

# Georg Schitter

## List of Publications by Year in descending order

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218  
papers

5,490  
citations

126708

33  
h-index

95083

68  
g-index

227  
all docs

227  
docs citations

227  
times ranked

4063  
citing authors

#	ARTICLE	IF	CITATIONS
1	Threshold voltage shift in organic field effect transistors by dipole monolayers on the gate insulator. <i>Journal of Applied Physics</i> , 2004, 96, 6431-6438.	1.1	514
2	Design and Modeling of a High-Speed AFM-Scanner. <i>IEEE Transactions on Control Systems Technology</i> , 2007, 15, 906-915.	3.2	328
3	Sacrificial Bonds and Hidden Length: Unraveling Molecular Mesostructures in Tough Materials. <i>Biophysical Journal</i> , 2006, 90, 1411-1418.	0.2	273
4	High performance feedback for fast scanning atomic force microscopes. <i>Review of Scientific Instruments</i> , 2001, 72, 3320-3327.	0.6	240
5	Components for high speed atomic force microscopy. <i>Ultramicroscopy</i> , 2006, 106, 881-887.	0.8	220
6	Design and input-shaping control of a novel scanner for high-speed atomic force microscopy. <i>Mechatronics</i> , 2008, 18, 282-288.	2.0	189
7	Identification and Open-Loop Tracking Control of a Piezoelectric Tube Scanner for High-Speed Scanning-Probe Microscopy. <i>IEEE Transactions on Control Systems Technology</i> , 2004, 12, 449-454.	3.2	179
8	APPLIED PHYSICS: High-Speed Atomic Force Microscopy. <i>Science</i> , 2006, 314, 601-602.	6.0	169
9	A Tutorial on the Mechanisms, Dynamics, and Control of Atomic Force Microscopes. <i>Proceedings of the American Control Conference</i> , 2007, , .	0.0	154
10	A new control strategy for high-speed atomic force microscopy. <i>Nanotechnology</i> , 2004, 15, 108-114.	1.3	142
11	MEMS-based lidar for autonomous driving. <i>Elektrotechnik Und Informationstechnik</i> , 2018, 135, 408-415.	0.7	123
12	Scanning probe microscopy at video-rate. <i>Materials Today</i> , 2008, 11, 40-48.	8.3	119
13	High-speed photography of compressed human trabecular bone correlates whitening to microscopic damage. <i>Engineering Fracture Mechanics</i> , 2007, 74, 1928-1941.	2.0	107
14	First Observation of Blending-Zone Morphology at Interface of Reclaimed Asphalt Binder and Virgin Bitumen. <i>Transportation Research Record</i> , 2013, 2370, 1-9.	1.0	103
15	State-space model of freely vibrating and surface-coupled cantilever dynamics in atomic force microscopy. <i>Physical Review B</i> , 2004, 69, .	1.1	93
16	Fast contact-mode atomic force microscopy on biological specimen by model-based control. <i>Ultramicroscopy</i> , 2004, 100, 253-257.	0.8	88
17	Tuning the interaction forces in tapping mode atomic force microscopy. <i>Physical Review B</i> , 2003, 68, .	1.1	78
18	Data acquisition system for high speed atomic force microscopy. <i>Review of Scientific Instruments</i> , 2005, 76, 026118.	0.6	75

