Abu Sebastian

List of Publications by Year
in descending order

201 papers	11,437 citations	53939 47 h-index	37326 100 g-index
207 all docs	207 docs citations	207 times ranked	7880 citing authors

#	Article	IF	Citations
1	Generalized Key-Value Memory to Flexibly Adjust Redundancy in Memory-Augmented Networks. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 10993-10998.	7.2	4
2	Mechanism and Impact of Bipolar Current Voltage Asymmetry in Computational Phaseâ€Change Memory. Advanced Materials, 2023, 35, e2201238.	11.1	8
3	2022 roadmap on neuromorphic computing and engineering. Neuromorphic Computing and Engineering, 2022, 2, 022501.	2.8	217
4	Precision of bit slicing with in-memory computing based on analog phase-change memory crossbars. Neuromorphic Computing and Engineering, 2022, 2, 014009.	2.8	18
5	HERMES-Coreâ€"A 1.59-TOPS/mm² PCM on 14-nm CMOS In-Memory Compute Core Using 300-ps/LSB Linearized CCO-Based ADCs. IEEE Journal of Solid-State Circuits, 2022, 57, 1027-1038.	3.5	49
6	MNEMOSENE: Tile Architecture and Simulator for Memristor-based Computation-in-memory. ACM Journal on Emerging Technologies in Computing Systems, 2022, 18, 1-24.	1.8	7
7	Interconnects for DNA, Quantum, In-Memory, and Optical Computing: Insights From a Panel Discussion. IEEE Micro, 2022, 42, 40-49.	1.8	11
8	Phase-change memtransistive synapses for mixed-plasticity neural computations. Nature Nanotechnology, 2022, 17, 507-513.	15.6	50
9	Neuromorphic computing: Challenges from quantum materials to emergent connectivity. Applied Physics Letters, 2022, 120, .	1.5	9
10	Experimental validation of state equations and dynamic route maps for phase change memristive devices. Scientific Reports, 2022, 12, 6488.	1.6	5
11	Structural Assessment of Interfaces in Projected Phase-Change Memory. Nanomaterials, 2022, 12, 1702.	1.9	2
12	Memristive technologies for data storage, computation, encryption, and radio-frequency communication. Science, 2022, 376, .	6.0	220
13	An integrated photonics engine for unsupervised correlation detection. Science Advances, 2022, 8, .	4.7	8
14	Optimised weight programming for analogue memory-based deep neural networks. Nature Communications, 2022, 13, .	5.8	21
15	A Multi-Memristive Unit-Cell Array With Diagonal Interconnects for In-Memory Computing. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3522-3526.	2.2	3
16	Parallel convolutional processing using an integrated photonic tensor core. Nature, 2021, 589, 52-58.	13.7	723
17	Control Systems for Nanopositioning. , 2021, , 401-409.		0
18	Mushroom-Type phase change memory with projection liner: An array-level demonstration of conductance drift and noise mitigation. , 2021, , .		11

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19	Robust high-dimensional memory-augmented neural networks. Nature Communications, 2021, 12, 2468.	5.8	50
20	Architecting more than Moore. , 2021, , .		0
21	Accurate Weight Mapping in a Multi-Memristive Synaptic Unit. , 2021, , .		1
22	Energy Efficient In-Memory Hyperdimensional Encoding for Spatio-Temporal Signal Processing. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1725-1729.	2.2	6
23	HERMES Core â€“ A 14nm CMOS and PCM-based In-Memory Compute Core using an array of 300ps/LSB Linearized CCO-based ADCs and local digital processing. , 2021, , .		48
24	Measurement of Onset of Structural Relaxation in Meltâ€Quenched Phase Change Materials. Advanced Functional Materials, 2021, 31, 2104422.	7.8	8
25	Nanopatterning of Phase-Change Material Thin Films For Tunable Photonics. , 2021, , .		0
26	Real-time Language Recognition using Hyperdimensional Computing on Phase-change Memory Array. , 2021, , .		2
27	Efficient Pipelined Execution of CNNs Based on In-Memory Computing and Graph Homomorphism Verification. IEEE Transactions on Computers, 2021, 70, 922-935.	2.4	9
28	A Flexible and Fast PyTorch Toolkit for Simulating Training and Inference on Analog Crossbar Arrays. , 2021, , .		48
29	Projected Mushroom Type Phaseâ€Change Memory. Advanced Functional Materials, 2021, 31, 2106547.	7.8	21
30	Accelerating Inference of Convolutional Neural Networks Using In-memory Computing. Frontiers in Computational Neuroscience, 2021, 15, 674154.	1.2	0
31	Ohm's Law + Kirchhoff's Current Law = Better AI: Neural-Network Processing Done in Memory with Analog Circuits will Save Energy. IEEE Spectrum, 2021, 58, 44-49.	0.5	14
32	Temperature sensitivity of analog in-memory computing using phase-change memory. , 2021, , .		8
33	File Classification Based on Spiking Neural Networks. , 2020, , .		2
34	Memristorsâ€"From Inâ€Memory Computing, Deep Learning Acceleration, and Spiking Neural Networks to the Future of Neuromorphic and Bioâ€Inspired Computing. Advanced Intelligent Systems, 2020, 2, 2000085.	3.3	143
35	Accurate Emulation of Memristive Crossbar Arrays for In-Memory Computing. , 2020, , .		0
36	Inâ€Memory Database Query. Advanced Intelligent Systems, 2020, 2, 2000141.	3.3	19

