## Using data clustering to improve cleaning performance

Software - Practice and Experience

29, 267-290

DOI: 10.1002/(sici)1097-024x(199903)29:3<267::aid-spe233>3.0.co;2-t

**Citation Report** 

#	Article	IF	CITATIONS
1	A space-efficient flash translation layer for CompactFlash systems. IEEE Transactions on Consumer Electronics, 2002, 48, 366-375.	3.0	571
2	A Space-Efficient Flash Memory Software for Mobile Devices. Lecture Notes in Computer Science, 2005, , 72-78.	1.0	1
3	Mapping Structures for Flash Memories: Techniques and Open Problems. , 0, , .		14
4	FAB: Flash-Aware Buffer Management Policy for Portable Media Players. IEEE Transactions on Consumer Electronics, 2006, 52, 485-493.	3.0	206
5	Real-Time Support of Flash Memory File System for Embedded Applications. , 0, , .		2
6	Improving the Reliability of JFFS2. , 2006, , .		1
7	An Intelligent Garbage Collection Algorithm for Flash Memory Storages. Lecture Notes in Computer Science, 2006, , 1019-1027.	1.0	14
8	CATA: A Garbage Collection Scheme for Flash Memory File Systems. Lecture Notes in Computer Science, 2006, , 103-112.	1.0	38
9	Uniformity improving page allocation for flash memory file systems. , 2007, , .		15
10	Block recycling schemes and their cost-based optimization in nand flash memory based storage system. , 2007, , .		20
11	Endurance enhancement of flash-memory storage systems. Proceedings - Design Automation Conference, 2007, , .	0.0	142
12	A multi-channel architecture for high-performance NAND flash-based storage system. Journal of Systems Architecture, 2007, 53, 644-658.	2.5	126
13	Chameleon: A High Performance Flash/FRAM Hybrid Solid State Disk Architecture. IEEE Computer Architecture Letters, 2008, 7, 17-20.	1.0	39
14	Configurable Flash-Memory Management: Performance versus Overheads. IEEE Transactions on Computers, 2008, 57, 1571-1583.	2.4	17
15	Memory management scheme for cost-effective disk-on-modules in consumer electronics devices. IEEE Transactions on Consumer Electronics, 2008, 54, 1776-1783.	3.0	3
16	Hybrid solid-state disks: Combining heterogeneous NAND flash in large SSDs. , 2008, , .		19
17	A New FTL-based Flash Memory Management Scheme with Fast Cleaning Mechanism. , 2008, , .		10
18	Improving Hybrid Flash-Disk Storage by Incorporating Sequential Pattern Mining into Fully-Associative Sector Translation. , 2009, , .		3

#	Article	IF	CITATIONS
19	Design and implementation of a uniformity-improving page allocation scheme for flash-based storage systems. Design Automation for Embedded Systems, 2009, 13, 5-25.	0.7	2
20	Improving energy efficiency for flash memory based embedded applications. Journal of Systems Architecture, 2009, 55, 15-24.	2.5	3
21	FLARE: A design environment for FLASH-based space applications. , 2009, , .		4
22	Co-optimization of buffer layer andÂFTL inÂhigh-performance flash-based storage systems. Design Automation for Embedded Systems, 2010, 14, 415-443.	0.7	5
23	ComboFTL: Improving performance and lifespan of MLC flash memory using SLC flash buffer. Journal of Systems Architecture, 2010, 56, 641-653.	2.5	65
24	An adaptive partitioning scheme for DRAM-based cache in Solid State Drives. , 2010, , .		27
25	An Optimization Algorithm for UBIFS Wear-Leveling. , 2010, , .		0
26	Intelligent Data Prefetching for Hybrid Flash-Disk Storage Using Sequential Pattern Mining Technique. , 2010, , .		6
27	Improving Flash Wear-Leveling by Proactively Moving Static Data. IEEE Transactions on Computers, 2010, 59, 53-65.	2.4	101
28	Hydra: A Block-Mapped Parallel Flash Memory Solid-State Disk Architecture. IEEE Transactions on Computers, 2010, 59, 905-921.	2.4	80
29	Improving flash translation layer performance by supporting large superblocks. IEEE Transactions on Consumer Electronics, 2010, 56, 642-650.	3.0	8
30	Flash Controller Design for FPGA Application. , 2010, , .		6
31	FASTer FTL for Enterprise-Class Flash Memory SSDs. , 2010, , .		29
32	Container Marking: Combining Data Placement, Garbage Collection and Wear Levelling for Flash. , 2011, , .		15
33	FLASH modelling for wearleveling algorithms. , 2011, , .		1
34	Detecting Solid-State Disk Geometry for Write Pattern Optimization. , 2011, , .		0
35	Rejuvenator: A static wear leveling algorithm for NAND flash memory with minimized overhead. , 2011, , , .		128
36	Ozone (O3): An Out-of-Order Flash Memory Controller Architecture. IEEE Transactions on Computers, 2011, 60, 653-666.	2.4	58

