Andrew J Fleming

List of Publications by Year
in descending order

200	5,440	76326 40	91884 69
papers	citations	h-index	g-index

204	204	204	2239
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of nanometer resolution position sensors: Operation and performance. Sensors and Actuators A: Physical, 2013, 190, 106-126.	4.1	306
2	Integral resonant control of collocated smart structures. Smart Materials and Structures, 2007, 16, 439-446.	3.5	179
3	A broadband controller for shunt piezoelectric damping of structural vibration. Smart Materials and Structures, 2003, 12, 18-28.	3.5	173
4	Sensorless vibration suppression and scan compensation for piezoelectric tube nanopositioners. IEEE Transactions on Control Systems Technology, 2006, 14, 33-44.	5.2	165
5	A New Method for Robust Damping and Tracking Control of Scanning Probe Microscope Positioning Stages. IEEE Nanotechnology Magazine, 2010, 9, 438-448.	2.0	162
6	Nanopositioning System With Force Feedback for High-Performance Tracking and Vibration Control. IEEE/ASME Transactions on Mechatronics, 2010, 15, 433-447.	5.8	160
7	High-Performance Control of Piezoelectric Tube Scanners. IEEE Transactions on Control Systems Technology, 2007, 15, 853-866.	5.2	152
8	Synthetic impedance for implementation of piezoelectric shunt-damping circuits. Electronics Letters, 2000, 36, 1525.	1.0	142
9	Design, Modeling and Control of Nanopositioning Systems. Advances in Industrial Control, 2014, , .	0.5	137
10	Multiple mode current flowing passive piezoelectric shunt controller. Journal of Sound and Vibration, 2003, 266, 929-942.	3.9	135
11	Finite Element Modeling of Soft Fluidic Actuators: Overview and Recent Developments. Advanced Intelligent Systems, 2021, 3, 2000187.	6.1	130
12	A grounded-load charge amplifier for reducing hysteresis in piezoelectric tube scanners. Review of Scientific Instruments, 2005, 76, 073707.	1.3	119
13	Optimization and implementation of multimode piezoelectric shunt damping systems. IEEE/ASME Transactions on Mechatronics, 2002, 7, 87-94.	5.8	109
14	Model Predictive Control Applied to Constraint Handling in Active Noise and Vibration Control. IEEE Transactions on Control Systems Technology, 2008, 16, 3-12.	5.2	106
15	Highâ€speed serialâ€kinematic SPM scanner: design and drive considerations. Asian Journal of Control, 2009, 11, 144-153.	3.0	104
16	Integrated strain and force feedback for high-performance control of piezoelectric actuators. Sensors and Actuators A: Physical, 2010, 161, 256-265.	4.1	104
17	Passive Vibration Control via Electromagnetic Shunt Damping. IEEE/ASME Transactions on Mechatronics, 2005, 10, 118-122.	5.8	103
18	Bridging the gap between conventional and video-speed scanning probe microscopes. Ultramicroscopy, 2010, 110, 1205-1214.	1.9	96

