>.

Batsakis:2009:CNC

[BBK⁺09] Alexandros Batsakis, Randal Burns, Arkady Kanevsky, James Lentini, and Thomas Talpey. CA-NFS: a congestion-aware network file system. *ACM Transactions on Storage*, 5(4):15:1–15:??, December 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Bergman:2023:ZBY

[BCBS23] Shai Bergman, Niklas Cassel, Matias Bjørling, and Mark Silberstein. ZNSwap: un-block your swap. *ACM Transactions*

on Storage, 19(2):12:1–12:25, May 2023. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3582434>.

Bessani:2013:DDS

[BCQ⁺13]

Alysson Bessani, Miguel Correia, Bruno Quaresma, Fernando André, and Paulo Sousa. DepSky: Dependable and secure storage in a cloud-of-clouds. *ACM Transactions on Storage*, 9(4):12:1–12:??, November 2013. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).

Bolosky:2012:ISI

[BF12]

Bill Bolosky and Jason Flinn. Introduction to the special issue USENIX FAST 2012. *ACM Transactions on Storage*, 8(4):12:1–12:??, November 2012. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).

Bhadkamkar:2009:SSS

[BFHR09]

Medha Bhadkamkar, Fernando Farfan, Vagelis Hristidis, and Raju Rangaswami. Storing semi-structured data on disk drives. *ACM Transactions on Storage*, 5(2):6:1–6:??, June 2009. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).

Bobbarjung:2006:IDE

[BJD06]

Deepak R. Bobbarjung, Suresh Jagannathan, and Cezary

Dubnicki. Improving duplicate elimination in storage systems. *ACM Transactions on Storage*, 2(4):424–448, November 2006. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).

Burns:2010:GEF

[BK10]

Randal Burns and Kimberly Keeton. Guest editorial: FAST’10. *ACM Transactions on Storage*, 6(3):8:1–8:??, September 2010. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).

Balakrishnan:2010:DRR

[BKPM10]

Mahesh Balakrishnan, Asim Kadav, Vijayan Prabhakaran, and Dahlia Malkhi. Differential RAID: Rethinking RAID for SSD reliability. *ACM Transactions on Storage*, 6(2):4:1–4:??, July 2010. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).

Brown:2022:ISS

[BL22]

Angela Demke Brown and Jay Lorch. Introduction to the special section on USENIX OSDI 2021. *ACM Transactions on Storage*, 18(1):1:1, February 2022. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3507950>.

Bahn:2009:PPS

[BLN09]

Hyokyung Bahn, Soyoon Lee, and Sam H. Noh. P/PA-

- SPTF: Parallelism-aware request scheduling algorithms for MEMS-based storage devices. *ACM Transactions on Storage*, 5(1):1:1–1:??, March 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [BN16] Jayanta Basak and P. C. Nagesh. A user-friendly log viewer for storage systems. *ACM Transactions on Storage*, 12(3):17:1–17:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [BP11] André Brinkmann and David Pease. Guest editorial. *ACM Transactions on Storage*, 7(3):7:1–7:??, October 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [BP17] Angela Demke Brown and Florentina Popovici. Introduction to the special issue on USENIX FAST 2016. *ACM Transactions on Storage*, 13(1):1:1–1:??, March 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [BWW16] Jayanta Basak, Kushal Wadhvani, and Kaladhar Voruganti. Storage workload identification. *ACM Transactions on Storage*, 12(3):14:1–14:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [BYY+22] Janki Bhimani, Zhengyu Yang, Jingpei Yang, Adnan Maruf, Ningfang Mi, Rajinikanth Pandurangan, Changho Choi, and Vijay Balakrishnan. Automatic stream identification to improve flash endurance in data centers. *ACM Transactions on Storage*, 18(2):17:1–17:29, May 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3470007>.
- [CBH+17] Ming Chen, Geetika Babu Bangera, Dean Hildebrand, Farhaan Jalia, Geoff Kuenning, Henry Nelson, and Erez Zadok. vNFS: Maximizing NFS performance with compounds and vectorized I/O. *ACM Transactions on Storage*, 13(3):21:1–21:??, October 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [CCB07] James Cipar, Mark D. Corner, and Emery D. Berger. Contributing storage using the transparent file system. *ACM Transactions on Storage*, 3(3):

Basak:2016:UFL**Brinkmann:2011:GE****Brown:2017:ISI****Basak:2016:SWI****Bhimani:2022:ASI****Chen:2017:VMN****Cipar:2007:CSU**

12:1–12:??, October 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Chen:2018:UUS

[CCC⁺18]

Shuo-Han Chen, Tseng-Yi Chen, Yuan-Hao Chang, Hsin-Wen Wei, and Wei-Kuan Shih. UnistorFS: a union storage file system design for resource sharing between memory and storage on persistent RAM-based systems. *ACM Transactions on Storage*, 14(1):3:1–3:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Cao:2022:HSC

[CDW⁺22]

Zhichao Cao, Huibing Dong, Yixun Wei, Shiyong Liu, and David H. C. Du. IS-HBase: an in-storage computing optimized HBase with I/O offloading and self-adaptive caching in compute-storage disaggregated infrastructure. *ACM Transactions on Storage*, 18(2):15:1–15:42, May 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3488368>.

Carns:2011:UIC

[CHA⁺11]

Philip Carns, Kevin Harms, William Allcock, Charles Bacon, Samuel Lang, Robert Latham, and Robert Ross. Understanding and improving computational science stor-

age access through continuous characterization. *ACM Transactions on Storage*, 7(3):8:1–8:??, October 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Chang:2012:COM

[CHHH12]

Yuan-Hao Chang, Cheng-Kang Hsieh, Po-Chun Huang, and Pi-Cheng Hsiu. A caching-oriented management design for the performance enhancement of solid-state drives. *ACM Transactions on Storage*, 8(1):3:1–3:??, February 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Chen:2016:IPF

[CHL16]

Feng Chen, Binbing Hou, and Rubao Lee. Internal parallelism of flash memory-based solid-state drives. *ACM Transactions on Storage*, 12(3):13:1–13:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Chang:2011:DLC

[CHLK11]

Yuan-Hao Chang, Ping-Yi Hsu, Yung-Feng Lu, and Tei-Wei Kuo. A driver-layer caching policy for removable storage devices. *ACM Transactions on Storage*, 7(1):1:1–1:??, June 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [CK05] **Chang:2005:EML**
Li-Pin Chang and Tei-Wei Kuo. Efficient management for large-scale flash-memory storage systems with resource conservation. *ACM Transactions on Storage*, 1(4):381–418, November 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [CK22] **Calciu:2022:ISS**
Irina Calciu and Geoff Kuenning. Introduction to the special section on USENIX ATC 2021. *ACM Transactions on Storage*, 18(2):10:1–10:2, May 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3519550>.
- [CKL⁺24] **Chun:2024:RIS**
Myoungjun Chun, Myung-suk Kim, Dusol Lee, Jisung Park, and Jihong Kim. ReadGuard: Integrated SSD management for priority-aware read performance differentiation. *ACM Transactions on Storage*, 20(4):25:1–25:??, November 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3676884>.
- [CLBB21] **Chikhaoui:2021:MOO**
Amina Chikhaoui, Laurent Lemarchand, Kamel Boukhalfa, and Jalil Boukhobza. Multi-objective optimization of data placement in a storage-as-a-service federated cloud. *ACM Transactions on Storage*, 17(3):22:1–22:32, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3452741>.
- [CLHK10] **Chang:2010:SEN**
Yuan-Hao Chang, Jian-Hong Lin, Jen-Wei Hsieh, and Tei-Wei Kuo. A strategy to emulate NOR flash with NAND flash. *ACM Transactions on Storage*, 6(2):5:1–5:??, July 2010. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [CLP09] **Choi:2009:JFT**
Hyun Jin Choi, Seung-Ho Lim, and Kyu Ho Park. JFTL: a flash translation layer based on a journal remapping for flash memory. *ACM Transactions on Storage*, 4(4):14:1–14:??, January 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [CLZ⁺21] **Cheng:2021:NOH**
Wen Cheng, Chunyan Li, Lingfang Zeng, Yingjin Qian, Xi Li, and André Brinkmann. NVMM-oriented hierarchical persistent client caching for Lustre. *ACM Transactions on Storage*, 17(1):6:1–6:22, February 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3452741>.

//dl.acm.org/doi/10.1145/3404190.

Cha:2020:BTB

[CNJ+20]

Hokeun Cha, Moohyeon Nam, Kibeom Jin, Jiwon Seo, and Beomseok Nam. B³-Tree: Byte-addressable binary B-tree for persistent memory. *ACM Transactions on Storage*, 16(3):17:1–17:27, August 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3394025>.

Choi:2018:HFC

[CNS+18]

Jin-Yong Choi, Eyeeye Hyun Nam, Yoon Jae Seong, Jin Hyuk Yoon, Sookwan Lee, Hong Seok Kim, Jeongsu Park, Yeong-Jae Woo, Sheayun Lee, and Sang Lyul Min. HIL: a framework for compositional FTL development and provably-correct crash recovery. *ACM Transactions on Storage*, 14(4):36:1–36:??, December 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Cho:2015:DTS

[CPW+15]

Seokhei Cho, Changhyun Park, Youjip Won, Sooyong Kang, Jaehyuk Cha, Sungroh Yoon, and Jongmoo Choi. Design tradeoffs of SSDs: From energy consumption’s perspective. *ACM Transactions on Storage*, 11(2):8:1–8:??, March 2015. CODEN ???? ISSN

1553-3077 (print), 1553-3093 (electronic).

Chen:2018:HPM

[CSOL18]

Youmin Chen, Jiwu Shu, Jiaxin Ou, and Youyou Lu. HiNFS: a persistent memory file system with both buffering and direct-access. *ACM Transactions on Storage*, 14(1):4:1–4:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Cai:2024:EFN

[CST+24]

Miao Cai, Junru Shen, Bin Tang, Hao Huang, and Baoliu Ye. Exploiting flat namespace to improve file system metadata performance on ultra-fast, byte-addressable NVMs. *ACM Transactions on Storage*, 20(1):2:1–2:??, February 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3620673>.

Choi:2014:THP

[CSY+14]

Jae Woo Choi, Dong In Shin, Young Jin Yu, Hyeonsang Eom, and Heon Young Yeom. Towards high-performance SAN with fast storage devices. *ACM Transactions on Storage*, 10(2):5:1–5:??, March 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [CWG⁺19] **Cao:2019:TTA**
 Zhichao Cao, Hao Wen, Xiongzi Ge, Jingwei Ma, Jim Diehl, and David H. C. Du. TDDFS: a tier-aware data deduplication-based file system. *ACM Transactions on Storage*, 15(1):4:1–4:??, April 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3295461.
- [CWY⁺15] **Chen:2015:EER** [DdL18]
 Tseng-Yi Chen, Hsin-Wen Wei, Tsung-Tai Yeh, Tsan-Sheng Hsu, and Wei-Kuan Shih. An energy-efficient and reliable storage mechanism for data-intensive academic archive systems. *ACM Transactions on Storage*, 11(2):10:1–10:??, March 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [DEH⁺08]
- [CYW⁺17] **Chen:2017:OFS**
 Cheng Chen, Jun Yang, Qingsong Wei, Chundong Wang, and Mingdi Xue. Optimizing file systems with fine-grained metadata journaling on byte-addressable NVM. *ACM Transactions on Storage*, 13(2):13:1–13:??, June 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [Des14]
- [CZD⁺17] **Chen:2017:EAM**
 Haibo Chen, Heng Zhang, Mingkai Dong, Zhaoguo Wang, Yubin Xia, Haibing Guan, and Binyu Zang. Efficient and available in-memory KV-store with hybrid erasure coding and replication. *ACM Transactions on Storage*, 13(3):25:1–25:??, October 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Desnoyers:2018:ISI**
 Peter Desnoyers and Eyal de Lara. Introduction to the special issue on SYSTOR 2017. *ACM Transactions on Storage*, 14(4):29:1–29:??, December 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Dholakia:2008:NID**
 Ajay Dholakia, Evangelos Eleftheriou, Xiao-Yu Hu, Ilias Iliadis, Jai Menon, and K. K. Rao. A new intra-disk redundancy scheme for high-reliability RAID storage systems in the presence of unrecoverable errors. *ACM Transactions on Storage*, 4(1):1:1–1:??, May 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Desnoyers:2014:AMS**
 Peter Desnoyers. Analytic models of SSD write performance. *ACM Transactions on Storage*, 10(2):8:1–8:??, March 2014. CODEN ???? ISSN

1553-3077 (print), 1553-3093 (electronic).

Do:2020:CEE

- [DFB⁺20] Jaeyoung Do, Victor C. Ferreira, Hossein Bobarshad, Mahdi Torabzadehkashi, Siavash Rezaei, Ali Heydarigorji, Diego Souza, Brunno F. Goldstein, Leandro Santiago, Min Soo Kim, Priscila M. V. Lima, Felipe M. G. França, and Vladimir Alves. Cost-effective, energy-efficient, and scalable storage computing for large-scale AI applications. *ACM Transactions on Storage*, 16(4):21:1–21:37, November 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3415580>.

DeCapitaniDiVimercati:2015:SIE

- [DFP⁺15] Sabrina De Capitani Di Vimercati, Sara Foresti, Stefano Paraboschi, Gerardo Pelosi, and Pierangela Samarati. Shuffle index: Efficient and private access to outsourced data. *ACM Transactions on Storage*, 11(4):19:1–19:??, November 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Desnoyers:2016:ISI

- [DH16] Peter Desnoyers and James Hughes. Introduction to the special issue on MSST 2015. *ACM Transactions on Stor-*

age, 12(1):1:1–1:??, February 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Ding:2007:BCM

- [DJC07] Xiaoning Ding, Song Jiang, and Feng Chen. A buffer cache management scheme exploiting both temporal and spatial localities. *ACM Transactions on Storage*, 3(2):5:1–5:??, June 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Dong:2021:RED

- [DKJS21] Siying Dong, Andrew Kryczka, Yanqin Jin, and Michael Stumm. RocksDB: Evolution of development priorities in a key-value store serving large-scale applications. *ACM Transactions on Storage*, 17(4):26:1–26:32, November 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3483840>.

Du:2024:FFA

- [DLW⁺24] Chunfeng Du, Zihang Lin, Suzhen Wu, Yifei Chen, Jiapeng Wu, Shengzhe Wang, Weichun Wang, Qingfeng Wu, and Bo Mao. FSDedup: Feature-aware and selective deduplication for improving performance of encrypted non-volatile main memory. *ACM Transactions on Storage*, 20(4):22:1–22:??, November 2024. CODEN ???? ISSN

- 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3662736>. [DS16]
- [DMS⁺16] **Diesburg:2016:TLA**
Sarah Diesburg, Christopher Meyers, Mark Stanovich, An-I Andy Wang, and Geoff Kuenning. TrueErase: Leveraging an auxiliary data path for per-file secure deletion. *ACM Transactions on Storage*, 12(4):18:1–18:??, August 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [EA08]
- [DP22] **Dean:2022:ISS**
Hildebrand Dean and Donald Porter. Introduction to the special section on USENIX FAST 2022. *ACM Transactions on Storage*, 18(4):28:1–28:??, November 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3564770>. [EEFM22]
- [DRK08] **Dutta:2008:WBG**
Kaushik Dutta, Raju Rangaswami, and Sajib Kundu. Workload-based generation of administrator hints for optimizing database storage utilization. *ACM Transactions on Storage*, 3(4):3:1–3:??, February 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [EFM17]
- Dragga:2016:GGC**
Chris Dragga and Douglas J. Santry. GCTrees: Garbage collecting snapshots. *ACM Transactions on Storage*, 12(1):4:1–4:??, February 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Essary:2008:PDG**
David Essary and Ahmed Amer. Predictive data grouping: Defining the bounds of energy and latency reduction through predictive data grouping and replication. *ACM Transactions on Storage*, 4(1):2:1–2:??, May 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Einzigler:2022:LRS**
Gil Einzigler, Ohad Eytan, Roy Friedman, and Benjamin Manes. Lightweight robust size aware cache management. *ACM Transactions on Storage*, 18(3):27:1–27:23, August 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3507920>.
- Einzigler:2017:THE**
Gil Einzigler, Roy Friedman, and Ben Manes. TinyLFU: a highly efficient cache admission policy. *ACM Transactions on Storage*, 13(4):35:1–35:??, December 2017. CODEN ????

ISSN 1553-3077 (print), 1553-3093 (electronic).