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19	Active damping of a piezoelectric tube scanner using self-sensing piezo actuation. <i>Mechatronics</i> , 2010, 20, 656-665.	2.0	69
20	Hierarchical interconnections in the nano-composite material bone: Fibrillar cross-links resist fracture on several length scales. <i>Composites Science and Technology</i> , 2006, 66, 1205-1211.	3.8	66
21	Temperature and thermal history dependence of the microstructure in bituminous materials. <i>European Polymer Journal</i> , 2013, 49, 1964-1974.	2.6	62
22	High speed laser scanning microscopy by iterative learning control of a galvanometer scanner. <i>Control Engineering Practice</i> , 2016, 50, 12-21.	3.2	58
23	Glycation changes molecular organization and charge distribution in type I collagen fibrils. <i>Scientific Reports</i> , 2020, 10, 3397.	1.6	56
24	ROBUST TWO-DEGREE-OF-FREEDOM CONTROL OF AN ATOMIC FORCE MICROSCOPE. <i>Asian Journal of Control</i> , 2004, 6, 156-163.	1.9	55
25	Turning Back Time. <i>Transportation Research Record</i> , 2014, 2444, 52-62.	1.0	55
26	Model-based aberration correction in a closed-loop wavefront-sensor-less adaptive optics system. <i>Optics Express</i> , 2010, 18, 24070.	1.7	54
27	Long-Range Fast Nanopositioner Using Nonlinearities of Hybrid Reluctance Actuator for Energy Efficiency. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 3051-3059.	5.2	51
28	Local strain and damage mapping in single trabeculae during three-point bending tests. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 523-534.	1.5	50
29	High-Performance Hybrid-Reluctance-Force-Based Tip/Tilt System: Design, Control, and Evaluation. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018, 23, 2494-2502.	3.7	49
30	Model-based signal conditioning for high-speed atomic force and friction force microscopy. <i>Microelectronic Engineering</i> , 2003, 67-68, 938-944.	1.1	44
31	System Design and Control of a Resonant Fast Steering Mirror for Lissajous-Based Scanning. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 1963-1972.	3.7	40
32	Low-stiffness dual stage actuator for long range positioning with nanometer resolution. <i>Mechatronics</i> , 2015, 29, 46-56.	2.0	37
33	Model-based feedback controller design for dual actuated atomic force microscopy. <i>Mechatronics</i> , 2012, 22, 327-337.	2.0	36
34	Robust 2 DOF-control of a piezoelectric tube scanner for high speed atomic force microscopy. , 0, , .		35
35	In situ observation of fluoride-ion-induced hydroxyapatite-collagen detachment on bone fracture surfaces by atomic force microscopy. <i>Nanotechnology</i> , 2007, 18, 135102.	1.3	34
36	Optical scanning of laser line sensors for 3D imaging. <i>Applied Optics</i> , 2018, 57, 5242.	0.9	34

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37	Comparison and Classification of High-Precision Actuators Based on Stiffness Influencing Vibration Isolation. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1169-1178.	3.7	33
38	Extracting hysteresis from nonlinear measurement of wavefront-sensorless adaptive optics system. Optics Letters, 2009, 34, 61.	1.7	31
39	Compact high performance hybrid reluctance actuated fast steering mirror system. Mechatronics, 2019, 62, 102251.	2.0	30
40	Velocity dependent friction laws in contact mode atomic force microscopy. Ultramicroscopy, 2004, 100, 309-317.	0.8	29
41	Integrated system and control design of a one DoF nano-metrology platform. Mechatronics, 2017, 47, 88-96.	2.0	27
42	Quantitative nanomechanical property mapping of bitumen micro-phases by peak-force Atomic Force Microscopy. , 2014, , 1397-1406.		27
43	Control Strategies Towards Faster Quantitative Imaging in Atomic Force Microscopy. European Journal of Control, 2005, 11, 384-395.	1.6	26
44	Advanced Mechanical Design and Control Methods for Atomic Force Microscopy in Real-Time. Proceedings of the American Control Conference, 2007, , .	0.0	26
45	The Effect of NaF In Vitro on the Mechanical and Material Properties of Trabecular and Cortical Bone. Advanced Materials, 2009, 21, 451-457.	11.1	25
46	Optical Scanning of a Laser Triangulation Sensor for 3-D Imaging. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3606-3613.	2.4	25
47	Improving the Speed of AFM by Mechatronic Design and Modern Control Methods Geschwindigkeitsverbesserung beim AFM mittels mechatronischem Design und modernen Regelmethode. TM Technisches Messen, 2009, 76, 266-273.	0.3	24
48	Atomic force microscopy capable of vibration isolation with low-stiffness Z-axis actuation. Ultramicroscopy, 2018, 186, 9-17.	0.8	24
49	High-speed photography of the development of microdamage in trabecular bone during compression. Journal of Materials Research, 2006, 21, 1093-1100.	1.2	23
50	Evaluation of surface charge shift of collagen fibrils exposed to glutaraldehyde. Scientific Reports, 2018, 8, 10126.	1.6	23
51	Design and modeling of a high-speed scanner for atomic force microscopy. , 2006, , .		22
52	Dual actuation for high-bandwidth nanopositioning. , 2008, , .		22
53	Automated spherical aberration correction in scanning confocal microscopy. Review of Scientific Instruments, 2014, 85, 123706.	0.6	22
54	Vibration isolator carrying atomic force microscope's head. Mechatronics, 2017, 44, 32-41.	2.0	21