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37	ESSOP: Efficient and Scalable Stochastic Outer Product Architecture for Deep Learning. , 2020, , .		0
38	Accurate deep neural network inference using computational phase-change memory. Nature Communications, 2020, 11, 2473.	5.8	263
39	Mixed-Precision Deep Learning Based on Computational Memory. Frontiers in Neuroscience, 2020, 14, 406.	1.4	61
40	State dependence and temporal evolution of resistance in projected phase change memory. Scientific Reports, 2020, 10, 8248.	1.6	14
41	In-memory hyperdimensional computing. Nature Electronics, 2020, 3, 327-337.	13.1	145
42	Experimental Demonstration of Supervised Learning in Spiking Neural Networks with Phase-Change Memory Synapses. Scientific Reports, 2020, 10, 8080.	1.6	48
43	Memory devices and applications for in-memory computing. Nature Nanotechnology, 2020, 15, 529-544.	15.6	968
44	Role of resistive memory devices in brain-inspired computing. , 2020, , 3-16.		7
45	Memristive devices for deep learning applications. , 2020, , 313-327.		0
46	Memristive devices for spiking neural networks. , 2020, , 399-405.		1
47	Phase-change memory. , 2020, , 63-96.		3
48	Memristive devices as computational memory. , 2020, , 167-174.		0
49	An overview of phase-change memory device physics. Journal Physics D: Applied Physics, 2020, 53, 213002.	1.3	202
50	Emerging materials in neuromorphic computing: Guest editorial. APL Materials, 2020, 8, .	2.2	16
51	Temperature Compensation Schemes for In-Memory Computing using Phase-Change Memory. , 2020, , .		2
52	Precision of synaptic weights programmed in phase-change memory devices for deep learning inference. , 2020, , .		17
53	On-chip Phase Change Optical Matrix Multiplication Core. , 2020, , .		9
54	Computational phase-change memory: beyond von Neumann computing. Journal Physics D: Applied Physics, 2019, 52, 443002.	1.3	78

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55	Computational memory-based inference and training of deep neural networks. , 2019, , .		9
56	Training Neural Networks using Memristive Devices with Nonlinear Accumulative Behavior. , 2019, , .		1
57	Building Next-Generation AI systems: Co-Optimization of Algorithms, Architectures, and Nanoscale Memristive Devices. , 2019, , .		1
58	Low-Power Neuromorphic Hardware for Signal Processing Applications: A Review of Architectural and System-Level Design Approaches. IEEE Signal Processing Magazine, 2019, 36, 97-110.	4.6	88
59	In-Memory Computing using Electrical and Photonic Memory Devices. , 2019, , .		1
60	Deep learning acceleration based on in-memory computing. IBM Journal of Research and Development, 2019, 63, 7:1-7:16.	3.2	18
61	Computational memory-based inference and training of deep neural networks. , 2019, , .		5
62	Reliability Challenges with Materials for Analog Computing. , 2019, , .		14
63	Applications of Computation-In-Memory Architectures based on Memristive Devices. , 2019, , .		24
64	Multi-ReRAM Synapses for Artificial Neural Network Training. , 2019, , .		8
65	Localised states and their capture characteristics in amorphous phase-change materials. Scientific Reports, 2019, 9, 6592.	1.6	5
66	In-memory computing on a photonic platform. Science Advances, 2019, 5, eaau5759.	4.7	238
67	Phase-Change Memory Models for Deep Learning Training and Inference. , 2019, , .		11
68	Phase-change memory enables energy-efficient brain-inspired computing. , 2019, , .		0
69	All-photonic in-memory computing based on phase-change materials. , 2019, , .		0
70	Mixed-precision in-memory computing. Nature Electronics, 2018, 1, 246-253.	13.1	315
71	Fluxâ€"Charge Memristor Model for Phase Change Memory. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 111-114.	2.2	26
72	Memristive effects in oxygenated amorphous carbon nanodevices. Nanotechnology, 2018, 29, 035201.	1.3	12