Einziger:2023:BCP

[EHW23]

Gil Einziger, Omri Himelbrand, and Erez Waisbard. Boosting cache performance by access time measurements. *ACM Transactions on Storage*, 19(1):8:1–8:29, February 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3572778>.

Esiner:2016:FFB

[EKB⁺16]

Ertem Esiner, Adilet Kacheev, Samuel Braunfeld, Alptekin Küpçü, and Öznur Özkasap. FlexDPDP: Flexlist-based optimized dynamic provable data possession. *ACM Transactions on Storage*, 12(4):23:1–23:??, August 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Ellard:2005:DPE

[EM05]

Daniel Ellard and James Megquier. DISP: Practical, efficient, secure and fault-tolerant distributed data storage. *ACM Transactions on Storage*, 1(1):71–94, February 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Elerath:2014:BMC

[ES14]

Jon G. Elerath and Jiri Schindler. Beyond MTTDL:

a closed-form RAID 6 reliability equation. *ACM Transactions on Storage*, 10(2):7:1–7:??, March 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). See rebuttal [IV15].

Feng:2023:TUT

[FCZ⁺23]

Guanyu Feng, Huanqi Cao, Xiaowei Zhu, Bowen Yu, Yuanwei Wang, Zixuan Ma, Shengqi Chen, and Wenguang Chen. TriCache: a user-transparent block cache enabling high-performance out-of-core processing with in-memory programs. *ACM Transactions on Storage*, 19(2):15:1–15:30, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3583139>.

Fukatani:2021:LDR

[FLY21]

Takayuki Fukatani, Hieu Hanh Le, and Haruo Yokota. Lightweight dynamic redundancy control with adaptive encoding for server-based storage. *ACM Transactions on Storage*, 17(4):28:1–28:38, November 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3456292>.

Fryer:2014:CIT

[FQS⁺14]

Daniel Fryer, Mike Qin, Jack Sun, Kah Wai Lee, Angela Demke Brown, and

Ashvin Goel. Checking the integrity of transactional mechanisms. *ACM Transactions on Storage*, 10(4):17:1–17:??, October 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Fryer:2012:RVF

[FSM⁺12]

Daniel Fryer, Kuei Sun, Rahat Mahmood, Tinghao Cheng, Shaun Benjamin, Ashvin Goel, and Angela Demke Brown. Recon: Verifying file system consistency at runtime. *ACM Transactions on Storage*, 8(4):15:1–15:??, November 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Ganesan:2017:RDI

[GAADAD17]

Aishwarya Ganesan, Ramnatthan Alagappan, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Redundancy does not imply fault tolerance: Analysis of distributed storage reactions to file-system faults. *ACM Transactions on Storage*, 13(3):20:1–20:??, October 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Ganesan:2021:SEC

[GAADAD21]

Aishwarya Ganesan, Ramnatthan Alagappan, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Strong and efficient consistency with consistency-aware

durability. *ACM Transactions on Storage*, 17(1):4:1–4:27, February 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3423138>.

Ganesan:2022:ENE

[GAR⁺22]

Aishwarya Ganesan, Ramnatthan Alagappan, Anthony Rebello, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Exploiting nil-external interfaces for fast replicated storage. *ACM Transactions on Storage*, 18(3):20:1–20:35, August 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3542821>.

Gill:2007:OMS

[GB07]

Binny S. Gill and Luis Angel D. Bathen. Optimal multi-stream sequential prefetching in a shared cache. *ACM Transactions on Storage*, 3(3):10:1–10:??, October 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Ge:2022:HFS

[GCD⁺22]

Xiongzi Ge, Zhichao Cao, David H. C. Du, Pradeep Ganesan, and Dennis Hahn. HintStor: a framework to study I/O hints in heterogeneous storage. *ACM Transactions on Storage*, 18(2):18:1–18:24, May 2022. CODEN ???? ISSN 1553-

- 3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3489143>.
- [GGE⁺05] **Ganesan:2005:MSS** Deepak Ganesan, Ben Greenstein, Deborah Estrin, John Heidemann, and Ramesh Govindan. Multiresolution storage and search in sensor networks. *ACM Transactions on Storage*, 1(3):277–315, August 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [GHWK15] **Gim:2015:SSC** Jongmin Gim, Taeho Hwang, Youjip Won, and Krishna Kant. SmartCon: Smart context switching for fast storage IO devices. *ACM Transactions on Storage*, 11(2):5:1–5:??, March 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [GLSB18] **Guz:2018:PCN** Zvika Guz, Harry (Huan) Li, Anahita Shayesteh, and Vijay Balakrishnan. Performance characterization of NVMe-over-fabrics storage disaggregation. *ACM Transactions on Storage*, 14(4):31:1–31:??, December 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [GN23] **Goel:2023:ISS** Ashvin Goel and Dalit Naor. Introduction to the special section on USENIX FAST 2023. *ACM Transactions on Storage*, 19(4):29:1–29:??, November 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3612820>.
- [GN24] **Geambasu:2024:ISS** Roxana Geambasu and Ed Nightingale. Introduction to the special section on USENIX OSDI 2023. *ACM Transactions on Storage*, 20(3):14:1–14:??, August 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3654801>.
- [GNB16] **Grawinkel:2016:LRM** Matthias Grawinkel, Lars Nagel, and André Brinkmann. LoneStar RAID: Massive array of offline disks for archival systems. *ACM Transactions on Storage*, 12(1):5:1–5:??, February 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [GR09] **Garrison:2009:UFS** John A. Garrison and A. L. Narasimha Reddy. Umbrella File System: Storage management across heterogeneous devices. *ACM Transactions on Storage*, 5(1):3:1–3:??, March 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [GR19] **Gunawi:2019:ISS**
 Haryadi Gunawi and Benjamin Reed. Introduction to the special section on the 2018 USENIX annual technical conference (ATC'18). *ACM Transactions on Storage*, 15(2):8:1–8:??, June 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3322100.
- [GR21] **Ghoshal:2021:PAM**
 Devarshi Ghoshal and Lavanya Ramakrishnan. Programming abstractions for managing workflows on tiered storage systems. *ACM Transactions on Storage*, 17(4):29:1–29:21, November 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3457119>.
- [GS06] **Gurumurthi:2006:TID**
 Sudhanva Gurumurthi and Anand Sivasubramaniam. Thermal issues in disk drive design: Challenges and possible solutions. *ACM Transactions on Storage*, 2(1):41–73, February 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [GSL⁺05] **Garg:2005:BDD**
 Nitin Garg, Sumeet Sobti, Junwen Lai, Fengzhou Zheng, Kai Li, Randolph Y. Wang, and Arvind Krishnamurthy. Bridging the digital divide: storage media + postal network = generic high-bandwidth communication. *ACM Transactions on Storage*, 1(2):246–275, May 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [GSS⁺18] **Gunawi:2018:FSS**
 Haryadi S. Gunawi, Riza O. Suminto, Russell Sears, Casey Golliher, Swaminathan Sundararaman, Xing Lin, Tim Emami, Weiguang Sheng, Nematollah Bidokhti, Caitie McCaffrey, Deepthi Srinivasan, Biswaranjan Panda, Andrew Baptist, Gary Grider, Parks M. Fields, Kevin Harms, Robert B. Ross, Andree Jacobson, Robert Ricci, Kirk Webb, Peter Alvaro, H. Birali Runesha, Mingzhe Hao, and Huaicheng Li. Fail-slow at scale: Evidence of hardware performance faults in large production systems. *ACM Transactions on Storage*, 14(3):23:1–23:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [GW10] **Gim:2010:EIQ**
 Jongmin Gim and Youjip Won. Extract and infer quickly: Obtaining sector geometry of modern hard disk drives. *ACM Transactions on Storage*, 6(2):6:1–6:??, July

2010. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [GZXZ23]
- [GYX⁺22] Congming Gao, Min Ye, Chun Jason Xue, Youtao Zhang, Liang Shi, Jiwu Shu, and Jun Yang. Reprogramming 3D TLC flash memory based solid state drives. *ACM Transactions on Storage*, 18(1):9:1–9:33, February 2022. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3487064>. [HA13]
- [GZ21] Ada Gavrilovska and Erez Zadok. Introduction to the special issue on USENIX ATC 2020. *ACM Transactions on Storage*, 17(2):9:1–9:2, June 2021. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3457170>. [HA17]
- [GZH⁺18] Om Rameshwar Gatla, Mai Zheng, Muhammad Hameed, Viacheslav Dubeyko, Adam Manzanares, Filip Blagojevic, Cyril Guyot, and Robert Mateescu. Towards robust file system checkers. *ACM Transactions on Storage*, 14(4):35:1–35:??, December 2018. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Hal16]
- Gatla:2023:UPM**
Om Rameshwar Gatla, Duo Zhang, Wei Xu, and Mai Zheng. Understanding persistent-memory-related issues in the Linux kernel. *ACM Transactions on Storage*, 19(4):36:1–36:??, November 2023. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3605946>.
- Hatzieleftheriou:2013:IBE**
Andromachi Hatzieleftheriou and Stergios V. Anastasiadis. Improving bandwidth efficiency for consistent multi-stream storage. *ACM Transactions on Storage*, 9(1):2:1–2:??, March 2013. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Hatzieleftheriou:2017:CSJ**
Andromachi Hatzieleftheriou and Stergios V. Anastasiadis. Client-side journaling for durable shared storage. *ACM Transactions on Storage*, 13(4):36:1–36:??, December 2017. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Hall:2016:TPR**
Robert J. Hall. Tools for predicting the reliability of large-scale storage systems. *ACM Transactions on Storage*, 12(4):24:1–24:??, August 2016.

- CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [HC17]
- [HAL⁺23] Kewen He, Yujie An, Yijing Luo, Xiaoguang Liu, and Gang Wang. FlatLSM: Write-optimized LSM-tree for PM-based KV stores. *ACM Transactions on Storage*, 19(2):19:1–19:26, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3579855>.
- [HBL⁺06] Bo Hong, Scott A. Brandt, Darrell D. E. Long, Ethan L. Miller, and Ying Lin. Using MEMS-based storage in computer systems—device modeling and management. *ACM Transactions on Storage*, 2(2):139–160, May 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HBP11] Zhen Huang, Ernst Biersack, and Yuxing Peng. Reducing repair traffic in P2P backup systems: Exact regenerating codes on hierarchical codes. *ACM Transactions on Storage*, 7(3):10:1–10:??, October 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HCC18] Chien-Chung Ho, Yu-Ming Chang, Yuan-Hao Chang, and Tei-Wei Kuo. An SLC-like programming scheme for MLC flash memory. *ACM Transactions on Storage*, 14(1):11:1–11:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HCL13] Cheng Huang, Minghua Chen, and Jin Li. Pyramid Codes: Flexible schemes to trade space for access efficiency in reliable data storage systems. *ACM Transactions on Storage*, 9(1):3:1–3:??, March 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HCO⁺17] Binbing Hou, Feng Chen, Zhonghong Ou, Ren Wang, and Michael Mesnier. Understanding I/O performance behaviors of cloud storage from a client’s perspective. *ACM Transactions on Storage*, 13(2):16:1–16:??, June 2017.
- [Hou:2017:GLL] Binbing Hou and Feng Chen. GDS-LC: a latency- and cost-aware client caching scheme for cloud storage. *ACM Transactions on Storage*, 13(4):40:1–40:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Hou:2018:SLP] Chien-Chung Ho, Yu-Ming Chang, Yuan-Hao Chang, and Tei-Wei Kuo. An SLC-like programming scheme for MLC flash memory. *ACM Transactions on Storage*, 14(1):11:1–11:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Hou:2013:PCF] Cheng Huang, Minghua Chen, and Jin Li. Pyramid Codes: Flexible schemes to trade space for access efficiency in reliable data storage systems. *ACM Transactions on Storage*, 9(1):3:1–3:??, March 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Hou:2017:UPB] Binbing Hou, Feng Chen, Zhonghong Ou, Ren Wang, and Michael Mesnier. Understanding I/O performance behaviors of cloud storage from a client’s perspective. *ACM Transactions on Storage*, 13(2):16:1–16:??, June 2017.
- [He:2023:FWO] Kewen He, Yujie An, Yijing Luo, Xiaoguang Liu, and Gang Wang. FlatLSM: Write-optimized LSM-tree for PM-based KV stores. *ACM Transactions on Storage*, 19(2):19:1–19:26, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3579855>.
- [Hong:2006:UMBb] Bo Hong, Scott A. Brandt, Darrell D. E. Long, Ethan L. Miller, and Ying Lin. Using MEMS-based storage in computer systems—device modeling and management. *ACM Transactions on Storage*, 2(2):139–160, May 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Huang:2011:RRT] Zhen Huang, Ernst Biersack, and Yuxing Peng. Reducing repair traffic in P2P backup systems: Exact regenerating codes on hierarchical codes. *ACM Transactions on Storage*, 7(3):10:1–10:??, October 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [HHFD17]
- [HDW⁺08] **Hildrum:2008:SOL**
Kirsten Hildrum, Fred Douglass, Joel L. Wolf, Philip S. Yu, Lisa Fleischer, and Akshay Katta. Storage optimization for large-scale distributed stream-processing systems. *ACM Transactions on Storage*, 3(4):5:1–5:??, February 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [HHK⁺21]
- [HF05] **Huang:2005:CRK**
Andrew C. Huang and Armando Fox. Cheap recovery: a key to self-managing state. *ACM Transactions on Storage*, 1(1):38–70, February 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HGZ⁺22] **Han:2022:SFR**
Runzhou Han, Om Rameshwar Gatla, Mai Zheng, Jinrui Cao, Di Zhang, Dong Dai, Yong Chen, and Jonathan Cook. A study of failure recovery and logging of high-performance parallel file systems. *ACM Transactions on Storage*, 18(2):14:1–14:44, May 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3483447>. [HJW15]
- Haghdoost:2017:HSR**
Alireza Haghdoost, Weiping He, Jerry Fredin, and David H. C. Du. `hfplayer`: Scalable replay for intensive block I/O workloads. *ACM Transactions on Storage*, 13(4):39:1–39:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Hong:2021:RFR**
Duwon Hong, Keonsoo Ha, Minseok Ko, Myoungjun Chun, Yoona Kim, Sungjin Lee, and Jihong Kim. Reparo: a fast RAID recovery scheme for ultra-large SSDs. *ACM Transactions on Storage*, 17(3):21:1–21:24, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3450977>.
- Harnik:2020:SVC**
Danny Harnik, Moshik Hershcovitch, Yosef Shatsky, Amir Epstein, and Ronen Kat. Sketching volume capacities in deduplicated storage. *ACM Transactions on Storage*, 15(4):24:1–24:23, February 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3369737>.
- Hwang:2015:HHB**
Taeho Hwang, Jaemin Jung, and Youjip Won. HEAPO:

- Heap-based persistent object store. *ACM Transactions on Storage*, 11(1):3:1–3:??, February 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [HM05]
- [HKC06] Jen-Wei Hsieh, Tei-Wei Kuo, and Li-Pin Chang. Efficient identification of hot data for flash memory storage systems. *ACM Transactions on Storage*, 2(1):22–40, February 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HSL⁺18] [HSL:2018:NRB] Lei Han, Zhaoyan Shen, Duo Liu, Zili Shao, H. Howie Huang, and Tao Li. A novel ReRAM-based processing-in-memory architecture for graph traversal. *ACM Transactions on Storage*, 14(1):9:1–9:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HWP09] [HWP:2009:PHF] Chih-Yuan Huang, Tei-Wei Kuo, and Ai-Chun Pang. QoS for storage subsystems using IEEE-1394. *ACM Transactions on Storage*, 4(4):12:1–12:??, January 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HLZ⁺17] [HLZ:2017:ORL] Yuchong Hu, Xiaolu Li, Mi Zhang, Patrick P. C. Lee, Xiaoyang Zhang, Pan Zhou, and Dan Feng. Optimal repair layering for erasure-coded data centers: From theory to practice. *ACM Transactions on Storage*, 13(4):33:1–33:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [HNB06] [HNB:2006:UMBa] Bo Hong, Feng Wang, Scott A. Brandt, Darrell D. E. Long, Thomas J. E. Schwarz, and S. J. Using MEMS-based storage in computer systems—MEMS storage architectures. *ACM Transactions on Storage*, 2(1):1–21, February 2006.
- [HNS05] [HNS:2005:RSR] Gordon F. Hughes and Joseph F. Murray. Reliability and security of RAID storage systems and D2D archives using SATA disk drives. *ACM Transactions on Storage*, 1(1):95–107, February 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Hsieh:2012:MDI

[HWC12]

Jen-Wei Hsieh, Chung-Hsien Wu, and Ge-Ming Chiu. MFTL: a design and implementation for MLC flash memory storage systems. *ACM Transactions on Storage*, 8(2):7:1–7:??, May 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Huang:2016:IFB

[HWF⁺16]

Sai Huang, Qingsong Wei, Dan Feng, Jianxi Chen, and Cheng Chen. Improving flash-based disk cache with lazy adaptive replacement. *ACM Transactions on Storage*, 12(2):8:1–8:??, February 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Hu:2018:FMR

[HWZ⁺18]

Xiameng Hu, Xiaolin Wang, Lan Zhou, Yingwei Luo, Zhenlin Wang, Chen Ding, and Chencheng Ye. Fast miss ratio curve modeling for storage cache. *ACM Transactions on Storage*, 14(2):12:1–12:??, May 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Hu:2019:TLF

[HZN⁺19]

Yige Hu, Zhiting Zhu, Ian Neal, Youngjin Kwon, Tianyu

Cheng, Vijay Chidambaram, and Emmett Witchel. TxFS: Leveraging file-system crash consistency to provide ACID transactions. *ACM Transactions on Storage*, 15(2):9:1–9:??, June 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3318159.