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55	Eliminating mechanical perturbations in scanning probe microscopy. <i>Nanotechnology</i> , 2002, 13, 663-665.	1.3	19
56	Linear Modeling and Control of Comb-Actuated Resonant MEMS Mirror With Nonlinear Dynamics. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 3315-3323.	5.2	19
57	Controller Design for a High-Sampling-Rate Closed-Loop Adaptive Optics System with Piezo-Driven Deformable Mirror. <i>European Journal of Control</i> , 2011, 17, 290-301.	1.6	18
58	Low-Latency Shack-Hartmann Wavefront Sensor Based on an Industrial Smart Camera. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2013, 62, 1241-1249.	2.4	18
59	Compact scanning confocal chromatic sensor enabling precision 3-D measurements. <i>Applied Optics</i> , 2021, 60, 7511.	0.9	17
60	Atomic force microscopy using voice coil actuators for vibration isolation. , 2015, , .		16
61	System and Control Design of a Voice Coil Actuated Mechanically Decoupling Two-Body Vibration Isolation System. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018, 23, 321-330.	3.7	16
62	Flux-Controlled Hybrid Reluctance Actuator for High-Precision Scanning Motion. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 9593-9600.	5.2	16
63	Design and evaluation of an integrated scanning laser triangulation sensor. <i>Mechatronics</i> , 2020, 72, 102453.	2.0	16
64	Experimental Evaluation of Vibration Influence on a Resonant MEMS Scanning System for Automotive Lidars. <i>IEEE Transactions on Industrial Electronics</i> , 2022, 69, 3099-3108.	5.2	16
65	A service-oriented domain specific language programming approach for batch processes. , 2016, , .		15
66	Quantitative AC - Kelvin Probe Force Microscopy. <i>Microelectronic Engineering</i> , 2017, 176, 28-32.	1.1	15
67	Field Programmable Analog Array (FPAA) based control of an Atomic Force Microscope. , 2008, , .		14
68	Microstructural changes in bitumen at the onset of crack formation. <i>European Polymer Journal</i> , 2014, 56, 17-25.	2.6	14
69	Six Degree of Freedom Vibration Isolation Platform for In-Line Nano-Metrology. <i>IFAC-PapersOnLine</i> , 2016, 49, 149-156.	0.5	14
70	Comparison of Code Measures of IEC 61131-3 and 61499 Standards for Typical Automation Applications. , 2018, , .		14
71	Integration of Control Design and System Operation of a High Performance Piezo-Actuated Fast Steering Mirror. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, 25, 239-247.	3.7	14
72	Quantifying the Thermomechanical Response of Bitumen from Microphase Properties. <i>Transportation Research Record</i> , 2016, 2574, 101-110.	1.0	13