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73	Impact of conductance drift on multi-PCM synaptic architectures. , 2018, , .		8
74	8-bit Precision In-Memory Multiplication with Projected Phase-Change Memory. , 2018, , .		52
75	Spiking Neural Networks Enable Two-Dimensional Neurons and Unsupervised Multi-Timescale Learning. , 2018, , .		5
76	A phase-change memory model for neuromorphic computing. Journal of Applied Physics, 2018, 124, .	1.1	96
77	Tutorial: Brain-inspired computing using phase-change memory devices. Journal of Applied Physics, 2018, 124, .	1.1	206
78	Compressed Sensing With Approximate Message Passing Using In-Memory Computing. IEEE Transactions on Electron Devices, 2018, 65, 4304-4312.	1.6	78
79	Signal and noise extraction from analog memory elements for neuromorphic computing. Nature Communications, 2018, 9, 2102.	5.8	83
80	Exploiting the non-linear current-voltage characteristics for resistive memory readout. , 2018, , .		1
81	The Role of Short-Term Plasticity in Neuromorphic Learning: Learning from the Timing of Rate-Varying Events with Fatiguing Spike-Timing-Dependent Plasticity. IEEE Nanotechnology Magazine, 2018, 12, 45-53.	0.9	13
82	Collective Structural Relaxation in Phaseâ€Change Memory Devices. Advanced Electronic Materials, 2018, 4, 1700627.	2.6	67
83	Neuromorphic computing with multi-memristive synapses. Nature Communications, 2018, 9, 2514.	5.8	566
84	Mixed-precision architecture based on computational memory for training deep neural networks. , 2018, , .		42
85	Monatomic phase change memory. Nature Materials, 2018, 17, 681-685.	13.3	221
86	Neuromorphic computing using non-volatile memory. Advances in Physics: X, 2017, 2, 89-124.	1.5	629
87	Temperature Evolution in Nanoscale Carbon-Based Memory Devices Due to Local Joule Heating. IEEE Nanotechnology Magazine, 2017, 16, 806-811.	1.1	15
88	Temporal correlation detection using computational phase-change memory. Nature Communications, 2017, 8, 1115.	5.8	188
89	Stochastic weight updates in phase-change memory-based synapses and their influence on artificial neural networks. , 2017, , .		14
90	Fatiguing STDP: Learning from spike-timing codes in the presence of rate codes. , 2017, , .		7

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91	An efficient synaptic architecture for artificial neural networks. , 2017, , .		0
92	Compressed sensing recovery using computational memory. , 2017, , .		16
93	Supervised learning in spiking neural networks with MLC PCM synapses. , 2017, , .		8
94	Carbon-Based Resistive Memories. , 2016, , .		6
95	Joule heating effects in nanoscale carbon-based memory devices. , 2016, , .		1
96	The complete time/temperature dependence of I-V drift in PCM devices. , 2016, , .		6
97	Evidence for thermally assisted threshold switching behavior in nanoscale phase-change memory cells. Journal of Applied Physics, 2016, 119, .	1.1	78
98	Stochastic phase-change neurons. Nature Nanotechnology, 2016, 11, 693-699.	15.6	799
99	Recent Progress in Phase-Change<?Pub _newline ?>Memory Technology. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2016, 6, 146-162.	2.7	273
100	Detecting Correlations Using Phase-Change Neurons and Synapses. IEEE Electron Device Letters, 2016, 37, 1238-1241.	2.2	54
101	Probing the micromechanics of the fastest growing plant cell â€” The pollen tube. , 2016, 2016, 461-464.		6
102	Inherent stochasticity in phase-change memory devices. , 2016, , .		16
103	Massively Parallelized Pollen Tube Guidance and Mechanical Measurements on a Lab-on-a-Chip Platform. PLoS ONE, 2016, 11, e0168138.	1.1	36
104	High-field electrical transport in amorphous phase-change materials. Journal of Applied Physics, 2015, 118, .	1.1	25
105	Subthreshold electrical transport in amorphous phase-change materials. New Journal of Physics, 2015, 17, 093035.	1.2	44
106	A finite-element thermoelectric model for phase-change memory devices. , 2015, , .		5
107	Projected phase-change memory devices. Nature Communications, 2015, 6, 8181.	5.8	121
108	Oxygenated amorphous carbon for resistive memory applications. Nature Communications, 2015, 6, 8600.	5.8	86