Huang:2013:ERD

[HZQX13]

Jianzhong Huang, Fenghao Zhang, Xiao Qin, and Changsheng Xie. Exploiting redundancies and deferred writes to conserve energy in erasure-coded storage clusters. *ACM Transactions on Storage*, 9(2):4:1–4:??, July 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Im:2021:DLT

[IBC⁺21]

Junsu Im, Jinwook Bae, Chanwoo Chung, Arvind, and Sungjin Lee. Design of LSM-tree-based key-value SSDs with bounded tails. *ACM Transactions on Storage*, 17(2):10:1–10:27, June 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3452846>.

Iliadis:2011:DSV

[IHHE11]

Ilias Iliadis, Robert Haas, Xiao-Yu Hu, and Evangelos Eleftheriou. Disk scrubbing versus intradisk redundancy for RAID storage systems.

- [JAM⁺16] *ACM Transactions on Storage*, 7(2):5:1–5:??, July 2011. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [IJK⁺17] Ilias Iliadis, Jens Jelitto, Yusik Kim, Slavisa Sarafijanovic, and Vinodh Venkatesan. ExaPlan: Efficient queueing-based data placement, provisioning, and load balancing for large tiered storage systems. *ACM Transactions on Storage*, 13(2):17:1–17:??, June 2017. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Ili23] Ilias Iliadis. Reliability evaluation of erasure-coded storage systems with latent errors. *ACM Transactions on Storage*, 19(1):4:1–4:47, February 2023. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3568313>.
- [IV15] Ilias Iliadis and Vinodh Venkatesan. Rebuttal to “Beyond MTDL: a Closed-Form RAID-6 Reliability Equation”. *ACM Transactions on Storage*, 11(2):9:1–9:??, March 2015. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). See [ES14].
- [Jones:2016:CDR] Stephanie N. Jones, Ahmed Amer, Ethan L. Miller, Darrell D. E. Long, Rekha Pitchumani, and Christina R. Strong. Classifying data to reduce long-term data movement in shingled write disks. *ACM Transactions on Storage*, 12(1):2:1–2:??, February 2016. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Jiang:2005:NFS] Anxiao (Andrew) Jiang and Jehoshua Bruck. Network file storage with graceful performance degradation. *ACM Transactions on Storage*, 1(2):171–189, May 2005. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Josephson:2010:DFS] William K. Josephson, Lars A. Bongo, Kai Li, and David Flynn. DFS: a file system for virtualized flash storage. *ACM Transactions on Storage*, 6(3):14:1–14:??, September 2010. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Jang:2024:BSH] Junhyeok Jang, Hanjin Choi, Hanyeoreum Bae, Seungjun Lee, Miryeong Kwon, and Myoungsoo Jung. Bridging software-hardware for CXL memory disaggregation in

- billion-scale nearest neighbor search. *ACM Transactions on Storage*, 20(2):10:1–10:??, May 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3639471>. **Jiang:2008:DDC**
- [JCG⁺16] Myoungsoo Jung, Wonil Choi, Shuwen Gao, Ellis Herbert Wilson III, David Donofrio, John Shalf, and Mahmut Taylan Kandemir. NANDFlash-Sim: High-fidelity, microarchitecture-aware NAND flash memory simulation. *ACM Transactions on Storage*, 12(2):6:1–6:??, February 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Jung:2016:NHF**
- [JDXD13] Song Jiang, Xiaoning Ding, Yuehai Xu, and Kei Davis. A prefetching scheme exploiting both data layout and access history on disk. *ACM Transactions on Storage*, 9(3):10:1–10:??, August 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Jiang:2013:PSE**
- [JGW⁺23] Andrzej Jackowski, Leszek Gryz, Michał Wełnicki, Cezary Dubnicki, and Konrad Iwanicki. Derrick: a three-layer balancer for self-managed continuous scalability. *ACM Transactions on Storage*, 19(3):27:1–27:34, August 2023. **Jackowski:2023:DTL**
- [JHZK08] Weihang Jiang, Chongfeng Hu, Yuanyuan Zhou, and Arkady Kanevsky. Are disks the dominant contributor for storage failures?: a comprehensive study of storage subsystem failure characteristics. *ACM Transactions on Storage*, 4(3):7:1–7:??, November 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Jaffer:2020:RMF**
- [JMHS20] Shehbaz Jaffer, Stathis Maneas, Andy Hwang, and Bianca Schroeder. The reliability of modern file systems in the face of SSD errors. *ACM Transactions on Storage*, 16(1):2:1–2:28, April 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3375553>. **Jaffer:2022:IEN**
- [JMS22] Shehbaz Jaffer, Kaveh Mahdavi, and Bianca Schroeder. Improving the endurance of next generation SSD’s using WOM-v codes. *ACM Transactions on Storage*, 18(4):29:1–29:??, November 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- (electronic). URL <https://dl.acm.org/doi/10.1145/3565027>.
- [JPB17] Yongsoo Joo, Sangsoo Park, and Hyokyung Bahn. Exploiting I/O reordering and I/O interleaving to improve application launch performance. *ACM Transactions on Storage*, 13(1):8:1–8:??, March 2017. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [JPC+20] Cheng Ji, Riwei Pan, Li-Pin Chang, Liang Shi, Zongwei Zhu, Yu Liang, Tei-Wei Kuo, and Chun Jason Xue. Inspection and characterization of app file usage in mobile devices. *ACM Transactions on Storage*, 16(4):25:1–25:25, November 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3404119>.
- [JSC20] Yichen Jia, Zili Shao, and Feng Chen. SlimCache: an efficient data compression scheme for flash-based key-value caching. *ACM Transactions on Storage*, 16(2):14:1–14:34, June 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3383124>.
- [JWK+10] Jaemin Jung, Youjip Won, Eunki Kim, Hyungjong Shin, and Byeonggil Jeon. FRASH: Exploiting storage class memory in hybrid file system for hierarchical storage. *ACM Transactions on Storage*, 6(1):3:1–3:??, March 2010. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [JYZ+15] William Jannen, Jun Yuan, Yang Zhan, Amogh Akshintala, John Esmet, Yizheng Jiao, Ankur Mittal, Prashant Pandey, Phaneendra Reddy, Leif Walsh, Michael A. Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. BetrFS: Write-optimization in a kernel file system. *ACM Transactions on Storage*, 11(4):18:1–18:??, November 2015. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KAG+22] Hiwot Tadese Kassa, Jason Akers, Mrinmoy Ghosh, Zhichao Cao, Vaibhav Gogte, and Ronald Dreslinski. Power-optimized deployment of key-value stores using storage class memory. *ACM Transactions on Storage*, 18(2):13:1–13:26, May 2022. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).

- (electronic). URL <https://dl.acm.org/doi/10.1145/3511905>.
- [Kas18] Anil Kashyap. Workload characterization for enterprise disk drives. *ACM Transactions on Storage*, 14(2):19:1–19:??, May 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KAU12] Hyojun Kim, Nitin Agrawal, and Cristian Ungureanu. Revisiting storage for smartphones. *ACM Transactions on Storage*, 8(4):14:1–14:??, November 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KCC13] Se Jin Kwon, Hyung-Ju Cho, and Tae-Sun Chung. Hybrid associative flash translation layer for the performance optimization of chip-level parallel flash memory. *ACM Transactions on Storage*, 9(4):13:1–13:??, November 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KCLK21] Joonsung Kim, Kanghyun Choi, Wonsik Lee, and Jangwoo Kim. Performance modeling and practical use cases for black-box SSDs. *ACM Transactions on Storage*, 17(2):14:1–14:38, June 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3440022>.
- [KCMDM20] Ram Kesavan, Matthew Curtis-Maury, Vinay Devadas, and Kesari Mishra. Countering fragmentation in an enterprise storage system. *ACM Transactions on Storage*, 15(4):25:1–25:35, February 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3366173>.
- [KDS20] Anthony Kougkas, Hariharan Devarajan, and Xian-He Sun. Bridging storage semantics using data labels and asynchronous I/O. *ACM Transactions on Storage*, 16(4):22:1–22:34, November 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3415579>.
- [KFPS20] Bradley C. Kuszmaul, Matteo Frigo, Justin Mazzola Paluska, and Alexander (Sasha) Sandler. Everyone loves file: Oracle File Storage Service. *ACM Transactions on Storage*, 16(1):3:1–3:29, April 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (elec-

- tronic). URL <https://dl.acm.org/doi/abs/10.1145/3377877>.
- [KH10] Mohammed G. Khatib and Pieter H. Hartel. Optimizing MEMS-based storage devices for mobile battery-powered systems. *ACM Transactions on Storage*, 6(1):1:1–1:??, March 2010. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KH20] Pradeep Kumar and H. Howie Huang. GraphOne: a data store for real-time analytics on evolving graphs. *ACM Transactions on Storage*, 15(4):29:1–29:40, February 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3364180>.
- [KHW⁺16] Junbin Kang, Chunming Hu, Tianyu Wo, Ye Zhai, Benlong Zhang, and Jinpeng Huai. MultiLanes: Providing virtualized storage for OS-level virtualization on manycores. *ACM Transactions on Storage*, 12(3):12:1–12:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KKD⁺22] Roei Kisous, Ariel Kolikant, Abhinav Duggal, Sarai Sheinvald, and Gala Yadgar. The what, the from, and the to: The migration games in deduplicated systems. *ACM Transactions on Storage*, 18(4):31:1–31:??, November 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3565025>.
- [KKR20] Jin-Soo Kim, Yang Seok Ki, and Erik Riedel. Introduction to the special section on computational storage. *ACM Transactions on Storage*, 16(4):20:1, November 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3425305>.
- [KKZ05] Magnus Karlsson, Christos Karamanolis, and Xiaoyun Zhu. Triage: Performance differentiation for storage systems using adaptive control. *ACM Transactions on Storage*, 1(4):457–480, November 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KLC⁺23] Miryeong Kwon, Seungjun Lee, Hyunkyu Choi, Jooyoung Hwang, and Myoungsoo Jung. Realizing strong determinism contract on log-structured merge key-value

- stores. *ACM Transactions on Storage*, 19(2):11:1–11:29, May 2023. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3582695>. **Kim:2024:LTA**
- [KLE20] Dong Hyun Kang, Sang-Won Lee, and Young Ik Eom. LDJ: Version consistency is almost free on commercial storage devices. *ACM Transactions on Storage*, 15(4):28:1–28:20, February 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3365918>. **Kang:2020:LVC**
- [KLL⁺24] Sang-Hoon Kim, Jinhyuk Lee, and Jin-Soo Kim. GCMix: an efficient data protection scheme against the paired page interference. *ACM Transactions on Storage*, 13(4):37:1–37:??, December 2017. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3385073>. **Kim:2017:GED**
- [KLP⁺20] Dongup Kwon, Wonsik Lee, Dongryeong Kim, Junehyuk Boo, and Jangwoo Kim. SmartFVM: a fast, flexible, and scalable hardware-based virtualization for commodity storage devices. *ACM Transactions on Storage*, 18(2):12:1–12:27, May 2022. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3633475>. **Kwon:2022:SFF**
- [KMM⁺12] Yannis Klonatos, Thanos Makatos, Manolis Marazakis, Michail D. Flouris, and Angelos Bilas. Transparent on-line storage compression at the block-level. *ACM Transactions on Storage*, 8(2):5:1–5:??, May 2012. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3511213>. **Klonatos:2012:TOS**
- [KLL⁺24] Donguk Kim, Jongsung Lee, Keun Soo Lim, Jun Heo, Tae Jun Ham, and Jae W. Lee. An LSM tree augmented with B+ tree on nonvolatile memory. *ACM Transactions on Storage*, 20(1):4:1–4:??, February 2024. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3633475>. **Kim:2024:LTA**
- [KLP⁺20] Jaewook Kwak, Sangjin Lee, Kibin Park, Jinwoo Jeong, and Yong Ho Song. Cosmos+ OpenSSD: Rapid prototype for flash storage systems. *ACM Transactions on Storage*, 16(3):15:1–15:35, August 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3385073>. **Kwak:2020:COR**

- [KPY17] **Kim:2017:SSU**
 Dongjin Kim, Kyu Ho Park, and Chan-Hyun Youn. SUPA: a single unified read-write buffer and pattern-change-aware FTL for the high performance of multi-channel SSD. *ACM Transactions on Storage*, 13(4):32:1–32:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KR06] **Kang:2006:AVA**
 Sukwoo Kang and A. L. Narasimha Reddy. An approach to virtual allocation in storage systems. *ACM Transactions on Storage*, 2(4):371–399, November 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KR10] **Koller:2010:DUC**
 Ricardo Koller and Raju Rangaswami. I/O Deduplication: Utilizing content similarity to improve I/O performance. *ACM Transactions on Storage*, 6(3):13:1–13:??, September 2010. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KSCM23] **Kadekodi:2023:PDC**
 Saurabh Kadekodi, Shashwat Silas, David Clausen, and Arif Merchant. Practical design considerations for wide locally recoverable codes (LRCs). *ACM Transactions on Storage*, 19(4):31:1–31:??, November 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3626198>.
- [KSDC14] **Kim:2014:EPC**
 Hyojun Kim, Sangeetha Seshadri, Clement L. Dickey, and Lawrence Chiu. Evaluating phase change memory for enterprise storage systems: a study of caching and tiering approaches. *ACM Transactions on Storage*, 10(4):15:1–15:??, October 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KSGP17] **Kesavan:2017:EFS**
 Ram Kesavan, Rohit Singh, Travis Grusecki, and Yuvraj Patel. Efficient free space reclamation in WAFL. *ACM Transactions on Storage*, 13(3):23:1–23:??, October 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KSKN18] **Kim:2018:CTC**
 Wook-Hee Kim, Jihye Seo, Jinwoong Kim, and Beom-seok Nam. clFB-tree: Cache-line friendly persistent B-tree for NVRAM. *ACM Transactions on Storage*, 14(1):5:1–5:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [KSL+23] **Kim:2023:ESS**
 Sang-Hoon Kim, Jaehoon

- Shim, Euidong Lee, Seongyeop Jeong, Ilkueon Kang, and Jin-Soo Kim. Empowering storage systems research with NVMeVirt: a comprehensive NVMe device emulator. *ACM Transactions on Storage*, 19(4):32:1–32:??, November 2023. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3625006>. [KZZ07]
- [KW17] Geoff Kuenning and Carl Waldspurger. Introduction to the special issue on USENIX FAST 2017. *ACM Transactions on Storage*, 13(3):18:1–18:??, October 2017. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [KZZ07]
- [KXX⁺20] Seulbae Kim, Meng Xu, Sanidhya Kashyap, Jungyeon Yoon, Wen Xu, and Taesoo Kim. Finding bugs in file systems with an extensible fuzzing framework. *ACM Transactions on Storage*, 16(2):10:1–10:35, June 2020. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3391202>. [KZZ07]
- [KYL⁺20] Oleg Kolosov, Gala Yadgar, Matan Liram, Itzhak Tamo, and Alexander Barg. On fault tolerance, locality, and optimality in locally repairable codes. *ACM Transactions on Storage*, 16(2):11:1–11:32, June 2020. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3381832>. [Kim:2007:ZR]
- [LADADL14] Lanyue Lu, Andrea C. Arpaci-Dusseau, Remzi H. Arpaci-Dusseau, and Shan Lu. A study of Linux file system evolution. *ACM Transactions on Storage*, 10(1):3:1–3:??, January 2014. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [LADADL14]
- [LB14] Eunji Lee and Hyokyung Bahn. Caching strategies for high-performance storage media. *ACM Transactions on Storage*, 10(3):11:1–11:??, July 2014. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [Lu:2014:SLF]
- [LBN14] Eunji Lee, Hyokyung Bahn, and Sam H. Noh. A unified [Lee:2014:CSH]
- [Lee:2014:UBC]
- [Kim:2020:FBF]
- [Kolosov:2020:FTL]