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73	Probabilistic Absolute Position Sensor Based on Objective Laser Speckles. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1188-1196.	2.4	13
74	Bandwidth extension of hybrid-reluctance-force-based tip/tilt system by reduction of eddy currents. , 2017, , .		13
75	Exploring the Pareto Fronts of Actuation Technologies for High Performance Mechatronic Systems. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1053-1063.	3.7	13
76	Dual Actuation for High Speed Atomic Force Microscopy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 220-226.	0.4	12
77	Dual Actuation of Fast Scanning Axis for High-speed Atomic Force Microscopy. IFAC-PapersOnLine, 2017, 50, 7633-7638.	0.5	12
78	Iterative trajectory learning for highly accurate optical satellite tracking systems. Acta Astronautica, 2019, 164, 121-129.	1.7	11
79	MEMS Test Bench and its Uncertainty Analysis for Evaluation of MEMS Mirrors. IFAC-PapersOnLine, 2019, 52, 49-54.	0.5	11
80	Data based modelling and identification of nonlinear SDOF MOEMS mirror. , 2019, , .		11
81	High-speed scanning chromatic confocal sensor for 3-D imaging with modeling-free learning control. Applied Optics, 2020, 59, 9234.	0.9	11
82	High Precision Hybrid Reluctance Actuator With Integrated Orientation Independent Zero Power Gravity Compensation. IEEE Transactions on Industrial Electronics, 2022, 69, 13296-13304.	5.2	11
83	Parametric PID controller tuning for a fast steering mirror. , 2017, , .		10
84	Scanning Wavefront Sensor for Measurement of Highly Divergent Wavefronts. IFAC-PapersOnLine, 2019, 52, 25-30.	0.5	10
85	Design and control of a MAGLEV platform for positioning in arbitrary orientations. , 2020, , .		10
86	Precise phase control of resonant MOEMS mirrors by comb-drive current feedback. Mechatronics, 2020, 71, 102420.	2.0	10
87	Confocal chromatic sensor with an actively tilted lens for 3D measurement. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, B46.	0.8	10
88	An integrated piezo-acoustic shear-force distance sensor with nanometer resolution for a micropipette tool. Sensors and Actuators A: Physical, 2003, 103, 353-358.	2.0	9
89	Modal actuation for high bandwidth nano-positioning. , 2010, , .		9
90	Sliding Mode and PID Control of a Dual Stage Actuator for Precision Positioning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6550-6555.	0.4	9

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91	Design of a dual-tone controller for Lissajous-based scanning of fast steering mirrors. , 2016, , .		9
92	Comparative Finite Element Analysis of a Voice Coil Actuator and a Hybrid Reluctance Actuator. IEEJ Journal of Industry Applications, 2019, 8, 192-199.	0.9	9
93	High-speed Scanner with Nanometer Resolution Using a Hybrid Reluctance Force Actuator. IEEJ Journal of Industry Applications, 2019, 8, 170-176.	0.9	9
94	System Integration and Control for 3D Scanning Laser Metrology. IEEJ Journal of Industry Applications, 2019, 8, 207-217.	0.9	9
95	Iterative parallel registration of strongly misaligned wavefront segments. Optics Express, 2021, 29, 33281.	1.7	9
96	Automated Measurement of Highly Divergent Optical Wavefronts With a Scanning Shackâ€“Hartmann Sensor. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	2.4	9
97	Entwurf und Regelung eines Positioniersystems fÃ¼r robotergestÃ¼tzte Nanomesstechnik. Automatisierungstechnik, 2015, 63, 727-738.	0.4	9
98	Bringing the Lab to the Fab: Robot-Based Inline Measurement System for Precise 3-D Surface Inspection in Vibrational Environments. IEEE Transactions on Industrial Electronics, 2022, 69, 10666-10673.	5.2	9
99	Novel techniques for high-resolution functional imaging of trabecular bone. , 2005, , .		8
100	On Recent Developments for High-Speed Atomic Force Microscopy. , 0, , .		8
101	Evaluation of a multi-agent approach for a real transportation system. , 2013, , .		8
102	Comparison of modeling-free learning control algorithms for galvanometer scanner's periodic motion. , 2017, , .		8
103	A Fast Piezo Actuated Tip/Tilt Mirror for raster scan applications. IFAC-PapersOnLine, 2019, 52, 289-294.	0.5	8
104	Supplemental Peak Filters for Advanced Disturbance Rejection on a High Precision Endeffector for Robot-Based Inline Metrology. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2258-2266.	3.7	8
105	Three-DoF Vibration Compensation Platform for Robot-Based Precision Inline Measurements on Free-Form Surfaces. IEEE Transactions on Industrial Electronics, 2022, 69, 613-621.	5.2	8
106	Fast closed loop control of piezoelectric transducers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 350.	1.6	7
107	High-Speed Photography of Human Trabecular Bone during Compression. Materials Research Society Symposia Proceedings, 2005, 874, 1.	0.1	7
108	A new technique for imaging Mineralized Fibrils on Bovine Trabecular Bone Fracture Surfaces by Atomic Force Microscopy. Materials Research Society Symposia Proceedings, 2005, 874, 1.	0.1	7