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109	Accumulation-Based Computing Using Phase-Change Memories With FET Access Devices. IEEE Electron Device Letters, 2015, 36, 975-977.	2.2	52
110	A collective relaxation model for resistance drift in phase change memory cells. , 2015, , .		24
111	Dual-Stage Nanopositioning for High-Speed Scanning Probe Microscopy. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1035-1045.	3.7	65
112	Amorphous carbon active contact layer for reliable nanoelectromechanical switches. , 2014, , .		21
113	A high-bandwidth spintronic position sensor. Nanotechnology, 2014, 25, 375501.	1.3	5
114	Crystal growth within a phase change memory cell. Nature Communications, 2014, 5, 4314.	5.8	199
115	Multi-frequency atomic force microscopy: A system-theoretic approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7499-7504.	0.4	3
116	Nanopositioning With Impulsive State Multiplication: A Hybrid Control Approach. IEEE Transactions on Control Systems Technology, 2013, 21, 1352-1364.	3.2	15
117	Reliable MLC data storage and retention in phase-change memory after endurance cycling. , 2013, , .		13
118	Nonvolatile resistive memory devices based on hydrogenated amorphous carbon. , 2013, , .		4
119	A high-speed electromagnetically-actuated scanner for dual-stage nanopositioning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 125-130.	0.4	3
120	Analysis and design of multiresolution scan trajectories for high-speed scanning probe microscopy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 138-144.	0.4	3
121	A Hybrid Control Approach to Nanopositioning. , 2013, , 89-120.		1
122	High-speed multiresolution scanning probe microscopy based on Lissajous scan trajectories. Nanotechnology, 2012, 23, 185501.	1.3	137
123	Note: Micro-cantilevers with AlN actuators and PtSi tips for multi-frequency atomic force microscopy. Review of Scientific Instruments, 2012, 83, 096107.	0.6	7
124	Micro-cantilever design and modeling framework for quantitative multi-frequency AFM. , 2012, , .		1
125	Optimal scan trajectories for high-speed scanning probe microscopy. , 2012, , .		25
126	A dual-stage nanopositioning approach to high-speed scanning probe microscopy. , 2012, , .		9