- buffer cache architecture that subsumes journaling functionality via nonvolatile memory. *ACM Transactions on Storage*, 10(1):1:1–1:??, January 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LBOX12] Jianqiang Luo, Kevin D. Bowers, Alina Oprea, and Lihao Xu. Efficient software implementations of large finite fields $GF(2^n)$ for secure storage applications. *ACM Transactions on Storage*, 8(1):2:1–2:??, February 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LBY+24] Chenxing Li, Sidi Mohamed Beillahi, Guang Yang, Ming Wu, Wei Xu, and Fan Long. LVMT: an efficient authenticated storage for blockchain. *ACM Transactions on Storage*, 20(3):17:1–17:??, August 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3664818>.
- [LCLX19] Yongkun Li, Helen H. W. Chan, Patrick P. C. Lee, and Yinlong Xu. Enabling efficient updates in KV storage via hashing: Design and performance evaluation. *ACM Transactions on Storage*, 15(3):20:1–20:??, August 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3340287.
- [LCMZ15] Zhichao Li, Ming Chen, Amanpreet Mukker, and Erez Zadok. On the trade-offs among performance, energy, and endurance in a versatile hybrid drive. *ACM Transactions on Storage*, 11(3):13:1–13:??, July 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LCR+21] Cheng Li, Hao Chen, Chaoyi Ruan, Xiaosong Ma, and Yinlong Xu. Leveraging NVMe SSDs for building a fast, cost-effective, LSM-tree-based KV store. *ACM Transactions on Storage*, 17(4):27:1–27:29, November 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3480963>.
- [LCZ05] Zhenmin Li, Zhifeng Chen, and Yuanyuan Zhou. Mining block correlations to improve storage performance. *ACM Transactions on Storage*, 1(2):213–245, May 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Luo:2012:ESI

Li:2024:LEA

Li:2019:EEU

Li:2015:TOA

Li:2021:LNS

Li:2005:MBC

- [LCZ⁺19] Li:2019:ESS Yin Li, Xubin Chen, Ning Zheng, Jingpeng Hao, and Tong Zhang. An exploratory study on software-defined data center hard disk drives. *ACM Transactions on Storage*, 15(3):18:1–18:??, August 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3319405.
- [LDZZ23] Lin:2023:IID Lifang Lin, Yuhui Deng, Yi Zhou, and Yifeng Zhu. InDe: an inline data deduplication approach via adaptive detection of valid container utilization. *ACM Transactions on Storage*, 19(1):6:1–6:27, February 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3568426>.
- [LFH⁺17] Liu:2017:HPG Qing Liu, Dan Feng, Yuchong Hu, Zhan Shi, and Min Fu. High-performance general functional regenerating codes with near-optimal repair bandwidth. *ACM Transactions on Storage*, 13(2):15:1–15:??, June 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LFJ⁺17] Liu:2017:SEC Qing Liu, Dan Feng, Hong Jiang, Yuchong Hu, and Tianfeng Jiao. Systematic erasure codes with optimal repair bandwidth and storage. *ACM Transactions on Storage*, 13(3):26:1–26:??, October 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LGH22] Litz:2022:PRP Heiner Litz, Javier Gonzalez, Ana Klimovic, and Christos Kozyrakis. RAIL: Predictable, low tail latency for NVMe flash. *ACM Transactions on Storage*, 18(1):5:1–5:21, February 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3465406>.
- [LGL22] Lawson:2022:EAS Margaret Lawson, William Gropp, and Jay Lofstead. EMPRESS: Accelerating scientific discovery through descriptive metadata management. *ACM Transactions on Storage*, 18(4):34:1–34:??, November 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3523698>.
- [LH21] Lu:2021:ISS Shan Lu and Jon Howell. Introduction to the special section on USENIX OSDI 2020. *ACM Transactions on Storage*, 17(3):16:1, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- (electronic). URL <https://dl.acm.org/doi/10.1145/3479434>. [LKE18]
- Li:2023:HPR**
- [LHZ⁺23] Pengfei Li, Yu Hua, Pengfei Zuo, Zhangyu Chen, and Jiajie Sheng. A high-performance RDMA-oriented learned key-value store for disaggregated memory systems. *ACM Transactions on Storage*, 19(4):30:1–30:??, November 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3620674>.
- Li:2017:CSN**
- [LJFS17] Ning Li, Hong Jiang, Dan Feng, and Zhan Shi. Customizable SLO and its near-precise enforcement for storage bandwidth. *ACM Transactions on Storage*, 13(1):6:1–6:??, March 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Lee:2017:RWA**
- [LKB⁺17] Eunji Lee, Julie Kim, Hyokyung Bahn, Sunjin Lee, and Sam H. Noh. Reducing write amplification of flash storage through cooperative data management with NVM. *ACM Transactions on Storage*, 13(2):12:1–12:??, June 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Lee:2018:MCM**
- Minho Lee, Dong Hyun Kang, and Young Ik Eom. M-CLOCK: Migration-optimized page replacement algorithm for hybrid memory architecture. *ACM Transactions on Storage*, 14(3):25:1–25:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Li:2014:SCG**
- [LL14] Mingqiang Li and Patrick P. C. Lee. STAIR codes: a general family of erasure codes for tolerating device and sector failures. *ACM Transactions on Storage*, 10(4):14:1–14:??, October 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Luo:2018:WER**
- [LLH⁺18] Huizhang Luo, Qing Liu, Jingtong Hu, Qiao Li, Liang Shi, Qingfeng Zhuge, and Edwin H.-M. Sha. Write energy reduction for PCM via pumping efficiency improvement. *ACM Transactions on Storage*, 14(3):27:1–27:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Li:2020:ILE**
- [LLT⁺20] Jingwei Li, Patrick P. C. Lee, Chufeng Tan, Chuan Qin, and Xiaosong Zhang. Information leakage in encrypted deduplication via frequency analysis:

- Attacks and defenses. *ACM Transactions on Storage*, 16(1):4:1–4:30, April 2020. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3365840>. **Lu:2017:WSK**
- [LPG⁺17] Lanyue Lu, Thanumalayan Sankaranarayanan Pillai, Hariharan Gopalakrishnan, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. WiscKey: Separating keys from values in SSD-conscious storage. *ACM Transactions on Storage*, 13(1):5:1–5:??, March 2017. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LLYS23] Xiaojian Liao, Youyou Lu, Zhe Yang, and Jiwu Shu. Efficient crash consistency for NVMe over PCIe and RDMA. *ACM Transactions on Storage*, 19(1):7:1–7:35, February 2023. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3568428>. **Liao:2023:ECC**
- [LPR⁺19] Michael Luby, Roberto Padovani, Thomas J. Richardson, Lorenz Minder, and Pooja Aggarwal. Liquid cloud storage. *ACM Transactions on Storage*, 15(1):2:1–2:??, April 2019. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3281276. **Luby:2019:LCS**
- [LLZA05] Xiaodong Li, Zhenmin Li, Yuanyuan Zhou, and Sarita Adve. Performance directed energy management for main memory and disks. *ACM Transactions on Storage*, 1(3):346–380, August 2005. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). **Li:2005:PDE**
- [LPS⁺23] Huaicheng Li, Martin L. Putra, Ronald Shi, Fadhil I. Kurnia, Xing Lin, Jaeyoung Do, Achmad Imam Kistijantoro, Gregory R. Ganger, and Haryadi S. Gunawi. Extending and programming the NVMe I/O determinism interface for flash arrays. *ACM Transactions on Storage*, 19(1):5:1–5:33, February 2023. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3568428>. **Li:2023:EPN**
- [Lon12] Darrell Long. Editorial note. *ACM Transactions on Storage*, 8(4):11:1–11:??, November 2012. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). **Long:2012:EN**

- [//dl.acm.org/doi/10.1145/3568427](https://dl.acm.org/doi/10.1145/3568427). **Li:2024:FCS**
- [LRE22] **Lembke:2022:DIF** [LSC⁺24] James Lembke, Pierre-Louis Roman, and Patrick Eugster. DEFUSE: an interface for fast and correct user space file system access. *ACM Transactions on Storage*, 18(3):22:1–22:29, August 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3494556>.
- [LRZ⁺22] **Li:2022:CRF** Ruibin Li, Xiang Ren, Xu Zhao, Siwei He, Michael Stumm, and Ding Yuan. ctFS: Replacing file indexing with hardware memory translation through contiguous file allocation for persistent memory. *ACM Transactions on Storage*, 18(4):30:1–30:??, November 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3565026>. **Li:2017:PDA**
- [LSDW17] Cheng Li, Philip Shilane, Fred Douglass, and Grant Wallace. Pannier: Design and analysis of a container-based flash cache for compound objects. *ACM Transactions on Storage*, 13(3):24:1–24:??, October 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LS12] **Luo:2012:GXC** [LSKK16] Xianghong Luo and Jiwu Shu. Generalized X-code: an efficient RAID-6 code for arbitrary size of disk array. *ACM Transactions on Storage*, 8(3):10:1–10:??, September 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Lee:2016:EST**
- Sungjin Lee, Dongkun Shin, Youngjin Kim, and Jihong Kim. Exploiting sequential and temporal localities to improve performance of NAND flash-based SSDs. *ACM Transactions on Storage*, 12(3):15:1–15:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [LSS16] **Lu:2016:BPE** Youyou Lu, Jiwu Shu, and Long Sun. Blurred persistence: Efficient transactions in persistent memory. *ACM Transactions on Storage*, 12(1):3:1–3:??, February 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LSZ09] **Li:2009:GCS** Mingqiang Li, Jiwu Shu, and Weimin Zheng. GRID codes: Strip-based erasure codes with high fault tolerance for storage systems. *ACM Transactions on Storage*, 4(4):15:1–15:??, January 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LSZ19] **Lu:2019:MSO** Youyou Lu, Jiwu Shu, and Jiacheng Zhang. Mitigating synchronous I/O overhead in file systems on open-channel SSDs. *ACM Transactions on Storage*, 15(3):17:1–17:??, August 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3319369.
- [LV17] **Liu:2017:OWL** Qingyue Liu and Peter Varman. Ouroboros wear leveling for NVRAM using hierarchical block migration. *ACM Transactions on Storage*, 13(4):30:1–30:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [LWC+22] **Liu:2022:CSP** Weihua Liu, Fei Wu, Xiang Chen, Meng Zhang, Yu Wang, Xiangfeng Lu, and Changsheng Xie. Characterization summary of performance, reliability, and threshold voltage distribution of 3D charge-trap NAND flash memory. *ACM Transactions on Storage*, 18(2):16:1–16:25, May 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3491230>.
- [LWLS23] **Li:2023:DCA** Jinhong Li, Qiuping Wang, Patrick P. C. Lee, and Chao Shi. An in-depth comparative analysis of cloud block storage workloads: Findings and implications. *ACM Transactions on Storage*, 19(2):16:1–16:32, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3572779>.
- [LXC+22] **Li:2022:PBP** Jun Li, Xiaofei Xu, Zhigang Cai, Jianwei Liao, Kenli Li, Balazs Gerofi, and Yutaka Ishikawa. Pattern-based prefetching with adaptive cache management inside of solid-state drives. *ACM Transactions on Storage*, 18(1):7:1–7:25, February

2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3474393>.
- [LXNL15] Yan-Kit Li, Min Xu, Chun-Ho Ng, and Patrick P. C. Lee. Efficient hybrid inline and out-of-line deduplication for backup storage. *ACM Transactions on Storage*, 11(1):2:1–2:??, February 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Li:2015:EHI**
- [LXZ⁺23] Ruiming Lu, Erci Xu, Yiming Zhang, Fengyi Zhu, Zhaosheng Zhu, Mengtian Wang, Zongpeng Zhu, Guangtao Xue, Jiwu Shu, Minglu Li, and Jiesheng Wu. From missteps to milestones: a journey to practical fail-slow detection. *ACM Transactions on Storage*, 19(4):33:1–33:??, November 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3617690>. **Lu:2023:MMJ**
- [LYL⁺21] Xiaolu Li, Zuoru Yang, Jinhong Li, Runhui Li, Patrick P. C. Lee, Qun Huang, and Yuchong Hu. Repair pipelining for erasure-coded storage: Algorithms and evaluation. *ACM Transactions on Storage*, 17(2):13:1–13:29, June 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3436890>. **Liu:2018:DDT**
- [LZC⁺18] Mengxing Liu, Mingxing Zhang, Kang Chen, Xuehai Qian, Yongwei Wu, Weimin Zheng, and Jinglei Ren. DudeTx: Durable transactions made decoupled. *ACM Transactions on Storage*, 14(1):7:1–7:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Li:2023:PBA**
- [LZL⁺23] Jiaxin Li, Yiming Zhang, Shan Lu, Haryadi S. Gunawi, Xiaohui Gu, Feng Huang, and Dongsheng Li. Performance bug analysis and detection for distributed storage and computing systems. *ACM Transactions on Storage*, 19(3):23:1–23:33, August 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3580281>. **Luo:2024:MDR**
- [LZS⁺24] Xuchuan Luo, Pengfei Zuo, Jiacheng Shen, Jiazhen Gu, Xin Wang, Michael Lyu, and Yangfan Zhou. A memory-disaggregated radix tree. *ACM Transactions on Storage*, 20(3):15:1–15:??, August 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Li:2021:RPE**

- (electronic). URL <https://dl.acm.org/doi/10.1145/3664289>. [MB12]
- [LZY⁺24] Huiba Li, Zhihao Zhang, Yifan Yuan, Rui Du, Kai Ma, Lanzheng Liu, Yiming Zhang, and Windsor Hsu. Block-level image service for the cloud. *ACM Transactions on Storage*, 20(1):1:1–1:??, February 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3620672>. [Li:2024:BLI]
- [LZYK⁺06] Song Lin, Demetrios Zeinalipour-Yazti, Vana Kalogeraki, Dimitrios Gunopulos, and Walid A. Najjar. Efficient indexing data structures for flash-based sensor devices. *ACM Transactions on Storage*, 2(4):468–503, November 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [Lin:2006:EID]
- [May22] Michael J. May. Donag: Generating efficient patches and diffs for compressed archives. *ACM Transactions on Storage*, 18(3):26:1–26:41, August 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3507919>. [May:2022:DGE]
- [Meyer:2012:SPD] Dutch T. Meyer and William J. Bolosky. A study of practical deduplication. *ACM Transactions on Storage*, 7(4):14:1–14:??, January 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [McAllister:2022:KTP] Sara McAllister, Benjamin Berg, Julian Tutuncu-Macias, Juncheng Yang, Sathya Gunasekar, Jimmy Lu, Daniel S. Berger, Nathan Beckmann, and Gregory R. Ganger. Kangaroo: Theory and practice of caching billions of tiny objects on flash. *ACM Transactions on Storage*, 18(3):21:1–21:33, August 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3542928>. [McAllister:2022:KTP]
- [MCR18] Leonardo Marmol, Mohammad Chowdhury, and Raju Rangaswami. LibPM: Simplifying application usage of persistent memory. *ACM Transactions on Storage*, 14(4):34:1–34:??, December 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [Marmol:2018:LSA]
- [MDAD⁺14] Ao Ma, Chris Dragga, Andrea C. Arpaci-Dusseau, Remzi H. Arpaci-Dusseau, and Marshall Kirk McKusick. Ffsck:

The fast file-system checker. *ACM Transactions on Storage*, 10(1):2:1–2:??, January 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Miranda:2014:RSE

[MEK⁺14]

Alberto Miranda, Sascha Efert, Yangwook Kang, Ethan L. Miller, Ivan Popov, Andre Brinkmann, Tom Friedetzky, and Toni Cortes. Random slicing: Efficient and scalable data placement for large-scale storage systems. *ACM Transactions on Storage*, 10(3):9:1–9:??, July 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Macko:2022:SDF

[MH22]

Peter Macko and Jason Hennessey. Survey of distributed file system design choices. *ACM Transactions on Storage*, 18(1):4:1–4:34, February 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3465405>.