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19	Adaptive multi-mode resonant piezoelectric shunt damping. Smart Materials and Structures, 2004, 13, 1025-1035.	3.5	89
20	Dual-Stage Vertical Feedback for High-Speed Scanning Probe Microscopy. IEEE Transactions on Control Systems Technology, 2011, 19, 156-165.	5.2	87
21	Charge drives for scanning probe microscope positioning stages. Ultramicroscopy, 2008, 108, 1551-1557.	1.9	85
22	A Novel Piezoelectric Strain Sensor for Simultaneous Damping and Tracking Control of a High-Speed Nanopositioner. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1113-1121.	5.8	85
23	Adaptive piezoelectric shunt damping. Smart Materials and Structures, 2003, 12, 36-48.	3.5	83
24	Inverse-feedforward of charge-controlled piezopositioners. Mechatronics, 2008, 18, 273-281.	3.3	77
25	Compact ultra-fast vertical nanopositioner for improving scanning probe microscope scan speed. Review of Scientific Instruments, 2011, 82, 123703.	1.3	77
26	Soft Pneumatic Actuators: A Review of Design, Fabrication, Modeling, Sensing, Control and Applications. IEEE Access, 2022, 10, 59442-59485.	4.2	72
27	Reducing the inductance requirements of piezoelectric shunt damping systems. Smart Materials and Structures, 2003, 12, 57-64.	3.5	71
28	Optimal Periodic Trajectories for Band-Limited Systems. IEEE Transactions on Control Systems Technology, 2009, 17, 552-562.	5.2	71
29	Control orientated synthesis of high-performance piezoelectric shunt impedances for structural vibration control. IEEE Transactions on Control Systems Technology, 2005, 13, 98-112.	5.2	66
30	Miniature Resonant Ambulatory Robot. IEEE Robotics and Automation Letters, 2017, 2, 337-343.	5.1	61
31	Precision current and charge amplifiers for driving highly capacitive piezoelectric loads. Electronics Letters, 2003, 39, 282.	1.0	57
32	Sensor Fusion for Improved Control of Piezoelectric Tube Scanners. IEEE Transactions on Control Systems Technology, 2008, 16, 1265-1276.	5.2	57
33	Q Control of an Atomic Force Microscope Microcantilever: A Sensorless Approach. Journal of Microelectromechanical Systems, 2011, 20, 1372-1381.	2.5	53
34	High speed nano-scale positioning using a piezoelectric tube actuator with active shunt control. Micro and Nano Letters, 2007, 2, 9.	1.3	50
35	An Analytical Approach to Integral Resonant Control of Second-Order Systems. IEEE/ASME Transactions on Mechatronics, 2014, 19, 651-659.	5.8	50
36	An Ultrathin Monolithic XY Nanopositioning Stage Constructed From a Single Sheet of Piezoelectric Material. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2611-2618.	5.8	50

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37	Control of Resonant Acoustic Sound Fields by Electrical Shunting of a Loudspeaker. IEEE Transactions on Control Systems Technology, 2007, 15, 689-703.	5.2	43
38	On the feedback structure of wideband piezoelectric shunt damping systems. Smart Materials and Structures, 2003, 12, 49-56.	3.5	42
39	Inertial vibration control using a shunted electromagnetic transducer. IEEE/ASME Transactions on Mechatronics, 2006, 11, 84-92.	5.8	41
40	A review of demodulation techniques for amplitude-modulation atomic force microscopy. Beilstein Journal of Nanotechnology, 2017, 8, 1407-1426.	2.8	41
41	Multimodal atomic force microscopy with optimized higher eigenmode sensitivity using on-chip piezoelectric actuation and sensing. Nanotechnology, 2019, 30, 085503.	2.6	40
42	Adaptive electromagnetic shunt damping. IEEE/ASME Transactions on Mechatronics, 2006, 11, 103-108.	5.8	39
43	Simulation of dynamics-coupling in piezoelectric tube scanners by reduced order finite element analysis. Review of Scientific Instruments, 2008, 79, 015105.	1.3	39
44	Subspace-Based System Identification for an Acoustic Enclosure. Journal of Vibration and Acoustics, Transactions of the ASME, 2002, 124, 414-419.	1.6	36
45	PPF Control of a Piezoelectric Tube Scanner. , 0, , .		36
46	Monolithic Piezoelectric Insect With Resonance Walking. IEEE/ASME Transactions on Mechatronics, 2018, 23, 524-530.	5.8	32
47	High-speed vertical positioning stage with integrated dual-sensor arrangement. Sensors and Actuators A: Physical, 2016, 248, 184-192.	4.1	30
48	Lyapunov Estimator for High-Speed Demodulation in Dynamic Mode Atomic Force Microscopy. IEEE Transactions on Control Systems Technology, 2018, 26, 765-772.	5.2	30
49	3D-printed omnidirectional soft pneumatic actuators: Design, modeling and characterization. Sensors and Actuators A: Physical, 2021, 332, 113199.	4.1	28
50	Synthesis and implementation of sensor-less active shunt controllers for electromagnetically actuated systems. IEEE Transactions on Control Systems Technology, 2005, 13, 246-261.	5.2	27
51	Charge drive with active DC stabilization for linearization of piezoelectric hysteresis. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1630-1637.	3.0	27
52	Simultaneous Optimization of Damping and Tracking Controller Parameters Via Selective Pole Placement for Enhanced Positioning Bandwidth of Nanopositioners. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	27
53	Optimal integral force feedback for active vibration control. Journal of Sound and Vibration, 2015, 356, 20-33.	3.9	27
54	A comparison of scanning methods and the vertical control implications for scanning probe microscopy. Asian Journal of Control, 2018, 20, 1352-1366.	3.0	26