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127	Tracking of Triangular References Using Signal Transformation for Control of a Novel AFM Scanner Stage. IEEE Transactions on Control Systems Technology, 2012, 20, 453-464.	3.2	48
128	Nanopositioning With Multiple Sensors: A Case Study in Data Storage. IEEE Transactions on Control Systems Technology, 2012, 20, 382-394.	3.2	18
129	A Framework for Reliability Assessment in Multilevel Phase-Change Memory. , 2012, , .		15
130	High-bandwidth nanopositioner with magnetoresistance based position sensing. Mechatronics, 2012, 22, 295-301.	2.0	42
131	Comparison of two non-linear control approaches to fast nanopositioning: Impulsive control and signal transformation. Mechatronics, 2012, 22, 302-309.	2.0	11
132	Special issue on â€œMechatronic systems for micro- and nanoscale applicationsâ€ Mechatronics, 2012, 22, 239-240.	2.0	0
133	Drift-resilient cell-state metric for multilevel phase-change memory. , 2011, , .		31
134	Resistance switching at the nanometre scale in amorphous carbon. New Journal of Physics, 2011, 13, 013020.	1.2	75
135	Systems and Control Approach to Electro-Thermal Sensing. Lecture Notes in Control and Information Sciences, 2011, , 137-152.	0.6	4
136	Impulsive control for fast nanopositioning. Nanotechnology, 2011, 22, 135501.	1.3	19
137	Fabrication of conducting AFM cantilevers with AlN-based piezoelectric actuators. Procedia Engineering, 2011, 25, 665-668.	1.2	9
138	Scanning probe microscopy based on magnetoresistive sensing. Nanotechnology, 2011, 22, 145501.	1.3	27
139	Non-resistance-based cell-state metric for phase-change memory. Journal of Applied Physics, 2011, 110, 084505.	1.1	52
140	Programming algorithms for multilevel phase-change memory. , 2011, , .		82
141	High-Speed, Ultra-High-Precision Nanopositioning: A Signal Transformation Approach. Lecture Notes in Control and Information Sciences, 2011, , 47-65.	0.6	0
142	Nanopositioning with multiple sensors: MISO control and inherent sensor fusion. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2012-2017.	0.4	1
143	High-speed spiral nanopositioning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2018-2023.	0.4	9
144	An analysis of signal transformation approach to triangular waveform tracking. Automatica, 2011, 47, 838-847.	3.0	15

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145	Force modulation for enhanced nanoscale electrical sensing. Nanotechnology, 2011, 22, 355706.	1.3	4
146	Ultra High Density Scanning Electrical Probe Phase-Change Memory for Archival Storage. Japanese Journal of Applied Physics, 2011, 50, 09MD04.	0.8	1
147	Impulsive control for nanopositioning. , 2011, , .		8
148	Ultra High Density Scanning Electrical Probe Phase-Change Memory for Archival Storage. Japanese Journal of Applied Physics, 2011, 50, 09MD04.	0.8	6
149	High-Bandwidth Intermittent-Contact Mode Scanning Probe Microscopy Using Electrostatically-Actuated Microcantilevers. Lecture Notes in Control and Information Sciences, 2011, , 119-135.	0.6	4
150	Tracking of high frequency piecewise affine signals using impulsive control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 90-95.	0.4	6
151	Tracking Control of a Novel AFM Scanner using Signal Transformation Method. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 84-89.	0.4	3
152	High Speed Nanopositioner with Magneto Resistance-Based Position Sensing. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 306-310.	0.4	3
153	Scanning Probe Microscopy using Higher-Mode Electrostatically-Actuated Microcantilevers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 212-219.	0.4	0
154	Estimation of amorphous fraction in multilevel phase-change memory cells. Solid-State Electronics, 2010, 54, 991-996.	0.8	34
155	Ultralow nanoscale wear through atom-by-atom attrition in silicon-containing diamond-like carbon. Nature Nanotechnology, 2010, 5, 181-185.	15.6	212
156	Stability of signal transformation method for triangular waveform tracking. , 2010, , .		0
157	Write strategies for multiterabit per square inch scanned-probe phase-change memories. Applied Physics Letters, 2010, 97, 173104.	1.5	25
158	High-throughput intermittent-contact scanning probe microscopy. Nanotechnology, 2010, 21, 075701.	1.3	8
159	Scanning Thermal Microscopy for Fast Multiscale Imaging and Manipulation. IEEE Nanotechnology Magazine, 2010, 9, 745-753.	1.1	7
160	Channel Modeling and Signal Processing for Probe Storage Channels. IEEE Journal on Selected Areas in Communications, 2010, 28, 143-157.	9.7	7
161	Multilevel phase-change memory. , 2010, , .		38
162	Force modulation for improved conductive-mode atomic force microscopy. , 2010, , .		1