Miao:2015:ISS

[MHL⁺15]

Youshan Miao, Wentao Han, Kaiwei Li, Ming Wu, Fan Yang, Lidong Zhou, Vijayan Prabhakaran, Enhong Chen, and Wenguang Chen. ImmortalGraph: a system for storage and analysis of temporal graphs. *ACM Transactions on Storage*, 11(3):14:1–14:??, July

2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Matsuzawa:2020:PQF

[MHS20]

Keiichi Matsuzawa, Mitsuo Hayasaka, and Takahiro Shinagawa. Practical quick file server migration. *ACM Transactions on Storage*, 16(2):13:1–13:30, June 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3377322>.

Mao:2012:HHP

[MJW⁺12]

Bo Mao, Hong Jiang, Suzhen Wu, Lei Tian, Dan Feng, Jianxi Chen, and Lingfang Zeng. HPDA: a hybrid parity-based disk array for enhanced performance and reliability. *ACM Transactions on Storage*, 8(1):4:1–4:??, February 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Mao:2014:RPO

[MJW⁺14]

Bo Mao, Hong Jiang, Suzhen Wu, Yinjin Fu, and Lei Tian. Read-performance optimization for deduplication-based storage systems in the cloud. *ACM Transactions on Storage*, 10(2):6:1–6:??, March 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [MKLC06] **Memik:2006:MTE**
Gokhan Memik, Mahmut T. Kandemir, Wei-Keng Liao, and Alok Choudhary. Multi-collective I/O: a technique for exploiting inter-file access patterns. *ACM Transactions on Storage*, 2(3):349–369, August 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [MLZG19] **May:2019:LF**
Michael J. May, Etamar Laron, Khalid Zoabi, and Havah Gerhardt. On the life-cycle of the file. *ACM Transactions on Storage*, 15(1):1:1–1:??, April 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3295463.
- [MMES21] **Maneas:2021:RSE**
Stathis Maneas, Kaveh Mahdavian, Tim Emami, and Bianca Schroeder. Reliability of SSDs in enterprise storage systems: a large-scale field study. *ACM Transactions on Storage*, 17(1):3:1–3:27, February 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3423088>.
- [MMP⁺19] **Mohan:2019:CAS**
Jayashree Mohan, Ashlie Martinez, Soujanya Ponnappalli, Pandian Raju, and Vijay Chidambaram. CrashMonkey and ACE: Systematically testing file-system crash consistency. *ACM Transactions on Storage*, 15(2):14:1–14:??, June 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3320275.
- [MMR⁺09] **MacCormick:2009:KNA**
John MacCormick, Nicholas Murphy, Venugopalan Ramasubramanian, Udi Wieder, Junfeng Yang, and Lidong Zhou. Kinesis: a new approach to replica placement in distributed storage systems. *ACM Transactions on Storage*, 4(4):11:1–11:??, January 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [MNT06] **Mykletun:2006:AIO**
Einar Mykletun, Maithili Narasimha, and Gene Tsudik. Authentication and integrity in outsourced databases. *ACM Transactions on Storage*, 2(2):107–138, May 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [MQR⁺11] **Manzanares:2011:PBP**
Adam Manzanares, Xiao Qin, Xiaojun Ruan, and Shu Yin. PRE-BUD: Prefetching for energy-efficient parallel I/O systems with buffer disks. *ACM Transactions on Storage*, 7(1):3:1–3:??, June 2011. CODEN ???? ISSN 1553-

3077 (print), 1553-3093 (electronic).

Moon:2016:DRI

- [MR16] Sangwhan Moon and A. L. Narasimhan and Reddy. Does RAID improve lifetime of SSD arrays? *ACM Transactions on Storage*, 12(3):11:1–11:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Muniswamy-Reddy:2009:CBV

- [MRH09] Kiran-Kumar Muniswamy-Reddy and David A. Holland. Causality-based versioning. *ACM Transactions on Storage*, 5(4):13:1–13:??, December 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Mi:2009:EMI

- [MRZ⁺09] Ningfang Mi, Alma Riska, Qi Zhang, Evgenia Smirni, and Erik Riedel. Efficient management of idleness in storage systems. *ACM Transactions on Storage*, 5(2):4:1–4:??, June 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Ma:2017:LED

- [MSM⁺17] Jingwei Ma, Rebecca J. Stones, Yuxiang Ma, Jingui Wang, Junjie Ren, Gang Wang, and Xiaoguang Liu. Lazy exact deduplication. *ACM Transactions on Storage*, 13(2):11:1–11:??, June 2017. CODEN ???? ISSN

1553-3077 (print), 1553-3093 (electronic).

Ma:2009:NAS

Di Ma and Gene Tsudik. A new approach to secure logging. *ACM Transactions on Storage*, 5(1):2:1–2:??, March 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Maltzahn:2017:ISI

Carlos Maltzahn and Vasily Tarasov. Introduction to the special issue on MSST 2016. *ACM Transactions on Storage*, 13(2):10:1–10:??, June 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Malkhi:2020:ISS

Dahlia Malkhi and Dan Tsafir. Introduction to the special section on USENIX ATC 2019. *ACM Transactions on Storage*, 16(1):1:1, April 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3383194>.

Ma:2015:RCM

Ao Ma, Rachel Traylor, Fred Douglass, Mark Chamness, Guanlin Lu, Darren Sawyer, Surendar Chandra, and Windsor Hsu. RAIDShield: Characterizing, monitoring, and proactively protecting against

disk failures. *ACM Transactions on Storage*, 11(4):17:1–17:??, November 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Matthews:2008:ITM

[MTH⁺08] Jeanna Matthews, Sanjeev Trika, Debra Hensgen, Rick Coulson, and Knut Grimsrud. Intel(R) turbo memory: Non-volatile disk caches in the storage hierarchy of mainstream computer systems. *ACM Transactions on Storage*, 4(2):4:1–4:??, May 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Maccormick:2008:NPR

[MTJ⁺08] John Maccormick, Chandramohan A. Thekkath, Marcus Jager, Kristof Roomp, Lidong Zhou, and Ryan Peterson. Niobe: a practical replication protocol. *ACM Transactions on Storage*, 3(4):1:1–1:??, February 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Merchant:2020:ISI

[MW20] Arif Merchant and Hakim Weatherspoon. Introduction to the special issue on USENIX FAST 2019. *ACM Transactions on Storage*, 15(4):22e:1, February 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL [https://dl.](https://dl.acm.org/doi/abs/10.1145/3372347)

[acm.org/doi/abs/10.1145/3372347](https://dl.acm.org/doi/abs/10.1145/3372347).

Min:2024:EEZ

[MZLK24] Jaehong Min, Chenxingyu Zhao, Ming Liu, and Arvind Krishnamurthy. eZNS: Elastic zoned namespace for enhanced performance isolation and device utilization. *ACM Transactions on Storage*, 20(3):16:1–16:??, August 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3653716>.

Natanzon:2013:DSA

[NB13] Assaf Natanzon and Eitan Bachmat. Dynamic synchronous/asynchronous replication. *ACM Transactions on Storage*, 9(3):8:1–8:??, August 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

Nicolaou:2022:AAR

[NCP⁺22] Nicolas Nicolaou, Viveck Cadambe, N. Prakash, Andria Trigeorgi, Kishori Konwar, Muriel Medard, and Nancy Lynch. Ares: Adaptive, reconfigurable, erasure coded, atomic storage. *ACM Transactions on Storage*, 18(4):33:1–33:??, November 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3510613>.

- [NDR08] **Narayanan:2008:WLP** Dushyanth Narayanan, Austin Donnelly, and Antony Rowstron. Write off-loading: Practical power management for enterprise storage. *ACM Transactions on Storage*, 4(3):10:1–10:??, November 2008. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Noh22] **Noh:2022:ISS** Sam H. Noh. Introduction to the special section on SOSP 2021. *ACM Transactions on Storage*, 18(3):19:1, August 2022. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3542850>.
- [Noh18] **Noh:2018:ECL** Sam H. Noh. Editor-in-Chief letter. *ACM Transactions on Storage*, 14(1):1:1–1:??, April 2018. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Noh19] **Noh:2019:ATD** Sam H. Noh. ACM TOS distinguished reviewers. *ACM Transactions on Storage*, 15(1):1:1–1:??, April 2019. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3313879.
- [Noh21] **Noh:2021:TTA** Sam H. Noh. Thanking the TOS Associated Editors and Reviewers. *ACM Transactions on Storage*, 17(1):1:1–1:2, February 2021. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3442683>.
- [NQX06] **Nijim:2006:MIS** Mais Nijim, Xiao Qin, and Tao Xie. Modeling and improving security of a local disk system for write-intensive workloads. *ACM Transactions on Storage*, 2(4):400–423, November 2006. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [NSKY21] **Nachman:2021:GOS** Aviv Nachman, Sarai Sheinvald, Ariel Kolikant, and Gala Yadgar. GoSeed: Optimal seeding plan for deduplicated storage. *ACM Transactions on Storage*, 17(3):24:1–24:28, August 2021. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3453301>.
- [NW21] **Noh:2021:ISS** Sam H. Noh and Brent Welch. Introduction to the special section on USENIX FAST 2020. *ACM Transactions on Storage*, 17(1):2:1–2:2, February 2021. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).

- (electronic). URL <https://dl.acm.org/doi/10.1145/3442685>. [PBV11]
- [PAL⁺17] Thanumalayan Sankaranarayanan, Pillai, Ramnatthan Alagappan, Lanyue Lu, Vijay Chidambaram, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Application crash consistency and performance with CCFS. *ACM Transactions on Storage*, 13(3):19:1–19:??, October 2017. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [Pillai:2017:ACC]
- [PB05] Zachary Peterson and Randal Burns. Ext3cow: a time-shifting file system for regulatory compliance. *ACM Transactions on Storage*, 1(2):190–212, May 2005. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <http://hssl.cs.jhu.edu/~zachary/papers/peterson-tos05.pdf>. [Peterson:2005:ETS]
- [PB14] James S. Plank and Mario Blaum. Sector-disk (SD) erasure codes for mixed failure modes in RAID systems. *ACM Transactions on Storage*, 10(1):4:1–4:??, January 2014. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [Plank:2014:SDS]
- [Plank:2011:MDR] James S. Plank, Adam L. Buchsbaum, and Bradley T. Vander Zanden. Minimum density RAID-6 codes. *ACM Transactions on Storage*, 6(4):16:1–16:??, May 2011. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [PDZ⁺23] Shujie Pang, Yuhui Deng, Genxiong Zhang, Yi Zhou, Yaoqin Huang, and Xiao Qin. PSA-Cache: a page-state-aware cache scheme for boosting 3D NAND flash performance. *ACM Transactions on Storage*, 19(2):18:1–18:27, May 2023. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3574324>. [Pang:2023:PCP]
- [PKI⁺18] Roman Pletka, Ioannis Koltidas, Nikolas Ioannou, Sasa Tomić, Nikolaos Papandreou, Thomas Parnell, Haralampos Pozidis, Aaron Fry, and Tim Fisher. Management of next-generation NAND flash to achieve enterprise-level endurance and latency targets. *ACM Transactions on Storage*, 14(4):33:1–33:??, December 2018. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [Pletka:2018:MNG]

- [PNW⁺24] Paul:2024:TAE Arnab K. Paul, Sarah Neuwirth,^[PWLW21] Bharti Wadhwa, Feiyi Wang, Sarp Oral, and Ali R. Butt. Tarazu: an adaptive end-to-end I/O load-balancing framework for large-scale parallel file systems. *ACM Transactions on Storage*, 20(2):11:1–11:??, May 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3641885>.
- [PP16] Paulo:2016:EDD João Paulo and José Pereira. Efficient deduplication in a distributed primary storage infrastructure. *ACM Transactions on Storage*, 12(4):20:1–20:??, August 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [PSX⁺21] Papagiannis:2021:KEM Anastasios Papagiannis, Giorgos Saloustros, Giorgos Xanthakis, Giorgos Kalaentzis, Pilar Gonzalez-Ferez, and Angelos Bilas. Kreon: an efficient memory-mapped key-value store for flash storage. *ACM Transactions on Storage*, 17(1):7:1–7:32, February 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3418414>.
- [PNS17] Pan:2021:PLA Cheng Pan, Xiaolin Wang, Yingwei Luo, and Zhenlin Wang. Penalty- and locality-aware memory allocation in Redis using enhanced AET. *ACM Transactions on Storage*, 17(2):15:1–15:45, June 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3447573>.
- [PWS17] Parker-Wood:2017:ISI Aleatha Parker-Wood and Thomas Schwarz. Introduction to the Special Issue on Massive Storage Systems and Technology 2017. *ACM Transactions on Storage*, 13(4):28:1–28:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [PYY19] Pei:2019:RPU Shuyi Pei, Jing Yang, and Qing Yang. REGISTOR: a platform for unstructured data processing inside SSD storage. *ACM Transactions on Storage*, 15(1):7:1–7:??, April 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310149.
- [QFS⁺17] Qi:2017:CLN Shigui Qi, Dan Feng, Nan Su, Linjun Mei, and Jingning

- Liu. CDF-LDPC: a new error correction method for SSD to improve the read performance. *ACM Transactions on Storage*, 13(1):7:1-7:??, March 2017. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Raj05]
- [QJM+09] Xiao Qin, Hong Jiang, Adam Manzanares, Xiaojun Ruan, and Shu Yin. Dynamic load balancing for I/O-intensive applications on clusters. *ACM Transactions on Storage*, 5(3):9:1-9:??, November 2009. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Qin:2009:DLB]
- [QLL17] Chuan Qin, Jingwei Li, and Patrick P. C. Lee. The design and implementation of a rekeying-aware encrypted deduplication storage system. *ACM Transactions on Storage*, 13(1):9:1-9:??, March 2017. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Qin:2017:DIR]
- [QZL+23] Mian Qin, Qing Zheng, Jason Lee, Bradley Settlemyer, Fei Wen, Narasimha Reddy, and Paul Gratz. KVRangeDB: Range queries for a hash-based key-value device. *ACM Transactions on Storage*, 19(3):24:1-24:21, August 2023. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Qin:2023:KRQ]
- [Raj05] Sreeranga P. Rajan. Editorial. *ACM Transactions on Storage*, 1(1):1-2, February 2005. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Rajan:2005:E]
- [RBB+24] Patrick Raaf, André Brinkmann, Eric Borba, Hossein Asadi, Sai Narasimhamurthy, John Bent, Mohamad El-Batal, and Reza Salkhordeh. From SSDs back to HDDs: Optimizing VDO to support inline deduplication and compression for HDDs as primary storage media. *ACM Transactions on Storage*, 20(4):24:1-24:??, November 2024. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3678250>. [Raaf:2024:SBH]
- [RBM13] Ohad Rodeh, Josef Bacik, and Chris Mason. BTRFS: The Linux B-tree filesystem. *ACM Transactions on Storage*, 9(3):9:1-9:32, August 2013. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Rodeh:2013:BLB]
- [RDCS07] Raju Rangaswami, Zoran Dimitrijević, Edward Chang,

- and Klaus Schauser. Building MEMS-based storage systems for streaming media. *ACM Transactions on Storage*, 3(2): 6:1–6:??, June 2007. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [RHC15] Ohad Rodeh, Haim Helman, and David Chambliss. Visualizing block IO workloads. *ACM Transactions on Storage*, 11(2):6:1–6:??, March 2015. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Rod08] Ohad Rodeh. B-trees, shadowing, and clones. *ACM Transactions on Storage*, 3(4):2:1–2:??, February 2008. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [RPA⁺21] Anthony Rebello, Yuvraj Patel, Ramnatthan Alagappan, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Can applications recover from fsync failures? *ACM Transactions on Storage*, 17(2): 12:1–12:30, June 2021. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3450338>.
- [SBMW17] and Klaus Schauser. Building MEMS-based storage systems for streaming media. *ACM Transactions on Storage*, 3(2): 6:1–6:??, June 2007. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Shin:2017:IAT] Ji-Yong Shin, Mahesh Balakrishnan, Tudor Marian, and Hakim Weatherspoon. Isotope: ACID transactions for block storage. *ACM Transactions on Storage*, 13(1):4:1–4:??, March 2017. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Shen:2018:DID] Zhaoyan Shen, Feng Chen, Yichen Jia, and Zili Shao. DIDACache: an integration of device and application for flash-based key-value caching. *ACM Transactions on Storage*, 14(3):26:1–26:??, November 2018. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [SCJS18] Jiwu Shu, Youmin Chen, Qing Wang, Bohong Zhu, Junru Li, and Youyou Lu. TH-DPMS: Design and implementation of an RDMA-enabled Distributed Persistent Memory Storage System. *ACM Transactions on Storage*, 16(4):24:1–24:31, November 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3412852>.
- [SCW⁺20] Bianca Schroeder, Sotirios Damouras, and Phillipa Gill. Understanding latent sector
- [Schroeder:2010:ULS]