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55	Design and Control of Pneumatic Systems for Soft Robotics: A Simulation Approach. IEEE Robotics and Automation Letters, 2021, 6, 5800-5807.	5.1	26
56	<title>New method for multiple-mode shunt damping of structural vibration using a single piezoelectric transducer</title>. , 2001, , .		25
57	Application of MPC to an active structure using sampling rates up to 25kHz. , 0, , .		24
58	Quantitative scanning probe microscope topographies by charge linearization of the vertical actuator. Review of Scientific Instruments, 2010, 81, 103701.	1.3	24
59	Measuring and predicting resolution in nanopositioning systems. Mechatronics, 2014, 24, 605-618.	3.3	24
60	A Simplified Method for Discrete-Time Repetitive Control Using Model-Less Finite Impulse Response Filter Inversion. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	1.6	24
61	High speed single- and dual-stage vertical positioners. Review of Scientific Instruments, 2016, 87, 085104.	1.3	24
62	Electromagnetic shunt damping. , 0, , .		23
63	Optimal integral force feedback and structured PI tracking control: Application for objective lens positioner. Mechatronics, 2014, 24, 701-711.	3.3	23
64	A new electrical configuration for improving the range of piezoelectric bimorph benders. Sensors and Actuators A: Physical, 2015, 224, 106-110.	4.1	23
65	Spatial system identification of a simply supported beam and a trapezoidal cantilever plate. IEEE Transactions on Control Systems Technology, 2003, 11, 726-736.	5.2	22
66	High-speed serial-kinematic AFM scanner: Design and drive considerations. , 2008, , .		22
67	A megahertz bandwidth dual amplifier for driving piezoelectric actuators and other highly capacitive loads. Review of Scientific Instruments, 2009, 80, 104701.	1.3	22
68	Finite-Time Learning Control Using Frequency Response Data With Application to a Nanopositioning Stage. IEEE/ASME Transactions on Mechatronics, 2019, 24, 2085-2096.	5.8	20
69	Passive shunt damping of a piezoelectric stack nanopositioner. , 2010, , .		18
70	Dynamics, Stability, and Control of Multivariable Piezoelectric Shunts. IEEE/ASME Transactions on Mechatronics, 2004, 9, 87-99.	5.8	17
71	A review of demodulation techniques for multifrequency atomic force microscopy. Beilstein Journal of Nanotechnology, 2020, 11, 76-91.	2.8	17
72	Highly resonant controller for multimode piezoelectric shunt damping. Electronics Letters, 2001, 37, 1505.	1.0	16

