Angeliki Pantazi

List of Publications by Year
in descending order

65 papers	2,045 citations	430874 18 h-index	254184 43 g-index
67 all docs	67 docs citations	67 times ranked	2061 citing authors

#	Article	IF	Citations
1	Stochastic phase-change neurons. Nature Nanotechnology, 2016, 11, 693-699.	31.5	799
2	High-speed multiresolution scanning probe microscopy based on Lissajous scan trajectories. Nanotechnology, 2012, 23, 185501.	2.6	137
3	29.5-$\hbox{Gb/in}^{2}$ Recording Areal Density on Barium Ferrite Tape. IEEE Transactions on Magnetics, 2011, 47, 137-147.	2.1	105
4	All-memristive neuromorphic computing with level-tuned neurons. Nanotechnology, 2016, 27, 355205.	2.6	102
5	Nanopositioning for probe-based data storage [Applications of Control]. IEEE Control Systems, 2008, 28, 26-35.	0.8	93
6	Deep learning incorporating biologically inspired neural dynamics and in-memory computing. Nature Machine Intelligence, 2020, 2, 325-336.	16.0	86
7	Achieving Subnanometer Precision in a MEMS-Based Storage Device During Self-Servo Write Process. IEEE Nanotechnology Magazine, 2008, 7, 586-595.	2.0	77
8	Control of MEMS-Based Scanning-Probe Data-Storage Devices. IEEE Transactions on Control Systems Technology, 2007, 15, 824-841.	5.2	75
9	Dual-Stage Nanopositioning for High-Speed Scanning Probe Microscopy. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1035-1045.	5.8	65
10	Non-resistance-based cell-state metric for phase-change memory. Journal of Applied Physics, 2011, 110, 084505.	2.5	52
11	High-bandwidth nanopositioner with magnetoresistance based position sensing. Mechatronics, 2012, 22, 295-301.	3.3	42
12	123 Gbit/in^{2} Recording Areal Density on Barium Ferrite Tape. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	37
13	201 Gb/in^{2} Recording Areal Density on Sputtered Magnetic Tape. IEEE Transactions on Magnetics, 2018, 54, 1-8.	2.1	28
14	Optimal scan trajectories for high-speed scanning probe microscopy. , 2012, , .		25
15	Servo-Pattern Design and Track-Following Control for Nanometer Head Positioning on Flexible Tape Media. IEEE Transactions on Control Systems Technology, 2012, 20, 369-381.	5.2	21
16	Track-following in tape storage: Lateral tape motion and control. Mechatronics, 2012, 22, 361-367.	3.3	21
17	Impulsive control for fast nanopositioning. Nanotechnology, 2011, 22, 135501.	2.6	19
18	85.9 Gb/in^{2} Recording Areal Density on Barium Ferrite Tape. IEEE Transactions on Magnetics, 2015, 51, 1-7.	2.1	19