- errors and how to protect against them. *ACM Transactions on Storage*, 6(3):9:1–9:??, September 2010. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [SHDA17]
- [SFW⁺20] Kuei Sun, Daniel Fryer, Russell Wang, Sagar Patel, Joseph Chu, Matthew Lakier, Angela Demke Brown, and Ashvin Goel. Spiffy: Enabling file-system aware storage applications. *ACM Transactions on Storage*, 16(3):16:1–16:39, August 2020. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3386368>. [Sun:2020:SEF]
- [SG07] Bianca Schroeder and Garth A. Gibson. Understanding disk failure rates: What does an MTTF of 1,000,000 hours mean to you? *ACM Transactions on Storage*, 3(3):8:1–8:??, October 2007. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [Schroeder:2007:UDF]
- [SGMV09] Mark W. Storer, Kevin M. Greenan, Ethan L. Miller, and Kaladhar Voruganti. POT-SHARDS — a secure, recoverable, long-term archival storage system. *ACM Transactions on Storage*, 5(2):5:1–5:??, June 2009. CODEN ????. [Storer:2009:PSR]
- ISSN 1553-3077 (print), 1553-3093 (electronic). [Shafaei:2017:MDM]
- Mansour Shafaei, Mohammad Hossein Hajkazemi, Peter Desnoyers, and Abutalib Aghayev. Modeling drive-managed SMR performance. *ACM Transactions on Storage*, 13(4):38:1–38:??, December 2017. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [Shilane:2012:WOR]
- Philip Shilane, Mark Huang, Grant Wallace, and Windsor Hsu. WAN-optimized replication of backup datasets using stream-informed delta compression. *ACM Transactions on Storage*, 8(4):13:1–13:??, November 2012. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [ZhenJ:2018:CSN]
- Zhen “Jason” Sun, Geoff Kuenning, Sonam Mandal, Philip Shilane, Vasily Tarasov, Nong Xiao, and Erez Zadok. Cluster and single-node analysis of long-term deduplication patterns. *ACM Transactions on Storage*, 14(2):13:1–13:??, May 2018. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). [Sun:2023:SWF]
- Jinghan Sun, Shaobo Li, Jun Xu, and Jian Huang. The

- security war in file systems: an empirical study from a vulnerability-centric perspective. *ACM Transactions on Storage*, 19(4):34:1–34:??, November 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3606020>. [SPR19]
- Sha:2023:VGB**
- [SLZ⁺23] Zhibing Sha, Jun Li, Fengxiang Zhang, Min Huang, Zhigang Cai, Francois Trahay, and Jianwei Liao. Visibility graph-based cache management for DRAM buffer inside solid-state drives. *ACM Transactions on Storage*, 19(3):25:1–25:21, August 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3586576>. [SS14]
- Sivathanu:2005:ISS**
- [SPADAD05] Muthian Sivathanu, Vijayan Prabhakaran, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Improving storage system availability with D-GRAID. *ACM Transactions on Storage*, 1(2):133–170, May 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [SSC⁺24]
- Shim:2011:HFT**
- [SPP11] Gyudong Shim, Youngwoo Park, and Kyu Ho Park. A hybrid flash translation layer with adaptive merge for SSDs. *ACM Transactions on Storage*, 6(4):15:1–15:??, May 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Saad:2019:LPD**
- Mohamed M. Saad, Roberto Palmieri, and Binoy Ravindran. Lerna: Parallelizing dependent loops using speculation. *ACM Transactions on Storage*, 15(1):6:1–6:??, April 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310368.
- Saxena:2014:DPS**
- Mohit Saxena and Michael M. Swift. Design and prototype of a solid-state cache. *ACM Transactions on Storage*, 10(3):10:1–10:??, July 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Stylianakis:2024:ISE**
- Giorgos Stylianakis, Giorgos Saloustros, Orestis Chiotakis, Giorgos Xanthakis, and Angelos Bilas. Index shipping for efficient replication in LSM key-value stores with hybrid KV placement. *ACM Transactions on Storage*, 20(3):20:1–20:??, August 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3658672>.

- Song:2016:EMM**
- [SSHY16] Nae Young Song, Yongseok Son, Hyuck Han, and Heon Young Yeom. Efficient memory-mapped I/O on fast storage device. *ACM Transactions on Storage*, 12(4):19:1–19:??, August 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [SSWC14]
- Stefanovici:2017:TSS**
- [SSOT17] Ioan Stefanovici, Bianca Schroeder, Greg O’Shea, and Eno Thereska. Treating the storage stack like a network. *ACM Transactions on Storage*, 13(1):2:1–2:??, March 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [ST06]
- Sundararaman:2010:MOS**
- [SSR⁺10] Swaminathan Sundararaman, Sriram Subramanian, Abhishek Rajimwale, Andrea C. Arpaci-Dusseau, Remzi H. Arpaci-Dusseau, and Michael M. Swift. Membrane: Operating system support for restartable file systems. *ACM Transactions on Storage*, 6(3):11:1–11:??, September 2010. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [ST14]
- Sankar:2013:DSE**
- [SSVG13] Sriram Sankar, Mark Shaw, Kushagra Vaid, and Sudhanva Gurumurthi. Datacenter scale evaluation of the impact of temperature on hard disk drive failures. *ACM Transactions on Storage*, 9(2):6:1–6:24, July 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Sun:2014:LDL**
- Zhiwei Sun, Anthony Skjellum, Lee Ward, and Matthew L. Curry. A lightweight data location service for nondeterministic exascale storage systems. *ACM Transactions on Storage*, 10(3):12:1–12:??, July 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Sugahara:2006:SMB**
- Satoshi Sugahara and Masaaki Tanaka. Spin MOSFETs as a basis for spintronics. *ACM Transactions on Storage*, 2(2):197–219, May 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Schroeder:2014:ISI**
- Bianca Schroeder and Eno Thereska. Introduction to the special issue on USENIX FAST 2014. *ACM Transactions on Storage*, 10(4):13:1–13:??, October 2014. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- Sun:2023:USA**
- Diansen Sun, Ruixiong Tan, and Yunpeng Chai. A universal SMR-aware cache framework with deep optimization

- for DM-SMR and HM-SMR disks. *ACM Transactions on Storage*, 19(3):26:1–26:35, August 2023. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3588442>. [SWY18]
- [STZ10] Priya Sehgal, Vasily Tarasov, and Erez Zadok. Optimizing energy and performance for server-class file system workloads. *ACM Transactions on Storage*, 6(3):10:1–10:??, September 2010. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [SXF21]
- [SVG⁺20] Muthian Sivathanu, Midhul Vuppalapati, Bhargav S. Gulavani, Kaushik Rajan, Jyoti Leeka, Jayashree Mohan, and Piyus Kedia. INSTalytics: Cluster filesystem co-design for big-data analytics. *ACM Transactions on Storage*, 15(4):23:1–23:30, February 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3369738>. [SXJ⁺24]
- [SW09] Margo Seltzer and Ric Wheeler. Introduction to special issue FAST 2009. *ACM Transactions on Storage*, 5(4):11:1–11:??, December 2009. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Sun:2018:BDS]
- [Sun:2018:BDS] Yuliang Sun, Yu Wang, and Huazhong Yang. Bidirectional database storage and SQL query exploiting RRAM-based process-in-memory structure. *ACM Transactions on Storage*, 14(1):8:1–8:??, April 2018. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). [Song:2021:TRN]
- [Song:2021:TRN] Xiaojia Song, Tao Xie, and Stephen Fischer. Two reconfigurable NDP servers: Understanding the impact of near-data processing on data center applications. *ACM Transactions on Storage*, 17(4):31:1–31:27, November 2021. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3460201>. [Sun:2024:GUG]
- [Sun:2024:GUG] Hui Sun, Jinfeng Xu, Xiangxiang Jiang, Guanzhong Chen, Yinliang Yue, and Xiao Qin. gLSM: Using GPGPU to accelerate compactions in LSM-tree-based key-value stores. *ACM Transactions on Storage*, 20(1):5:1–5:??, February 2024. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3633782>.

- [SYK⁺11] **Shin:2011:RBI**
 Dong In Shin, Young Jin Yu, Hyeong S. Kim, Hyeonsang Eom, and Heon Young Yeom. Request bridging and interleaving: Improving the performance of small synchronous updates under seek-optimizing disk subsystems. *ACM Transactions on Storage*, 7(2):4:1–4:??, July 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [SZ05] **Seo:2005:EDR**
 Beomjoo Seo and Roger Zimmermann. Efficient disk replacement and data migration algorithms for large disk subsystems. *ACM Transactions on Storage*, 1(3):316–345, August 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [SZ15] **Schindler:2015:ISI**
 Jiri Schindler and Erez Zadok. Introduction to the special issue on USENIX FAST 2015. *ACM Transactions on Storage*, 11(4):15:1–15:??, November 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [SZ23] **Schindler:2023:ISS**
 Jiri Schindler and Noa Zilberman. Introduction to the special section on USENIX ATC 2022. *ACM Transactions on Storage*, 19(2):10:1, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [SZS⁺12] **Sundararaman:2012:MCC**
 Swaminathan Sundararaman, Yupu Zhang, Sriram Subramanian, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Making the common case the only case with anticipatory memory allocation. *ACM Transactions on Storage*, 7(4):13:1–13:??, January 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [TB09] **Thomasian:2009:HRR**
 Alexander Thomasian and Mario Blaum. Higher reliability redundant disk arrays: Organization, operation, and coding. *ACM Transactions on Storage*, 5(3):7:1–7:??, November 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [TCJ⁺11] **Tian:2011:OAU**
 Lei Tian, Qiang Cao, Hong Jiang, Dan Feng, Changsheng Xie, and Qin Xin. Online availability upgrades for parity-based RAIDs through supplementary parity augmentations. *ACM Transactions on Storage*, 6(4):17:1–17:??, May 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [TCL12] **Tran:2012:ECB**
 Nguyen Tran, Frank Chiang, and Jinyang Li. Efficient cooperative backup with decentralized trust management. *ACM Transactions on Storage*, 8(3):8:1–8:??, September 2012. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [TGL+18] **Teng:2018:LCD**
 Dejun Teng, Lei Guo, Rubao Lee, Feng Chen, Yanfeng Zhang, Siyuan Ma, and Xiaodong Zhang. A low-cost disk solution enabling LSM-tree to achieve high performance for mixed read/write workloads. *ACM Transactions on Storage*, 14(2):15:1–15:??, May 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [THTT08] **Tran:2008:NAD**
 Dinh Nguyen Tran, Phung Chinh Huynh, Y. C. Tay, and Anthony K. H. Tung. A new approach to dynamic self-tuning of database buffers. *ACM Transactions on Storage*, 4(1):3:1–3:??, May 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [THWD08] **Tsafrir:2008:PSF**
 Dan Tsafrir, Tomer Hertz, David Wagner, and Dilma Da Silva. Portably solving file races with hardness amplification. *ACM Transactions on Storage*, 4(3):9:1–9:??, November 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [TIM+18] **Trivedi:2018:FFN**
 Animesh Trivedi, Nikolas Ioannou, Bernard Metzler, Patrick Stuedi, Jonas Pfefferle, Kornilios Kourtis, Ioannis Koltsidas, and Thomas R. Gross. FlashNet: Flash/network stack co-design. *ACM Transactions on Storage*, 14(4):30:1–30:??, December 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [TLM+23] **Tong:2023:OFD**
 Qiuyun Tong, Xinghua Li, Yinbin Miao, Yunwei Wang, Ximeng Liu, and Robert H. Deng. Owner-free distributed symmetric searchable encryption supporting conjunctive queries. *ACM Transactions on Storage*, 19(4):38:1–38:??, November 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3607255>.
- [Tos09] **Tosun:2009:DCS**
 Ali Şaman Tosun. Divide-and-conquer scheme for strictly optimal retrieval of range queries. *ACM Transactions on Storage*, 5(3):8:1–8:??, November 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [TPM⁺11] **Tomazic:2011:FFE**
 Saso Tomazic, Vesna Pavlovic, Jasna Milovanovic, Jaka Sodnik, Anton Kos, Sara Stancin, and Veljko Milutinovic. Fast file existence checking in archiving systems. *ACM Transactions on Storage*, 7(1):2:1–2:??, June 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [Tri15] **Trifonov:2015:LCI**
 P. Trifonov. Low-complexity implementation of RAID based on Reed–Solomon codes. *ACM Transactions on Storage*, 11(1):1:1–1:??, February 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [TSWT22] **Tai:2022:OSP**
 Amy Tai, Igor Smolyar, Michael Wei, and Dan Tsafir. Optimizing storage performance with calibrated interrupts. *ACM Transactions on Storage*, 18(1):3:1–3:32, February 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3505139>.
- [TXZ⁺24] **Tan:2024:DFD**
 Haoliang Tan, Wen Xia, Xianguyu Zou, Cai Deng, Qing Liao, and Zhaoquan Gu. The design of fast delta encoding for delta compression based storage systems. *ACM Transactions on Storage*, 20(4):23:1–23:??, November 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3664817>.
- [TZJW08] **Traeger:2008:NYS**
 Avishay Traeger, Erez Zadok, Nikolai Joukov, and Charles P. Wright. A nine year study of file system and storage benchmarking. *ACM Transactions on Storage*, 4(2):5:1–5:??, May 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [VAM⁺19] **Vangoor:2019:PRU**
 Bharath Kumar Reddy Vangoor, Prafful Agarwal, Manu Mathew, Arun Ramachandran, Swaminathan Sivaraman, Vasily Tarasov, and Erez Zadok. Performance and resource utilization of FUSE user-space file systems. *ACM Transactions on Storage*, 15(2):15:1–15:??, June 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310148.
- [VDV17] **Viotti:2017:HRH**
 Paolo Viotti, Dan Dobre, and Marko Vukolić. Hybris: Robust hybrid cloud storage. *ACM Transactions on Storage*, 13(3):27:1–27:??, October 2017. CODEN ???? ISSN

- 1553-3077 (print), 1553-3093 (electronic).
- [VFNN10] **Veeraraghavan:2010:QRF**
Kaushik Veeraraghavan, Jason Flinn, Edmund B. Nightingale, and Brian Noble. quFiles: The right file at the right time. *ACM Transactions on Storage*, 6(3):12:1–12:??, September 2010. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [VJG08] **Verma:2008:UBU**
Akshat Verma, Rohit Jain, and Sugata Ghosal. A utility-based unified disk scheduling framework for shared mixed-media services. *ACM Transactions on Storage*, 3(4):4:1–4:??, February 2008. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [VMF⁺06] **Vazhkudai:2006:CCD**
Sudharshan S. Vazhkudai, Xiaosong Ma, Vincent W. Freeh, Jonathan W. Strickland, Nandan Tammineedi, Tyler Simon, and Stephen L. Scott. Constructing collaborative desktop storage caches for large scientific datasets. *ACM Transactions on Storage*, 2(3):221–254, August 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [VSV09] **Vrable:2009:CFB**
Michael Vrable, Stefan Savage, and Geoffrey M. Voelker. Cumulus: Filesystem backup to the cloud. *ACM Transactions on Storage*, 5(4):14:1–14:??, December 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [VTHB18] **Vef:2018:CST**
Marc-André Vef, Vasily Tarasov, Dean Hildebrand, and André Brinkmann. Challenges and solutions for tracing storage systems: a case study with spectrum scale. *ACM Transactions on Storage*, 14(2):18:1–18:??, May 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WB05] **Wu:2005:TRL**
Changxun Wu and Randal Burns. Tunable randomization for load management in shared-disk clusters. *ACM Transactions on Storage*, 1(1):108–131, February 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WBZ⁺19] **Wang:2019:AAD**
Ji Wang, Weidong Bao, Lei Zheng, Xiaomin Zhu, and Philip S. Yu. An attention-augmented deep architecture for hard drive status monitoring in large-scale storage systems. *ACM Transactions on Storage*, 15(3):21:1–21:??, August 2019. CODEN ???? ISSN 1553-3077 (print), 1553-