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73	Piezoelectric Actuators With Integrated High-Voltage Power Electronics. IEEE/ASME Transactions on Mechatronics, 2015, 20, 611-617.	5.8	15
74	Evaluation of charge drives for scanning probe microscope positioning stages. , 2008, , .		13
75	Design of a Charge Drive for Reducing Hysteresis in a Piezoelectric Bimorph Actuator. IEEE/ASME Transactions on Mechatronics, 2015, , 1-1.	5.8	13
76	Image-Guided Locomotion of a Pneumatic-Driven Peristaltic Soft Robot. , 2019, , .		13
77	Electrode Configurations for Piezoelectric Tube Actuators With Improved Scan Range and Reduced Cross-Coupling. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1479-1486.	5.8	13
78	A new repetitive control scheme based on non-causal FIR filters. , 2014, , .		12
79	Improving Digital-to-Analog Converter Linearity by Large High-Frequency Dithering. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 1409-1420.	5.4	12
80	High-speed vertical positioning for contact-mode atomic force microscopy. , 2009, , .		11
81	Note: A method for estimating the resolution of nanopositioning systems. Review of Scientific Instruments, 2012, 83, 086101.	1.3	11
82	A novel and compatible sensing coil for a capsule in Wireless Capsule Endoscopy for real time localization. , 2014, , .		11
83	Iterative Control for Periodic Tasks with Robustness Considerations, Applied to a Nanopositioning Stage**This work is supported by the Innovational Research Incentives Scheme under the VENI grant Precision Motion: Beyond the Nanometer (no. 13073) awarded by NWO (The Netherlands Organisation) Tj ETQq1 1 0.784314 rgBT /Ov	0.8	11
84	Lyapunov estimation for high-speed demodulation in multifrequency atomic force microscopy. Beilstein Journal of Nanotechnology, 2018, 9, 490-498.	2.8	11
85	On Amplitude Estimation for High-Speed Atomic Force Microscopy. , 2016, , .		10
86	Resonance-Enhanced Coupling for Range Extension of Electromagnetic Tracking Systems. IEEE Transactions on Magnetics, 2018, 54, 1-9.	2.1	10
87	Piezoelectric Bimorph Actuator With Integrated Strain Sensing Electrodes. IEEE Sensors Journal, 2018, 18, 5812-5817.	4.7	10
88	Nonlinear Estimation and Control of Bending Soft Pneumatic Actuators Using Feedback Linearization and UKF. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1919-1927.	5.8	10
89	Techniques and considerations for driving piezoelectric actuators at high speed. Proceedings of SPIE, 2008, , .	0.8	8
90	Discrete-time repetitive control with model-less FIR filter inversion for high performance nanopositioning. , 2014, , .		8

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91	Optimal Integral Force Feedback and Structured PI Tracking Control: Application for High Speed Confocal Microscopy.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 11793-11799.	0.4	8
92	Design and characterization of a miniature monolithic piezoelectric hexapod robot. , 2016, , .		8
93	Existing methods for improving the accuracy of digital-to-analog converters. Review of Scientific Instruments, 2017, 88, 094702.	1.3	8
94	Multivariable Model-less Feedforward Control of a Monolithic Nanopositioning Stage with FIR Filter Inversion. , 2019, , .		8
95	Gradient-based optimization for efficient exposure planning in maskless lithography. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2017, 16, 1.	0.9	8
96	Design of a two degree of freedom resonant miniature robotic leg. , 2015, , .		7
97	A review of scanning methods and control implications for scanning probe microscopy. , 2016, , .		7
98	An Algorithm for Transmitter Optimization in Electromagnetic Tracking Systems. IEEE Transactions on Magnetics, 2017, 53, 1-8.	2.1	7
99	Higher-harmonic AFM imaging with a high-bandwidth multifrequency Lyapunov filter. , 2017, , .		7
100	Tracking Control of a Monolithic Piezoelectric Nanopositioning Stage using an Integrated Sensor.. IFAC-PapersOnLine, 2017, 50, 10913-10917.	0.9	7
101	Modelling and Simulation of Pneumatic Sources for Soft Robotic Applications. , 2020, , .		7
102	Active atomic force microscope cantilevers with integrated device layer piezoresistive sensors. Sensors and Actuators A: Physical, 2021, 319, 112519.	4.1	7
103	A Control and Drive System for Pneumatic Soft Robots: PneuSoRD. , 2021, , .		7
104	<title>Innovations in piezoelectric shunt damping</title>. , 2001, 4235, 89.		6
105	Vibration isolation using a shunted electromagnetic transducer. , 2004, , .		6
106	A new robust damping and tracking controller for SPM positioning stages. , 2009, , .		6
107	Resonance-shifting integral resonant control scheme for increasing the positioning bandwidth of nanopositioners. , 2013, , .		6
108	A closed-loop phase-locked interferometer for wide bandwidth position sensing. Review of Scientific Instruments, 2015, 86, 115001.	1.3	6