#	Article	IF	Citations
19	Nanopositioning With Multiple Sensors: A Case Study in Data Storage. IEEE Transactions on Control Systems Technology, 2012, 20, 382-394.	5.2	18
20	Online Spatio-Temporal Learning in Deep Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8894-8908.	11.3	16
21	Jitter Investigation and Performance Evaluation of a Small-Scale Probe Storage Device Prototype. , 2007, , .		15
22	Nanopositioning With Impulsive State Multiplication: A Hybrid Control Approach. IEEE Transactions on Control Systems Technology, 2013, 21, 1352-1364.	5.2	15
23	Introducing principles of synaptic integration in the optimization of deep neural networks. Nature Communications, 2022, 13, 1885.	12.8	13
24	Learning spatio-temporal patterns in the presence of input noise using phase-change memristors. , 2016, , .		12
25	Comparison of two non-linear control approaches to fast nanopositioning: Impulsive control and signal transformation. Mechatronics, 2012, 22, 302-309.	3.3	11
26	Unsupervised Learning Using Phase-Change Synapses and Complementary Patterns. Lecture Notes in Computer Science, 2017, , 281-288.	1.3	11
27	High-speed spiral nanopositioning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2018-2023.	0.4	9
28	A dual-stage nanopositioning approach to high-speed scanning probe microscopy. , 2012, , .		9
29	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
30	Track-Following High Frequency Lateral Motion of Flexible Magnetic Media With Sub-100 nm Positioning Error. IEEE Transactions on Magnetics, 2011, 47, 1868-1873.	2.1	8
31	Impulsive control for nanopositioning. , 2011, , .		8
32	Channel Modeling and Signal Processing for Probe Storage Channels. IEEE Journal on Selected Areas in Communications, 2010, 28, 143-157.	14.0	7
33	Neuromorphic Architecture With 1M Memristive Synapses for Detection of Weakly Correlated Inputs. IEEE Transactions on Circuits and Systems II: Express Briefs, 2017, 64, 1342-1346.	3.0	7
34	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
35	Nanoscale track-following for tape storage. , 2015, , .		6
36	Mechanics of lateral positioning of a translating tape due to tilted rollers: Theory and experiments. International Journal of Solids and Structures, 2015, 66, 88-97.	2.7	6

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37	A high-bandwidth spintronic position sensor. Nanotechnology, 2014, 25, 375501.	2.6	5
38	Resolution Limits of Timing-Based Servo Schemes in Magnetic Tape Drives. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	5
39	Neuromorphic system with phase-change synapses for pattern learning and feature extraction. , 2017, , .		5
40	Control for high-speed archimedean spiral nanopositioning. , 2010, , .		4
41	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
42	Initial resolution of head position and skew uncertainty in control systems for flangeless tape drives. , 2012, , .		3
43	Identification of MIMO transport systems in tape drives. , 2013, , .		3
44	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
45	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
46	Tape transport control based on sensor fusion. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6849-6855.	0.4	3
47	Speech Recognition Using Biologically-Inspired Neural Networks. , 2022, , .		3
48	Nanoscale Track-follow Performance for Flexible Tape Media. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 869-874.	0.4	2
49	Vibration compensation in tape drive track following using multiple accelerometers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 506-510.	0.4	2
50	Tape drive track following using cascade control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5896-5901.	0.4	2
51	Near-optimal tape transport control with feedback of velocity and tension. IFAC-PapersOnLine, 2016, 49, 19-25.	0.9	2
52	Feedback control of transport systems in tape drives without tension transducers. Mechatronics, 2018, 49, 211-223.	3.3	2
53	Compressional Wave Disturbance Suppression for Nanoscale Track-Following on Flexible Tape Media. , 2018, , .		2
54	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

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55	Tape transport control with suppression of time-varying tension disturbances. IFAC-PapersOnLine, 2017, 50, 7639-7644.	0.9	1
56	Feature Learning Using Synaptic Competition in a Dynamically-Sized Neuromorphic Architecture. , 2017, , .		1
57	A Hybrid Control Approach to Nanopositioning. , 2013, , 89-120.		1
58	Accelerating Spiking Neural Networks using Memristive Crossbar Arrays. , 2020, , .		1
59	Skew estimation and feed-forward control in flangeless tape drives. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 484-489.	0.4	0
60	Online Feature Learning from a non-i.i.d. Stream in a Neuromorphic System with Synaptic Competition. , 2018, , .		0
61	Control Systems for Nanopositioning. , 2021, , 401-409.		0
62	Track-following system optimization for future magnetic tape data storage. Mechatronics, 2021, 80, 102662.	3.3	0
63	Lateral Tape Motion and Control Systems Design in Tape Storage. Lecture Notes in Control and Information Sciences, 2011, , 271-287.	1.0	0
64	Characterization and Simulation of MIMO Transport Systems in Tape. , 2013, , .		0
65	Skew Estimation and Compensation in Tape Drives With Flangeless Rollers. , 2013, , .		0