- 3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3340290. **Wei:2015:AFS**
- [WCC15] Qingsong Wei, Jianxi Chen, and Cheng Chen. Accelerating file system metadata access with byte-addressable nonvolatile memory. *ACM Transactions on Storage*, 11(3):12:1–12:??, July 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Wei:2021:XFR**
- [WCCZ21] Xingda Wei, Rong Chen, Haibo Chen, and Binyu Zang. XStore: Fast RDMA-based ordered key-value store using remote learned cache. *ACM Transactions on Storage*, 17(3):18:1–18:32, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3468520>. **Wang:2024:EEP**
- [WCJ+24] Shucheng Wang, Qiang Cao, Hong Jiang, Ziyi Lu, Jie Yao, Yuxing Chen, and Anqun Pan. Explorations and exploitation for parity-based RAIDs with ultra-fast SSDs. *ACM Transactions on Storage*, 20(1):6:1–6:??, February 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3627992>. **Wu:2024:PSB**
- [WCR+06] Youjip Won, Hyungkyu Chang, Jaemin Ryu, Yongdai Kim, and Junseok Shim. Intelligent storage: Cross-layer optimization for soft real-time workload. *ACM Transactions on Storage*, 2(3):255–282, August 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Won:2006:ISC**
- [WCW+22] Zhaoguo Wang, Haibo Chen, Youyun Wang, Chuzhe Tang, and Huan Wang. The concurrent learned indexes for multicore data storage. *ACM Transactions on Storage*, 18(1):8:1–8:35, February 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3478289>. **Wang:2022:CLI**
- [WCXY15] Qingsong Wei, Cheng Chen, Mingdi Xue, and Jun Yang. Z-MAP: a zone-based flash translation layer with workload classification for solid-state drive. *ACM Transactions on Storage*, 11(1):4:1–4:??, February 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Wei:2015:ZMZ**

- Polling sanitization to balance I/O latency and data security of high-density SSDs. *ACM Transactions on Storage*, 20(2):13:1–13:??, May 2024. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3639826>.
- [WKC06] **Wu:2006:DEI**
 Chin-Hsien Wu, Tei-Wei Kuo, and Li-Pin Chang. The design of efficient initialization and crash recovery for log-based file systems over flash memory. *ACM Transactions on Storage*, 2(4):449–467, November 2006. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WDG⁺06] **Wright:2006:VUS**
 Charles P. Wright, Jay Dave, Puja Gupta, Harikesavan Krishnan, David P. Quigley, Erez Zadok, and Mohammad Nayyer Zubair. Versatility and Unix semantics in namespace unification. *ACM Transactions on Storage*, 2(1):74–105, February 2006. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WKR06] **Wang:2006:CFS**
 An-I Andy Wang, Geoff Kuenning, Peter Reiher, and Gerald Popek. The *Conquest* file system: Better performance through a disk/persistent-RAM hybrid design. *ACM Transactions on Storage*, 2(3):309–348, August 2006. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WH15] **Wu:2015:DSF**
 Chin-Hsien Wu and Kuo-Yi Huang. Data sorting in flash memory. *ACM Transactions on Storage*, 11(2):7:1–7:??, March 2015. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WLC⁺22] **Wu:2012:AWB**
 Guanying Wu, Xubin He, and Ben Eckart. An adaptive write buffer management scheme for flash-based SSDs. *ACM Transactions on Storage*, 8(1):1:1–1:??, February 2012. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WL24] **Williams:2024:ISS**
 Dan Williams and Julia Lawall. Introduction to the special section on USENIX ATC 2023. *ACM Transactions on Storage*, 20(2):7:1–7:??, May 2024. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3635156>.
- [WLC⁺22] **Wang:2022:EEB**
 Shucheng Wang, Ziyi Lu, Qiang Cao, Hong Jiang, Jie Yao, Yuanyuan Dong, Puyuan Yang, and Changsheng Xie. Exploration and exploitation

- for buffer-controlled HDD-writes for SSD-HDD hybrid storage server. *ACM Transactions on Storage*, 18(1):6:1–6:29, February 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3465410>. [WLV+24]
- [WLD21] Fenggang Wu, Bingzhe Li, and David H. C. Du. FluidSMR: Adaptive management for hybrid SMR drives. *ACM Transactions on Storage*, 17(4):32:1–32:30, November 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3465404>. [WLV+24]
- [WLL+19] Weidong Wen, Yang Li, Wenhai Li, Lingfeng Deng, and Yanxiang He. CORES: Towards scan-optimized columnar storage for nested records. *ACM Transactions on Storage*, 15(3):16:1–16:??, August 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3321704. [WLV+24]
- [WLL+22] Qing Wang, Youyou Lu, Junru Li, Minhui Xie, and Jiwu Shu. Nap: Persistent memory indexes for NUMA architectures. *ACM Transactions on Storage*, 18(1):2:1–2:35, February 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3507922>. [WLV+24]
- [WLV+24] Jing Wang, Youyou Lu, Qing Wang, Yuhao Zhang, and Jiwu Shu. Perseid: a secondary indexing mechanism for LSM-based storage systems. *ACM Transactions on Storage*, 20(2):9:1–9:??, May 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3633285>. [WLV+24]
- [WLV+24] Rui Wang, Yongkun Li, Yinlong Xu, Hong Xie, John C. S. Lui, and Shuibing He. Toward fast and scalable random walks over disk-resident graphs via efficient I/O management. *ACM Transactions on Storage*, 18(4):36:1–36:??, November 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3533579>. [WLV+24]
- [WLV+24] Avani Wildani and Ethan L. Miller. Can we group storage? Statistical techniques to identify predictive groupings in storage system accesses. *ACM Transactions on Storage*, 12(2):7:1–7:??, Febru-

Wu:2021:FAM**Wang:2024:PSI****Wen:2019:CTS****Wang:2022:TFS****Wang:2022:PNP****Wildani:2016:CWG**

- ary 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [WQR13]
- Wu:2016:LLD**
- [WMCJ16] Suzhen Wu, Bo Mao, Xiaolan Chen, and Hong Jiang. LDM: Log disk mirroring with improved performance and reliability for SSD-based disk arrays. *ACM Transactions on Storage*, 12(4):22:1–22:??, August 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [WSSZ07]
- Won:2018:BOC**
- [WOJ⁺18] Youjip Won, Joontaek Oh, Jaemin Jung, Gyeongyeol Choi, Seongbae Son, Jooyoung Hwang, and Sangyeun Cho. Bringing order to chaos: Barrier-enabled I/O stack for flash storage. *ACM Transactions on Storage*, 14(3):24:1–24:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [WSZ⁺10]
- Weddle:2007:PGS**
- [WOQ⁺07] Charles Weddle, Mathew Oldham, Jin Qian, An-I Andy Wang, Peter Reiher, and Geoff Kuenning. PARaid: a gear-shifting power-aware RAID. *ACM Transactions on Storage*, 3(3):13:1–13:??, October 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [WTZ⁺23]
- Wu:2013:SFS**
- Xiaojian Wu, Sheng Qiu, and A. L. Narasimha Reddy. SCMFS: a file system for storage class memory and its extensions. *ACM Transactions on Storage*, 9(3):7:1–7:??, August 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [Wright:2007:EAS]
- Charles P. Wright, Richard Spillane, Gopalan Sivathanu, and Erez Zadok. Extending ACID semantics to the file system. *ACM Transactions on Storage*, 3(2):4:1–4:??, June 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [Wang:2010:SSO]
- Yang Wang, Jiwu Shu, Guangyan Zhang, Wei Xue, and Weimin Zheng. SOPA: Selecting the optimal caching policy adaptively. *ACM Transactions on Storage*, 6(2):7:1–7:??, July 2010. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). [Wu:2023:FFD]
- Suzhen Wu, Zhanhong Tu, Yuxuan Zhou, Zuocheng Wang, Zhirong Shen, Wei Chen, Wei Wang, Weichun Wang, and Bo Mao. FAST-Sync: a FAST delta sync scheme for encrypted cloud storage in high-bandwidth

- network environments. *ACM Transactions on Storage*, 19(4):37:1–37:??, November 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3607536>.
- [WWJ⁺23] **Wu:2023:CBM** Haonan Wu, Shuxian Wang, Zhanfeng Jin, Yuhang Zhang, Ruyun Ma, Sijin Fan, and Ruili Chao. CostCounter: a better method for collision mitigation in cuckoo hashing. *ACM Transactions on Storage*, 19(3):28:1–28:24, August 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3596910>.
- [WWW⁺18] **Wang:2018:PRT** Chundong Wang, Qingsong Wei, Lingkun Wu, Sibao Wang, Cheng Chen, Xiaokui Xiao, Jun Yang, Mingdi Xue, and Yechao Yang. Persisting RB-Tree into NVM in a consistency perspective. *ACM Transactions on Storage*, 14(1):6:1–6:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WXH⁺16] **Wan:2016:HSF** Jiguang Wan, Peng Xu, Xubin He, Jibin Wang, Junyao Li, and Changsheng Xie. H-Scale: a fast approach to scale disk arrays via hybrid stripe deployment. *ACM Transactions on Storage*, 12(3):16:1–16:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WXS16] **Wang:2016:SIW** Wei Wang, Tao Xie, and Abhinav Sharma. SWANS: an interdisk wear-leveling strategy for RAID-0 structured SSD arrays. *ACM Transactions on Storage*, 12(3):10:1–10:??, June 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [WZC⁺24] **Wei:2024:EDP** Junyu Wei, Guangyan Zhang, Junchao Chen, Yang Wang, Weimin Zheng, Tingtao Sun, Jiasheng Wu, and Jiangwei Jiang. Exploiting data-pattern-aware vertical partitioning to achieve fast and low-cost cloud log storage. *ACM Transactions on Storage*, 20(2):12:1–12:??, May 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3643641>.
- [WZH⁺20] **Wang:2020:CWY** Hua Wang, Jiawei Zhang, Ping Huang, Xinbo Yi, Bin Cheng, and Ke Zhou. Cache what you need to cache: Reducing write traffic in cloud cache via “One-Time-Access-Exclusion” policy. *ACM Transactions on Storage*, 16

- (3):18:1–18:24, August 2020. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3397766>.
- [XCK⁺14] Lianghong Xu, James Cipar, Elie Krevat, Alexey Tumanov, Nitin Gupta, Michael A. Kozuch, and Gregory R. Ganger. Agility and performance in elastic distributed storage. *ACM Transactions on Storage*, 10(4):16:1–16:??, October 2014. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [XCR18] Wei Xie, Yong Chen, and Philip C. Roth. Exploiting internal parallelism for address translation in solid-state drives. *ACM Transactions on Storage*, 14(4):32:1–32:??, December 2018. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [XK24] Wang Xu and Israel Koren. A scalable wear leveling technique for phase change memory. *ACM Transactions on Storage*, 20(1):3:1–3:??, February 2024. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3631146>.
- [XMRF⁺13] Yulai Xie, Kiran-Kumar Muniswamy-Reddy, Dan Feng, Yan Li, and Darrell D. E. Long. Evaluation of a hybrid approach for efficient provenance storage. *ACM Transactions on Storage*, 9(4):14:1–14:??, November 2013. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- [XOZ⁺20] Bing Xie, Sarp Oral, Christopher Zimmer, Jong Youl Choi, David Dillow, Scott Klasky, Jay Lofstead, Norbert Podhorszki, and Jeffrey S. Chase. Characterizing output bottlenecks of a production supercomputer: Analysis and implications. *ACM Transactions on Storage*, 15(4):26:1–26:39, February 2020. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3335205>.
- [XPZ⁺23] Wen Xia, Lifeng Pu, Xiangyu Zou, Philip Shilane, Shiyi Li, Haijun Zhang, and Xuan Wang. The design of fast and lightweight resemblance detection for efficient post-deduplication delta compression. *ACM Transactions on Storage*, 19(3):22:1–22:30, August 2023. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).

Xie:2013:EHA**Xu:2014:APE****Xie:2020:COB****Xie:2018:EIP****Xu:2024:SWL****Xia:2023:DFL**

- (electronic). URL <https://dl.acm.org/doi/10.1145/3584663>.
- [XS09] Tao Xie and Yao Sun. A file assignment strategy independent of workload characteristic assumptions. *ACM Transactions on Storage*, 5(3):10:1–10:??, November 2009. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Xie:2009:FAS**
- [XS18] Chun Jason Xue and Michael Swift. Introduction to the special issue on NVM and storage. *ACM Transactions on Storage*, 14(1):2:1–2:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Xue:2018:ISI**
- [XWL⁺18] Qin Xiong, Fei Wu, Zhonghai Lu, Yue Zhu, You Zhou, Yibing Chu, Changsheng Xie, and Ping Huang. Characterizing 3D floating gate NAND flash: Observations, analyses, and implications. *ACM Transactions on Storage*, 14(2):16:1–16:??, May 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Xiong:2018:CFG**
- [XXD19] Xuchao Xie, Liquan Xiao, and David H. C. Du. ZoneTier: a zone-based storage tiering and caching co-design to integrate SSDs with SMR drives. *ACM Transactions on Storage*, 15(3):19:1–19:??, August 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3335548. **Xiang:2011:HAF**
- [XXL⁺11] Liping Xiang, Yinlong Xu, John C. S. Lui, Qian Chang, Yubiao Pan, and Runhui Li. A hybrid approach to failed disk recovery using RAID-6 codes: Algorithms and performance evaluation. *ACM Transactions on Storage*, 7(3):11:1–11:??, October 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Yumerefendi:2007:SAN**
- [YC07] Aydan R. Yumerefendi and Jeffrey S. Chase. Strong accountability for network storage. *ACM Transactions on Storage*, 3(3):11:1–11:??, October 2007. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Yang:2020:SEF**
- [YCM⁺20] Fan Yang, Youmin Chen, Haiyu Mao, Youyou Lu, and Jiwu Shu. ShieldNVM: an efficient and fast recoverable system for secure non-volatile memory. *ACM Transactions on Storage*, 16(2):12:1–12:31, June 2020. CODEN ???? ISSN 1553-3077 (print), 1553-

- 3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3381835>.
- [YCY⁺20] **Yang:2020:BFO** Yang Yang, Qiang Cao, Jie Yao, Hong Jiang, and Li Yang. Batch-file operations to optimize massive files accessing: Analysis, design, and application. *ACM Transactions on Storage*, 16(3):19:1–19:25, August 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3394286>.
- [YFHW20] **Ye:2020:HCF** Liuqing Ye, Dan Feng, Yuchong Hu, and Xueliang Wei. Hybrid codes: Flexible erasure codes with optimized recovery performance. *ACM Transactions on Storage*, 16(4):26:1–26:26, November 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3407193>.
- [YGJS21] **Yadgar:2021:SBW** Gala Yadgar, Moshe Gabel, Shehbaz Jaffer, and Bianca Schroeder. SSD-based workload characteristics and their performance implications. *ACM Transactions on Storage*, 17(1):8:1–8:26, February 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3423137>.
- [YHJ13] **You:2013:USL** Gae-Won You, Seung-Won Hwang, and Navendu Jain. Ursa: Scalable load and power management in cloud storage systems. *ACM Transactions on Storage*, 9(1):1:1–1:??, March 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [YLADAD23] **Yang:2023:PSA** Suli Yang, Jing Liu, Andrea Arpaci-Dusseau, and Remzi Arpaci-Dusseau. Principled schedulability analysis for distributed storage systems using thread architecture models. *ACM Transactions on Storage*, 19(2):17:1–17:47, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3574323>.
- [YLH⁺17] **Yan:2017:TTF** Shiqin Yan, Huaicheng Li, Mingzhe Hao, Michael Hao Tong, Swaminathan Sundararaman, Andrew A. Chien, and Haryadi S. Gunawi. Tiny-tail flash: Near-perfect elimination of garbage collection tail latencies in NAND SSDs. *ACM Transactions on Storage*, 13(3):22:1–22:??, October 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- Yao:2024:ECS**
- [YLL⁺24] Xiangyu Yao, Qiao Li, Kaihuan Lin, Xinbiao Gan, Jie Zhang, Congming Gao, Zhirong Shen, Quanqing Xu, Chuanhui Yang, and Jason Xue. Extremely-compressed SSDs with I/O behavior prediction. *ACM Transactions on Storage*, 20(4):26:1–26:??, November 2024. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3677044>.
- Yadgar:2019:ISI**
- [YP19] Gala Yadgar and Donald E. Porter. Introduction to the special issue on ACM International Systems and Storage Conference (SYSTOR) 2018. *ACM Transactions on Storage*, 15(1):5:1–5:??, April 2019. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3313898.
- Yang:2022:TED**
- [YLRL22] Zuoru Yang, Jingwei Li, Yanjing Ren, and Patrick P. C. Lee. Tunable encrypted deduplication with attack-resilient key management. *ACM Transactions on Storage*, 18(4):32:1–32:??, November 2022. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3510614>.
- Yoo:2018:OOF**
- [YOL⁺18] Jinsoo Yoo, Joontaek Oh, Seongjin Lee, Youjip Won, Jin-Yong Ha, Jongsung Lee, and Junseok Shim. OrcFS: Orchestrated file system for flash storage. *ACM Transactions on Storage*, 14(2):17:1–17:??, May 2018. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- You:2011:PFE**
- [YPLG11] Lawrence L. You, Kristal T. Pollack, Darrell D. E. Long, and K. Gopinath. PRESIDIO: a framework for efficient archival data storage. *ACM Transactions on Storage*, 7(2):6:1–6:??, July 2011. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).
- Yang:2023:CTE**
- [YPU⁺23] Tzu-Wei Yang, Seth Pollen, Mustafa Uysal, Arif Merchant, Homer Wolfmeister, and Junaid Khalid. Cache-Sack: Theory and experience of Google’s admission optimization for datacenter flash caches. *ACM Transactions on Storage*, 19(2):13:1–13:24, May 2023. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3582014>.