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109	A Five-Axis Monolithic Nanopositioning Stage Constructed from a Bimorph Piezoelectric Sheet. , 2019, , .		6
110	Large-Amplitude Dithering Mitigates Glitches in Digital-to-Analogue Converters. IEEE Transactions on Signal Processing, 2020, 68, 1950-1963.	5.3	6
111	Serial-kinematic monolithic nanopositioner with in-plane bender actuators. Mechatronics, 2021, 75, 102541.	3.3	6
112	<title>Improved current and charge amplifiers for driving piezoelectric loads</title>. , 2003, , .		5
113	<title>An autonomous piezoelectric shunt damping system</title>. , 2003, 5052, 207.		5
114	A method for reducing piezoelectric non-linearity in scanning probe microscope images. , 2011, , .		5
115	Low-Order Damping and Tracking Control for Scanning Probe Systems. Frontiers in Mechanical Engineering, 2015, 1, .	1.8	5
116	Optimization of near-field scanning optical lithography. Proceedings of SPIE, 2015, , .	0.8	5
117	Design, modeling, and characterization of an XY nanopositioning stage constructed from a single sheet of piezoelectric material. , 2016, , .		5
118	A Monolithic Serial-Kinematic Nanopositioner with Integrated Sensors and Actuators. , 2018, , .		5
119	Capacitive Instrumentation and Sensor Fusion for High-Bandwidth Nanopositioning. , 2019, 3, 1-3.		5
120	Experimental Characterisation of Hydraulic Fiber-Reinforced Soft Actuators for Worm-Like Robots. , 2019, , .		5
121	Amplitude noise spectrum of a lock-in amplifier: Application to microcantilever noise measurements. Sensors and Actuators A: Physical, 2020, 312, 112092.	4.1	5
122	<title>Electrodynamic vibration supression</title>. , 2003, , .		4
123	Simulation of Piezoelectric Tube Actuators by Reduced Finite Element Models for Controller Design. Proceedings of the American Control Conference, 2007, , .	0.0	4
124	Model-based vibration suppression in piezoelectric tube scanners through induced voltage feedback. , 2008, , .		4
125	Estimating the resolution of nanopositioning systems from frequency domain data. , 2012, , .		4
126	Simultaneous optimization of damping and tracking controller parameters via selective pole placement for enhanced positioning bandwidth of nanopositioners. , 2014, , .		4