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109	DESIGN AND CHARACTERIZATION OF A NOVEL SCANNER FOR HIGH-SPEED ATOMIC FORCE MICROSCOPY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 819-824.	0.4	7
110	Towards fast AFM-based nanometrology and nanomanufacturing. International Journal of Nanomanufacturing, 2012, 8, 392.	0.3	7
111	Dynamics, load balancing, and modal control of piezoelectric tube actuators. Mechatronics, 2012, 22, 282-294.	2.0	7
112	Demonstration of a Multi-Agent-based control system for active electric power distribution grids. , 2013, , .		7
113	Integrated design of the feedback controller and topography estimator for atomic force microscopy. Control Engineering Practice, 2013, 21, 1110-1120.	3.2	7
114	Design patterns for separating fault handling from control code in discrete manufacturing systems. , 2013, , .		7
115	Flexure design for precision positioning using low-stiffness actuators. IFAC-PapersOnLine, 2016, 49, 200-205.	0.5	7
116	Design of a phase-locked-loop-based control scheme for Lissajous-trajectory scanning of fast steering mirrors. , 2017, , .		7
117	Active damping by Q-control for fast force-distance curve measurements in atomic force microscopy. Review of Scientific Instruments, 2017, 88, 123711.	0.6	7
118	Noise analysis and efficiency improvement of a pulse-width modulated permanent magnet synchronous motor by dynamic error budgeting. Mechatronics, 2018, 50, 225-233.	2.0	7
119	Fast, precise, and shape-flexible registration of wavefronts. Applied Optics, 2021, 60, 6781.	0.9	7
120	Self-sensing actuation and damping of a piezoelectric tube scanner for atomic force microscopy. , 2009, , .		6
121	Mechatronic Design of an Active Two-body Vibration Isolation System. IFAC-PapersOnLine, 2016, 49, 133-140.	0.5	6
122	A framework for automatic knowledge-based fault detection in industrial conveyor systems. , 2017, , .		6
123	Sample-tracking Vibration Isolation with Hybrid Reluctance Actuators for Inline Metrology. IFAC-PapersOnLine, 2019, 52, 537-542.	0.5	6
124	Accurate Analytic Model of a Parametrically Driven Resonant MEMS Mirror With a Fourier Series-Based Torque Approximation. Journal of Microelectromechanical Systems, 2020, 29, 1431-1442.	1.7	6
125	Multiphysics finite element model for the computation of the electro-mechanical dynamics of a hybrid reluctance actuator. Mathematical and Computer Modelling of Dynamical Systems, 2020, 26, 322-343.	1.4	6
126	Atomic Force Microscopy Breaking Through the Vertical Range-Bandwidth Tradeoff. IEEE Transactions on Industrial Electronics, 2021, 68, 786-795.	5.2	6