#	Article	IF	Citations
37	Techniques for improving performance of the FAST (fully-associative sector translation) flash translation layer. IEEE Transactions on Consumer Electronics, 2011, 57, 1740-1748.	3.0	3
38	FTL algorithms for NAND-type flash memories. Design Automation for Embedded Systems, 2011, 15, 191-224.	0.7	31
39	A Real-Time Flash Memory Storage System in Embedded Environment. Advanced Materials Research, 0, 341-342, 807-810.	0.3	0
40	Dual Greedy: Adaptive garbage collection for page-mapping solid-state disks. , 2012, , .		1
41	DuLASP: A Workload-Aware Flash Translation Layer Exploiting both Temporal and Spatial Localities. , 2012, , .		2
42	Flash-aware linux swap system for portable consumer electronics. IEEE Transactions on Consumer Electronics, 2012, 58, 419-427.	3.0	7
43	OSSD: A case for object-based solid state drives. , 2013, , .		12
44	μ*-Tree: An Ordered Index Structure for NAND Flash Memory with Adaptive Page Layout Scheme. IEEE Transactions on Computers, 2013, 62, 784-797.	2.4	17
45	An empirical study of hot/cold data separation policies in solid state drives (SSDs). , 2013, , .		26
46	Improving flash write performance by using update frequency. Proceedings of the VLDB Endowment, 2013, 6, 733-744.	2.1	40
47	ReHypar: A Recursive Hybrid Chunk Partitioning Method Using NAND-Flash Memory SSD. Scientific World Journal, The, 2014, 2014, 1-9.	0.8	0
48	Garbage collection and wear leveling for flash memory: Past and future. , 2014, , .		57
49	On the necessity of hot and cold data identification to reduce the write amplification in flash-based SSDs. Performance Evaluation, 2014, 82, 1-14.	0.9	18
50	System-Wide Cooperative Optimization for NAND Flash-Based Mobile Systems. IEEE Transactions on Computers, 2014, 63, 2052-2065.	2.4	1
51	Design and Implementation of a Log-Structured File System for Flash-Based Solid State Drives. IEEE Transactions on Computers, 2014, 63, 2215-2227.	2.4	4
52	Stochastic modeling and optimization of garbage collection algorithms in solid-state drive systems. Queueing Systems, 2014, 77, 115-148.	0.6	3
53	Flash-Aware High-Performance and Endurable Cache. , 2015, , .		7
54	Data-centric garbage collection for NAND flash devices. , 2015, , .		3

#	Article	IF	CITATIONS
55	WARM: Improving NAND flash memory lifetime with write-hotness aware retention management. , 2015, , $\cdot$		79
56	Logical data packing for multi-chip flash-memory storage systems. , 2015, , .		1
57	Zombie Chasing: Efficient Flash Management Considering Dirty Data in the Buffer Cache. IEEE Transactions on Computers, 2015, 64, 569-581.	2.4	11
58	Efficient Victim Block Selection for Flash Storage Devices. IEEE Transactions on Computers, 2015, 64, 3444-3460.	2.4	9
59	Improving MLC Flash Performance with Workload-Aware Differentiated ECC. , 2016, , .		2
60	FastRead: Improving Read Performance for Multilevel-Cell Flash Memory. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 2998-3002.	2.1	14
61	Enabling sub-blocks erase management to boost the performance of 3D NAND flash memory. , 2016, , .		20
62	High-Performance and Endurable Cache Management for Flash-Based Read Caching. IEEE Transactions on Parallel and Distributed Systems, 2016, 27, 3518-3531.	4.0	7
63	LBA Scrambler: A NAND Flash Aware Data Management Scheme for High-Performance Solid-State Drives. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 115-128.	2.1	6
64	QoS-Aware Flash Memory Controller. , 2017, , .		6
65	ASA-FTL: An adaptive separation aware flash translation layer for solid state drives. Parallel Computing, 2017, 61, 3-17.	1.3	13
66	Using Disturbance Compensation and Data Clustering (DC)2 to Improve Reliability and Performance of 3D MLC Flash Memory. , 2017, , .		7
67	VST: A virtual stress testing framework for discovering bugs in SSD flash-translation layers. , 2017, , .		2
68	Don't make cache too complex: A simple probability-based cache management scheme for SSDs. PLoS ONE, 2017, 12, e0174375.	1.1	1
69	FastGC: Accelerate Garbage Collection via an Efficient Copyback-based Data Migration in SSDs. , 2018, , .		4
70	FastGC. , 2018, , .		6
71	Efficient Wear Leveling in NAND Flash Memory. Springer Series in Advanced Microelectronics, 2018, , 343-367.	0.3	0
72	Reinforcement Learning based Background Segment Cleaning for Log-structured File System on Mobile Devices. , 2019, , .		5