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127	A novel electrical configuration for three wire piezoelectric bimorph micro-positioners. , 2014, , .		4
128	Optimization and simulation of exposure pattern for scanning laser lithography. , 2015, , .		4
129	Exposure Optimization in Scanning Laser Lithography. IEEE Potentials, 2016, 35, 33-39.	0.3	4
130	A nonlinear programming approach to exposure optimization in scanning laser lithography. , 2016, , .		4
131	Scanning Laser Lithography With Constrained Quadratic Exposure Optimization. IEEE Transactions on Control Systems Technology, 2019, 27, 2221-2228.	5.2	4
132	Piezoelectric benders with strain sensing electrodes: Sensor design for position control and force estimation. Sensors and Actuators A: Physical, 2022, 335, 113384.	4.1	4
133	Experimental analysis of tip vibrations at higher eigenmodes of QPlus sensors for atomic force microscopy. Nanotechnology, 2022, 33, 185503.	2.6	4
134	Series-parallel impedance structure for piezoelectric vibration damping. , 2002, , .		3
135	Dominant resonant mode damping of a piezoelectric tube nanopositioner using optimal sensorless shunts. , 2007, , .		3
136	Integral control of collocated smart structures. , 2007, , .		3
137	Sensor fusion for improved control of piezoelectric tube scanners. , 2007, , .		3
138	Thermal analysis of piezoelectric benders with laminated power electronics. , 2013, , .		3
139	A closed-loop phase-locked interferometer for wide bandwidth position sensing. , 2015, , .		3
140	Note: An improved low-frequency correction technique for piezoelectric force sensors in high-speed nanopositioning systems. Review of Scientific Instruments, 2017, 88, 046105.	1.3	3
141	Experimental Scanning Laser Lithography with Exposure Optimization. IFAC-PapersOnLine, 2017, 50, 8662-8667.	0.9	3
142	Iterative Deconvolution for Exposure Planning in Scanning Laser Lithography. , 2018, , .		3
143	Direct Design of Closed-loop Demodulators for Amplitude Modulation Atomic Force Microscopy. , 2018, , .		3
144	Design and Analysis of Low-Distortion Demodulators for Modulated Sensors. IEEE/ASME Transactions on Mechatronics, 2019, 24, 1861-1870.	5.8	3

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145	Position and force sensing using strain gauges integrated into piezoelectric bender electrodes. Sensors and Actuators A: Physical, 2021, 321, 112416.	4.1	3
146	Five-axis bimorph monolithic nanopositioning stage: Design, modeling, and characterization. Sensors and Actuators A: Physical, 2021, 332, 113125.	4.1	3
147	Model-Based Nonlinear Feedback Controllers for Pressure Control of Soft Pneumatic Actuators Using On/Off Valves. Frontiers in Robotics and AI, 2022, 9, 818187.	3.2	3
148	High performance raster scanning of atomic force microscopy using Model-free Repetitive Control. Mechanical Systems and Signal Processing, 2022, 173, 109027.	8.0	3
149	Single-Walled Carbon Nanotubes as One-Dimensional Scattering Surfaces for Measuring Point Spread Functions and Performance of Tip-Enhanced Raman Spectroscopy Probes. ACS Applied Nano Materials, 2022, 5, 9024-9033.	5.0	3
150	Online-Tuned Multi-Mode Resonant Piezoelectric Shunt for Broadband Vibration Suppression. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 295-300.	0.4	2
151	Sensor-less Vibration Suppression and Scan Compensation for Piezoelectric Tube Nanopositioners. , 0, , .		2
152	Mitigation of acoustic resonance using electrically shunted loudspeakers. , 2006, , .		2
153	Optimal input signals for bandlimited scanning systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11805-11810.	0.4	2
154	High Performance Nanopositioning with Integrated Strain and Force Feedback. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 117-124.	0.4	2
155	An experimental comparison of PI, inversion, and damping control for high performance nanopositioning. , 2013, , .		2
156	Precision charge drive with low frequency voltage feedback for linearization of piezoelectric hysteresis. , 2013, , .		2
157	Spectral estimation using dual sensors with uncorrelated noise. , 2013, , .		2
158	Improving DAC resolution in closed-loop control of precision mechatronic systems using dithering. , 2016, , .		2
159	Frequency domain analysis of robust demodulators for high-speed atomic force microscopy. , 2017, , .		2
160	Piezoelectric bimorph actuator with integrated strain sensing electrodes. , 2017, , .		2
161	Improving Robustness Filter Bandwidth in Repetitive Control by Considering Model Mismatch. Asian Journal of Control, 2018, 20, 1047-1057.	3.0	2
162	Independent Estimation of Temperature and Strain in Tee-Rosette Piezoresistive Strain Sensors. , 2018, , .		2