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127	Charge-Based Capacitive Self-Sensing With Continuous State Observation for Resonant Electrostatic MEMS Mirrors. <i>Journal of Microelectromechanical Systems</i> , 2021, 30, 897-906.	1.7	6
128	Robust wavefront segment registration based on a parallel approach. <i>Applied Optics</i> , 2021, 60, 1578.	0.9	6
129	Adaptive Lissajous scanning pattern design by phase modulation. <i>Optics Express</i> , 2021, 29, 27989.	1.7	6
130	Noise Reduction of Learning Control for Periodic Motion of Galvanometer Scanner. <i>IFAC-PapersOnLine</i> , 2020, 53, 8401-8406.	0.5	6
131	Towards Integrated Design of a Robust Feedback Controller and Topography Estimator for Atomic Force Microscopy. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 12709-12714.	0.4	5
132	High precision wavelength estimation method for integrated optics. <i>Optics Express</i> , 2013, 21, 17042.	1.7	5
133	High-precision Positioning System using a Low-stiffness Dual Stage Actuator. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 20-27.	0.4	5
134	Similarity-based Feedback Control for Linear Operation of Piezoelectric Actuators. , 2018, , .		5
135	Iterative Learning Control for Laser Scanning based Micro 3D Printing. <i>IFAC-PapersOnLine</i> , 2019, 52, 169-174.	0.5	5
136	Scanning laser triangulation sensor geometry maintaining imaging condition. <i>IFAC-PapersOnLine</i> , 2019, 52, 301-306.	0.5	5
137	Compensation of Hysteresis in Hybrid Reluctance Actuator for High-Precision Motion. <i>IFAC-PapersOnLine</i> , 2019, 52, 477-482.	0.5	5
138	Signal reversal in Kelvin-probe force microscopy. <i>Review of Scientific Instruments</i> , 2019, 90, 113703.	0.6	5
139	High performance motion control for optical satellite tracking systems. <i>Advances in Space Research</i> , 2020, 65, 1333-1343.	1.2	5
140	A Mechatronic Lock-In Amplifier: Integrating Demodulation in Sensor Electronics for Measuring Mechanical Oscillations. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-8.	2.4	5
141	A Novel Approach for Integrating IEC 61131-3 Engineering and Execution Into IEC 61499. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 5411-5418.	7.2	5
142	Improving the Imaging Speed of AFM with Modern Control Techniques. <i>Lecture Notes in Control and Information Sciences</i> , 2011, , 83-100.	0.6	5
143	Transformation-based iterative learning control for non-collocated sensing of a galvanometer scanner. , 2013, , .		4
144	Noise Analysis and Improvement of a Permanent Magnet Synchronous Motor by Dynamic Error Budgeting. <i>IFAC-PapersOnLine</i> , 2016, 49, 339-346.	0.5	4

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145	Development of a Compact Atomic Force Microscope Based on an Optical Pickup Head. IFAC-PapersOnLine, 2016, 49, 629-635.	0.5	4
146	Automatic generation of diagnostic handling code for decentralized PLC-based control architectures. , 2016, , .		4
147	Ontology-based framework for the generation of interlock code with redundancy elimination. , 2017, , .		4
148	Wavefront measurement based feedback control for automatic alignment of a high-NA optical system. Journal of Physics: Conference Series, 2018, 1065, 032001.	0.3	4
149	Digital Asynchronous Phase Locked Loop for Precision Control of MOEMS Scanning Mirror. IFAC-PapersOnLine, 2019, 52, 43-48.	0.5	4
150	High-bandwidth tip-tilt vibration compensation in telescope systems. IFAC-PapersOnLine, 2019, 52, 549-554.	0.5	4
151	Imaging and tracking an electrostatic charge micro-domain by Kelvin force microscopy as evidence of water adsorption on mica surface. Current Applied Physics, 2020, 20, 1391-1395.	1.1	4
152	The potential of magnetic force microscopy for in-situ investigation of nanophase iron in lunar dust. Planetary and Space Science, 2012, 74, 270-275.	0.9	3
153	Automated adjustment of aberration correction in scanning confocal microscopy. , 2012, , .		3
154	Budgeting of Systematic Versus Stochastic Errors in Sensor Fusion for Piezo Electric Transducers. IFAC-PapersOnLine, 2017, 50, 7651-7656.	0.5	3
155	Automated Tripod Leveling and Parameter Estimation for a Granular-fill Insulation Distributing Robot. IFAC-PapersOnLine, 2019, 52, 223-228.	0.5	3
156	Efficient Demodulation for Measuring the Amplitude of Mechanical Oscillations. , 2020, , .		3
157	An efficient control transition scheme between stabilization and tracking task of a MAGLEV platform enabling active vibration compensation. , 2020, , .		3
158	Development of Reluctance Actuator for High-Precision Positioning and Scanning Motion. , 2021, , .		3
159	Instrument for tensile testing of individual collagen fibrils with facile sample coupling and uncoupling. Review of Scientific Instruments, 2022, 93, 054103.	0.6	3
160	Compensation Based Displacement Measurement Using Objective Laser Speckles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 264-270.	0.4	2
161	Towards High Speed Ferrule-Top Atomic Force Microscopy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 131-137.	0.4	2
162	High bandwidth deflection readout for atomic force microscopes. Review of Scientific Instruments, 2015, 86, 103701.	0.6	2