<u></u>	 D
( ITAT	REDUDT
CITAL	<b>KLFOKI</b>

#	Article	IF	CITATIONS
73	Isolation: Inexpensively separating cold data via garbage collection to improve the lifetime and performance of NAND flash SSDs. Concurrency Computation Practice and Experience, 2021, 33, e5460.	1.4	5
74	Simultaneously reducing cost and improving performance of NVM-based block devices via transparent data compression. , 2019, , .		3
75	Thermo-GC: Reducing Write Amplification by Tagging Migrated Pages during Garbage Collection. , 2019,		3
76	Boosting the Performance of SSDs via Fully Exploiting the Plane Level Parallelism. IEEE Transactions on Parallel and Distributed Systems, 2020, 31, 2185-2200.	4.0	12
77	On Minimizing Internal Data Migrations of Flash Devices via Lifetime-Retention Harmonization. IEEE Transactions on Computers, 2021, 70, 428-439.	2.4	5
78	An Efficient Data Migration Scheme to Optimize Garbage Collection in SSDs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 430-443.	1.9	8
79	Gather Interface for Freezing Pages in Flash Storage. IEEE Access, 2021, 9, 102542-102548.	2.6	0
80	A Crash Recovery Scheme for a Hybrid Mapping FTL in NAND Flash Storage Devices. Electronics (Switzerland), 2021, 10, 327.	1.8	5
81	SSD-based Workload Characteristics and Their Performance Implications. ACM Transactions on Storage, 2021, 17, 1-26.	1.4	38
82	Efficiently Reclaiming Space in a Log Structured Store. , 2021, , .		0
83	Design and Implementation of Virtual Stream Management for NAND Flash-Based Storage. IEEE Transactions on Consumer Electronics, 2021, 67, 149-157.	3.0	8
84	Reducing write amplification in flash by death-time prediction of logical block addresses. , 2021, , .		11
85	Update Frequency-Directed Subpage Management for Mitigating Garbage Collection and DRAM Overheads. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 2467-2480.	1.9	4
86	MAGIC: Making IMR-Based HDD Perform Like CMR-Based HDD. IEEE Transactions on Computers, 2022, 71, 643-657.	2.4	3
87	Competitive Analysis of Flash-Memory Algorithms. Lecture Notes in Computer Science, 2006, , 100-111.	1.0	41
88	Tuning the Ext4 Filesystem Performance for Android-Based Smartphones. Advances in Intelligent and Soft Computing, 2012, , 745-752.	0.2	6
89	Efficient Wear Leveling in NAND Flash Memory. Springer Series in Advanced Microelectronics, 2013, , 233-257.	0.3	3
90	A group-based wear-leveling algorithm for large-capacity flash memory storage systems. , 2007, , .		75

#	Article	IF	CITATIONS
91	2R. Proceedings of the VLDB Endowment, 2020, 13, 2004-2017.	2.1	7
92	A Buffer Management Issue in Designing SSDs for LFSs. IEICE Transactions on Information and Systems, 2010, E93-D, 1644-1647.	0.4	5
95	SCJ: Segment Cleaning Journaling for Log-Structured File Systems. IEEE Access, 2021, 9, 142437-142448.	2.6	1
96	K Partition-Based Even Wear-Leveling Policy for Flash Memory. The KIPS Transactions PartD, 2006, 13D, 377-382.	0.2	0
97	A Wear-leveling Scheme for NAND Flash Memory based on Update Patterns of Data. Journal of Korean Institute of Intelligent Systems, 2010, 20, 761-767.	0.0	1
98	Wear-Leveling Optimization of Android YAFFS2 File System for NAND Based Embedded Devices. Lecture Notes in Computer Science, 2014, , 12-21.	1.0	0
99	HFM: Hybrid File Mapping Algorithm for SSD Space Utilization. Applied Mathematics and Information Sciences, 2014, 8, 2251-2265.	0.7	0
101	How to improve the performance of the d-choices garbage collection algorithm in flash-based SSDs. , 2020, , .		1
104	A Machine-Learning-based Data Classifier to Reduce the Write Amplification in SSDs. , 2020, , .		2
105	Wear leveling in SSDs considered harmful. , 2022, , .		5
106	Cocktail: Mixing Data With Different Characteristics to Reduce Read Reclaims for nand Flash Memory. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2023, 42, 2336-2349.	1.9	3
107	WAFLASH: Taming Unaligned Writes in Solid-State Disks. , 2022, , .		0
110	On the Cost of Near-Perfect Wear Leveling in Flash-Based SSDs. ACM Transactions on Modeling and Performance Evaluation of Computing Systems, 2023, 8, 1-22.	0.8	0
111	An Efficient Hot-Cold Data Separation Garbage Collection Algorithm Based on Logical Interval in NAND Flash-Based Consumer Electronics. IEEE Transactions on Consumer Electronics, 2023, 69, 431-440.	3.0	1
113	ACE: An Analog Cell Emulator for Dependability Study of NAND Flash Memory. , 2023, , .		0