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163	A Simple Asymmetric Hysteresis Model for Displacement-Force Control of Piezoelectric Actuators. , 2018, , .		2
164	Resonance-shifting Integral Resonant Control for High-speed Nanopositioning. , 2018, , .		2
165	Hysteresis Modeling and Control. Advances in Industrial Control, 2014, , 299-316.	0.5	2
166	Tracking Control for Nanopositioning Systems. , 2016, , 213-244.		2
167	<title>Adaptive piezoelectric shunt damping</title>. , 2002, , .		1
168	Synthesis of optimal piezoelectric shunt impedances for structural vibration control. , 2004, , .		1
169	Corrections to â€œInertial Vibration Control Using a Shunted Electromagnetic Transducerâ€• IEEE/ASME Transactions on Mechatronics, 2006, 11, 367-367.	5.8	1
170	Integral control of smart structures with collocated sensors and actuators. , 2007, , .		1
171	Time-domain adaptive feed-forward control of nanopositioning systems with periodic inputs. , 2009, , .		1
172	High speed nanopositioning with force feedback. , 2010, , .		1
173	Passive piezoelectric shunt control of an Atomic Force Microscope microcantilever. , 2011, , .		1
174	Improving the positioning bandwidth of the Integral Resonant Control Scheme through strategic zero placement.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6539-6544.	0.4	1
175	Digital-to-analog converter considerations for achieving a dynamic range of 1 ppm in precision mechatronics systems. , 2015, , .		1
176	High sensitivity interferometer for on-axis detection of AFM cantilever deflection. , 2016, , .		1
177	Model-based Q Factor Control for Photothermally Excited Microcantilevers. , 2019, , .		1
178	Electromagnetic Techniques for Vibration Damping and Isolation. Shock and Vibration, 2019, 2019, 1-2.	0.6	1
179	Mechanical Design: Flexure-Based Nanopositioners. Advances in Industrial Control, 2014, , 57-102.	0.5	1
180	Types of Nanopositioners. Advances in Industrial Control, 2014, , 43-55.	0.5	1

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181	Piezoelectric Transducers. Advances in Industrial Control, 2014, , 17-41.	0.5	1
182	Simultaneous tip force and displacement sensing for AFM cantilevers with on-chip actuation: Design and characterization for off-resonance tapping mode. Sensors and Actuators A: Physical, 2022, 338, 113496.	4.1	1
183	Getting the Message About Noise Across, Loud and Clear [Focus on Education]. IEEE Control Systems, 2012, 32, 110-124.	0.8	0
184	Resolution of sensors with capacitive source impedance. , 2013, , .		0
185	Recovering the spectrum of a low level signal from two noisy measurements using the cross power spectral density. Review of Scientific Instruments, 2013, 84, 085112.	1.3	0
186	Time Domain Resolution of Nanopositioning Systems*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 7-12.	0.4	0
187	Position Sensor Performance in Nanometer Resolution Feedback Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 1-6.	0.4	0
188	Active damping control using optimal Integral Force Feedback. , 2014, , .		0
189	Model-less FIR repetitive control with consideration of uncertainty. , 2015, , .		0
190	Experimental assessment of dynamic digital-to-analog converter performance for applications in precision mechatronic systems. , 2016, , .		0
191	Position Sensors for Nanopositioning. , 2016, , 245-294.		0
192	Modelling and control of nitrogen partial pressure for prophylaxis and treatment of air embolism. , 2017, , .		0
193	Modeling and Noise Analysis of a Microcantilever-based Mass Sensor. , 2019, , .		0
194	<title>Robust passive piezoelectric shunt dampener</title>. , 2003, , .		0
195	Shunt Control. Advances in Industrial Control, 2014, , 155-174.	0.5	0
196	Charge Drives. Advances in Industrial Control, 2014, , 317-336.	0.5	0
197	Noise in Nanopositioning Systems. Advances in Industrial Control, 2014, , 337-393.	0.5	0
198	Electrical Considerations. Advances in Industrial Control, 2014, , 395-408.	0.5	0

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199	Command Shaping. Advances in Industrial Control, 2014, , 275-298.	0.5	0
200	Integrated force and displacement sensing in active microcantilevers for off-resonance tapping mode atomic force microscopy. , 2020, , .		0