- [YS17] **Yadgar:2017:ETY** Gala Yadgar and Roman Shor. Experience from two years of visualizing flash with SSD-Player. *ACM Transactions on Storage*, 13(4):31:1–31:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [YSEY10] **Yu:2010:NVS** Young Jin Yu, Dong In Shin, Hyeonsang Eom, and Heon Young Yeom. NCQ vs. I/O scheduler: Preventing unexpected misbehaviors. *ACM Transactions on Storage*, 6(1):2:1–2:??, March 2010. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [YV05] **Yu:2005:CAR** Haifeng Yu and Amin Vahdat. Consistent and automatic replica regeneration. *ACM Transactions on Storage*, 1(1):3–37, February 2005. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [YWH⁺17] **Yao:2017:BEK** Ting Yao, Jiguang Wan, Ping Huang, Xubin He, Fei Wu, and Changsheng Xie. Building efficient key-value stores via a lightweight compaction tree. *ACM Transactions on Storage*, 13(4):29:1–29:??, December 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [YXZ⁺23] **Yang:2023:EEM** Bin Yang, Wei Xue, Tianyu Zhang, Shichao Liu, Xiaosong Ma, Xiyang Wang, and Weiguo Liu. End-to-end I/O monitoring on leading supercomputers. *ACM Transactions on Storage*, 19(1):3:1–3:35, February 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3568425>.
- [YYC⁺18] **Yan:2018:RRB** Wenrui Yan, Jie Yao, Qiang Cao, Changsheng Xie, and Hong Jiang. ROS: a rack-based optical storage system with inline accessibility for long-term data preservation. *ACM Transactions on Storage*, 14(3):28:1–28:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [YYM⁺18] **Yadgar:2018:AFP** Gala Yadgar, Eitan Yaakobi, Fabio Margaglia, Yue Li, Alexander Yucovich, Nachum Bundak, Lior Gilon, Nir Yakovi, Assaf Schuster, and André Brinkmann. An analysis of flash page reuse with WOM codes. *ACM Transactions on Storage*, 14(1):10:1–10:??, April 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [YYR21] Yang:2021:LSA Juncheng Yang, Yao Yue, and K. V. Rashmi. A large-scale analysis of hundreds of in-memory key-value cache clusters at Twitter. *ACM Transactions on Storage*, 17(3):17:1–17:35, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3468521>.
- [YZ16] Yue Yang and Jianwen Zhu. Write skew and Zipf distribution: Evidence and implications. *ACM Transactions on Storage*, 12(4):21:1–21:??, August 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [YZJ⁺17] Yuan:2017:WWR Jun Yuan, Yang Zhan, William Jannen, Prashant Pandey, Amogh Akshintala, Kanchan Chandnani, Pooja Deo, Zardosht Kasheff, Leif Walsh, Michael A. Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. Writes wrought right, and other adventures in file system optimization. *ACM Transactions on Storage*, 13(1):3:1–3:??, March 2017. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ZB16] Zhang:2016:EDP Yihua Zhang and Marina Blanton. Efficient dynamic provable possession of remote data via update trees. *ACM Transactions on Storage*, 12(2):9:1–9:??, February 2016. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ZCJ⁺20] Zheng:2020:SDR Qing Zheng, Charles D. Cranor, Ankush Jain, Gregory R. Ganger, Garth A. Gibson, George Amvrosiadis, Bradley W. Settlemyer, and Gary Grider. Streaming data reorganization at scale with DeltaFS indexed massive directories. *ACM Transactions on Storage*, 16(4):23:1–23:31, November 2020. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3415581>.
- [ZCJ⁺21] Zhan:2021:CAW Yang Zhan, Alex Conway, Yizheng Jiao, Nirjhar Mukherjee, Ian Groombridge, Michael A. Bender, Martin Farach-Colton, William Jannen, Rob Johnson, Donald E. Porter, and Jun Yuan. Copy-on-abundant-write for nimble file system clones. *ACM Transactions on Storage*, 17(1):5:1–5:27, February 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3415581>.

- [//dl.acm.org/doi/10.1145/3423495](https://dl.acm.org/doi/10.1145/3423495).
- [ZCL⁺21] Jiachen Zhang, Lixiao Cui, Peng Li, Xiaoguang Liu, and Gang Wang. Toward virtual machine image management for persistent memory. *ACM Transactions on Storage*, 17(3):20:1–20:24, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3450976>.
- [ZD21] **Zhang:2021:TVM** Baoquan Zhang and David H. C. Du. NVLSM: a persistent memory key-value store using log-structured merge tree with accumulative compaction. *ACM Transactions on Storage*, 17(3):23:1–23:26, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3453300>.
- [ZCL⁺24] **Zhang:2024:DID** [ZDZ⁺21] Datong Zhang, Yuhui Deng, Yi Zhou, Yifeng Zhu, and Xiao Qin. Improving the performance of deduplication-based backup systems via container utilization based hot fingerprint entry distilling. *ACM Transactions on Storage*, 20(4):21:1–21:??, November 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3662735>.
- [ZCW⁺21] **Zhu:2021:ORE** [ZFX⁺18] Bohong Zhu, Youmin Chen, Qing Wang, Youyou Lu, and Jiwu Shu. Octopus +: an RDMA-enabled distributed persistent memory file system. *ACM Transactions on Storage*, 17(3):19:1–19:25, August 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3448418>.
- Zhang:2021:IPD** [Zhou:2018:EEE] Datong Zhang, Yuhui Deng, Yi Zhou, Yifeng Zhu, and Xiao Qin. Improving the performance of deduplication-based backup systems via container utilization based hot fingerprint entry distilling. *ACM Transactions on Storage*, 17(4):30:1–30:23, November 2021. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3459626>.
- Deng Zhou, Vania Fang, Tao Xie, Wen Pan, Ram Kesavan, Tony Lin, and Naresh Patel. Empirical evaluation and enhancement of enterprise storage system request scheduling. *ACM Transactions on Storage*, 14(2):14:1–14:??, May 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).

- [ZHS23] **Zheng:2023:THP** Shengan Zheng, Morteza Hoseinzadeh, Steven Swanson, and Linpeng Huang. TPFS: a high-performance tiered file system for persistent memories and disks. *ACM Transactions on Storage*, 19(2):20:1–20:28, May 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3580280>.
- [ZHW19] **Zuo:2019:LHH** Pengfei Zuo, Yu Hua, and Jie Wu. Level hashing: a high-performance and flexible-resizing persistent hashing index structure. *ACM Transactions on Storage*, 15(2):13:1–13:??, June 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3322096.
- [ZH23] **Zhang:2023:LVA** Ming Zhang, Yu Hua, Pengfei Zuo, and Lurong Liu. Localized validation accelerates distributed transactions on disaggregated persistent memory. *ACM Transactions on Storage*, 19(3):21:1–21:35, August 2023. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3582012>.
- [ZIJ+06] **Zadok:2006:IFS** Erez Zadok, Rakesh Iyer, Nikolai Joukov, Gopalan Sivathanu, and Charles P. Wright. On incremental file system development. *ACM Transactions on Storage*, 2(2):161–196, May 2006. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ZJP+18] **Zhan:2018:EDM** Yang Zhan, Yizheng Jiao, Donald E. Porter, Alex Conway, Eric Knorr, Martin Farach-Colton, Michael A. Bender, Jun Yuan, William Jannen, and Rob Johnson. Efficient directory mutations in a full-path-indexed file system. *ACM Transactions on Storage*, 14(3):22:1–22:??, November 2018. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ZJQ+15] **Zhang:2015:FFC** Ji Zhang, Xunfei Jiang, Xiao Qin, Wei-Shinn Ku, and Mohammed I. Alghamdi. Frog: a framework for context-based file systems. *ACM Transactions on Storage*, 11(3):11:1–11:??, July 2015. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic).
- [ZLA+24] **Zhao:2024:EEH** Nannan Zhao, Muhui Lin, Hadeel Albahar, Arnab K. Paul, Zhijie Huan, Subil Abraham, Keren Chen, Vasily

- Tarasov, Dimitrios Skourtis, Ali Anwar, and Ali Butt. An end-to-end high-performance deduplication scheme for Docker registries and Docker container storage systems. *ACM Transactions on Storage*, 20(3):18:1–18:??, August 2024. CODEN ????, ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3643819>. **Zhang:2019:LGF**
- [ZLL19] Yiming Zhang, Dongsheng Li, and Ling Liu. Leveraging locality for fast failure recovery in distributed RAM storage. *ACM Transactions on Storage*, 15(1):3:1–3:??, April 2019. CODEN ????, ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3289604. **Zhang:2020:PEE**
- [ZLL⁺20] Yiming Zhang, Huiba Li, Shengyun Liu, Jiawei Xu, and Guangtao Xue. PBS: an efficient erasure-coded block storage system based on speculative partial writes. *ACM Transactions on Storage*, 16(1):6:1–6:25, April 2020. CODEN ????, ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3365839>. **Zhang:2023:HBS**
- [ZLLH23] Yiming Zhang, Huiba Li, Shengyun Liu, and Peng Huang. Hybrid block storage for efficient cloud volume service. *ACM Transactions on Storage*, 19(4):35:1–35:??, November 2023. CODEN ????, ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3596446>. **Zheng:2022:WBD**
- [ZLQ⁺22] Jianwei Zheng, Zhenhua Li, Yuanhui Qiu, Hao Lin, He Xiao, Yang Li, and Yunhao Liu. WebAssembly-based delta sync for cloud storage services. *ACM Transactions on Storage*, 18(3):24:1–24:31, August 2022. CODEN ????, ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3502847>. **Zhang:2020:CFF**
- [ZRRW20] Shuanglong Zhang, Robert Roy, Leah Rumancik, and An-I Andy Wang. The composite-file system: Decoupling one-to-one mapping of files and metadata for better performance. *ACM Transactions on Storage*, 16(1):5:1–5:18, April 2020. CODEN ????, ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3366684>. **Zhang:2006:SPV**
- [ZSW⁺06] Jianyong Zhang, Anand Sivasubramaniam, Qian Wang, Alma Riska, and Erik Riedel.

- Storage performance virtualization via throughput and latency control. *ACM Transactions on Storage*, 2(3):283–308, August 2006. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3523699>. **Zhang:2023:OCD**
- [ZSXZ07] Guangyan Zhang, Jiwu Shu, Wei Xue, and Weimin Zheng. SLAS: An efficient approach to scaling round-robin striped volumes. *ACM Transactions on Storage*, 3(1):??, March 2007. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). **Zhang:2007:SEA**
- [ZT20] Tianli Zhou and Chao Tian. Fast erasure coding for data storage: a comprehensive study of the acceleration techniques. *ACM Transactions on Storage*, 16(1):7:1–7:24, April 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3375554>. **Zhou:2020:FEC**
- [ZWF22] Yang Zhou, Fang Wang, and Dan Feng. A disk failure prediction method based on active semi-supervised learning. *ACM Transactions on Storage*, 18(4):35:1–35:??, November 2022. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3523699>. **Zhou:2022:DFP**
- [ZWG⁺23] Yiming Zhang, Li Wang, Shun Gai, Qiwen Ke, Wenhao Li, Zhenlong Song, Guangtao Xue, and Jiwu Shu. Oasis: Controlling data migration in expansion of object-based storage systems. *ACM Transactions on Storage*, 19(1):2:1–2:22, February 2023. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3568424>. **Zhang:2023:OCD**
- [ZWH⁺17] You Zhou, Fei Wu, Ping Huang, Xubin He, Changsheng Xie, and Jian Zhou. Understanding and alleviating the impact of the flash address translation on solid state devices. *ACM Transactions on Storage*, 13(2):14:1–14:??, June 2017. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). **Zhou:2017:UAI**
- [ZWM⁺20] Guangyan Zhang, Zhufan Wang, Xiaosong Ma, Songlin Yang, Zican Huang, and Weimin Zheng. Determining data distribution for large disk enclosures with 3-D data templates. *ACM Transactions on Storage*, 15(4):27:1–27:38, February 2020. CODEN ????? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3523699>. **Zhang:2020:DDD**

- [//dl.acm.org/doi/abs/10.1145/3342858](https://dl.acm.org/doi/abs/10.1145/3342858).
- [ZXJ11] Xuechen Zhang, Yuehai Xu, and Song Jiang. YouChoose: Choosing your storage device as a performance interface to consolidated I/O service. *ACM Transactions on Storage*, 7(3):9:1–9:??, October 2011. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Zhang:2011:YCY**
- [ZYWX22] Yiwen Zhang, Ting Yao, Jiguang Wan, and Changsheng Xie. Building GC-free key-value store on HM-SMR drives with ZoneFS. *ACM Transactions on Storage*, 18(3):23:1–23:23, August 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3502846>. **Zhang:2022:BGF**
- [ZYL24] Jia Zhao, Zuoru Yang, Jingwei Li, and Patrick P. C. Lee. Encrypted data reduction: Removing redundancy from encrypted data in outsourced storage. *ACM Transactions on Storage*, 20(4):27:1–27:??, November 2024. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3685278>. **Zhao:2024:EDR**
- [ZYL13] Guangyan Zhang, Weimin Zheng, and Keqin Li. Design and evaluation of a new approach to RAID-0 scaling. *ACM Transactions on Storage*, 9(4):11:1–11:??, November 2013. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). **Zhang:2013:DEN**
- [ZYL+19a] Yu Zhang, Jin Zhao, Xiaofei Liao, Hai Jin, Lin Gu, Haikun Liu, Bingsheng He, and Ligang He. CGraph: a distributed storage and processing system for concurrent iterative graph analysis jobs. *ACM Transactions on Storage*, 15(2):10:1–10:??, June 2019. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3319406. **Zhang:2019:CDS**
- [ZYS+22] Xiangyu Zou, Jingsong Yuan, Philip Shilane, Wen Xia, Haijun Zhang, and Xuan Wang. From hyper-dimensional structures to linear structures: Maintaining deduplicated data’s locality. *ACM Transactions on Storage*, 18(3):25:1–25:28, August 2022. CODEN ???? ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3507921>. **Zou:2022:HDS**
- [ZZL+19b] Tao Zhu, Zhuoyue Zhao,

Feifei Li, Weining Qian, Aoying Zhou, Dong Xie, Ryan Stutsman, Haining Li, and Huiqi Hu. SolarDB: Toward a shared-everything database on distributed log-structured storage. *ACM Transactions on Storage*, 15(2):11:1–11:??, June 2019. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3318158.

Zhou:2024:CAC

[ZZL⁺24]

Yuanhui Zhou, Jian Zhou, Kai Lu, Ling Zhan, Peng Xu, Peng Wu, Shuning Chen, Xian Liu, and Jiguang Wan. A contract-aware and cost-effective LSM store for cloud storage with low latency spikes. *ACM Transactions on Storage*, 20(2):8:1–8:??, May 2024. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3643851>.

Zuo:2022:ROS

[ZZS⁺22]

Pengfei Zuo, Qihui Zhou, Jiazhao Sun, Liu Yang, Shuangwu Zhang, Yu Hua, James Cheng, Rongfeng He, and Huabing Yan. RACE: One-sided RDMA-conscious extendible hashing. *ACM Transactions on Storage*, 18(2):11:1–11:29, May 2022. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic). URL <https://dl.acm.org/doi/10.1145/3511895>.

[/dl.acm.org/doi/10.1145/3511895](https://dl.acm.org/doi/10.1145/3511895).

Zeng:2017:CCS

[ZZW⁺17]

Lingfang Zeng, Zehao Zhang, Yang Wang, Dan Feng, and Kenneth B. Kent. CosaFS: a cooperative shingle-aware file system. *ACM Transactions on Storage*, 13(4):34:1–34:??, December 2017. CODEN ????. ISSN 1553-3077 (print), 1553-3093 (electronic).