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163	Real-Time Models of Electrostatically Actuated Cantilever Probes With Integrated Thermal Sensor for Nanoscale Interrogation. Journal of Microelectromechanical Systems, 2010, 19, 83-98.	1.7	5
164	Nanoscale phase transformation in Ge2Sb2Te5 using encapsulated scanning probes and retraction force microscopy. Review of Scientific Instruments, 2009, 80, 083701.	0.6	32
165	Signal transformation approach to fast nanopositioning. Review of Scientific Instruments, 2009, 80, 076101.	0.6	24
166	High-speed intermittent-contact mode scanning probe microscopy using cantilevers with integrated electrostatic actuator and thermoelectric sensor. , 2009, , .		0
167	Estimation of amorphous fraction in multilevel phase change memory cells. , 2009, , .		4
168	Encapsulated tips for reliable nanoscale conduction in scanning probe technologies. Nanotechnology, 2009, 20, 105701.	1.3	42
169	Feedback enhanced thermo-electric topography sensing. , 2009, , .		2
170	Nanoscale PtSi Tips for Conducting Probe Technologies. IEEE Nanotechnology Magazine, 2009, 8, 128-131.	1.1	62
171	Design of Power-Optimized Thermal Cantilevers for Scanning Probe Topography Sensing. , 2009, , .		10
172	Probe-based ultrahigh-density storage technology. IBM Journal of Research and Development, 2008, 52, 493-511.	3.2	129
173	Achieving Subnanometer Precision in a MEMS-Based Storage Device During Self-Servo Write Process. IEEE Nanotechnology Magazine, 2008, 7, 586-595.	1.1	77
174	Modeling and Experimental Identification of Silicon Microheater Dynamics: A Systems Approach. Journal of Microelectromechanical Systems, 2008, 17, 911-920.	1.7	52
175	On intermittent-contact mode sensing using electrostatically-actuated micro-cantilevers with integrated thermal sensors. , 2008, , .		6
176	Modeling and identification of the dynamics of electrostatically actuated microcantilever with integrated thermal sensor. , 2008, , .		8
177	Nanopositioning for probe-based data storage [Applications of Control]. IEEE Control Systems, 2008, 28, 26-35.	1.0	93
178	Track-follow Control for High-density Probe-based Storage Devices. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9236-9241.	0.4	0
179	A Self Servo Writing Scheme for a MEMS Storage Device with Sub-nanometer Precision. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9242-9247.	0.4	8
180	Jitter Investigation and Performance Evaluation of a Small-Scale Probe Storage Device Prototype. , 2007, , .		15

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181	Control of MEMS-Based Scanning-Probe Data-Storage Devices. IEEE Transactions on Control Systems Technology, 2007, 15, 824-841.	3.2	75
182	A Review of the Systems Approach to the Analysis of Dynamic-Mode Atomic Force Microscopy. IEEE Transactions on Control Systems Technology, 2007, 15, 952-959.	3.2	51
183	Towards faster data access: Seek operations in MEMS-based storage devices. , 2006, , .		2
184	Harnessing the transient signals in atomic force microscopy. International Journal of Robust and Nonlinear Control, 2005, 15, 805-820.	2.1	45
185	Thermally driven non-contact atomic force microscopy. Applied Physics Letters, 2005, 87, 111901.	1.5	33
186	Design methodologies for robust nano-positioning. IEEE Transactions on Control Systems Technology, 2005, 13, 868-876.	3.2	274
187	The amplitude phase dynamics and fixed points in tapping-mode atomic force microscopy. , 2004, , .		11
188	Thermal noise response based control of tip-sample separation in AFM. , 2004, , .		4
189	Transient-signal-based sample-detection in atomic force microscopy. Applied Physics Letters, 2003, 83, 5521-5523.	1.5	74
190	High bandwidth nano-positioner: A robust control approach. Review of Scientific Instruments, 2002, 73, 3232-3241.	0.6	384
191	Harmonic and power balance tools for tapping-mode atomic force microscope. Journal of Applied Physics, 2001, 89, 6473-6480.	1.1	98
192	Harmonic analysis based modeling of tapping-mode AFM. , 1999, , .		26
193	Control of the nanopositioning devices. , 0, , .		10
194	H/sub âˆž/ loop shaping design for nano-positioning. , 0, , .		22
195	Robust control approach to atomic force microscopy. , 0, , .		31
196	An observer based sample detection scheme for atomic force microscopy. , 0, , .		21
197	Two-sensor-based H>inf<∞>/inf<control for nanopositioning in probe storage. , 0, , .		9
198	Nanopositioning for probe storage. , 0, , .		11

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199	Dynamics of Silicon Micro-Heaters: Modelling and Experimental Identification. , 0, , .		9
200	Scanning Probes Entering Data Storage: From Promise to Reality. , 0, , .		3
201	Towards faster data access: Seek operations in MEMS-based storage devices. , 0, .		9