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163	Advanced Mechatronics for Precision Engineering and Mechatronic Imaging Systems. IFAC-PapersOnLine, 2015, 48, 942-943.	0.5	2
164	Auto-tuning PI controller for surface tracking in atomic force microscopy - a practical approach. , 2016, , .		2
165	Adaptive optics for confocal laser scanning microscopy with adjustable pinhole. Proceedings of SPIE, 2016, , .	0.8	2
166	A framework for modular and distributable control of reconfigurable robotic systems. , 2016, , .		2
167	Patching process optimization in an agent-controlled timber mill. Journal of Intelligent Manufacturing, 2017, 28, 69-84.	4.4	2
168	Influence of Scheimpflug condition on measurements of a scanning laser line sensor for 3D imaging. Journal of Physics: Conference Series, 2018, 1065, 142006.	0.3	2
169	Feature detection and scan area selection for 3D laser scanning sensors. , 2018, , .		2
170	Water desorption in Kelvin-probe force microscopy: a generic model. Nanotechnology, 2018, 29, 505705.	1.3	2
171	Electrostatic Read Out for Label-Free Assays Based on Kelvin Force Principle. Sensing and Imaging, 2019, 20, 1.	1.0	2
172	Mechatronic Approach towards Lightweight Mirrors with Active Optics for Telescope Systems. IFAC-PapersOnLine, 2019, 52, 7-12.	0.5	2
173	Self-Aligning Scanning Shack-Hartmann Sensor for Automatic Wavefront Measurements of High-NA Optics. , 2020, , .		2
174	Turbulence load prediction for manned and unmanned aircraft by means of anticipating differential pressure measurements. CEAS Aeronautical Journal, 2021, 12, 535-548.	0.9	2
175	Speckle simulation tool for the design of laser-based displacement sensors. , 2021, , .		2
176	Self-sensing control of resonant MEMS scanner by comb-drive current feedback. Mechatronics, 2021, 78, 102631.	2.0	2
177	Load dynamics in piezoelectric actuation. , 2009, , .		2
178	Design methodology to develop an active optics system for a thin 1-m meniscus mirror. Journal of Astronomical Telescopes, Instruments, and Systems, 2020, 6, .	1.0	2
179	Simulation and Reduction of Speckle-induced Uncertainty in Laser Triangulation Sensors. , 2022, , .		2
180	EXPERIMENTAL APPLICATION OF L1-OPTIMAL CONTROL IN ATOMIC FORCE MICROSCOPY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 664-669.	0.4	1

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181	MIMO Self-Sensing Control of a Piezoelectric Tube Scanner. , 2009, , .		1
182	Dynamics and Modal Control of Piezoelectric Tube Actuators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 317-323.	0.4	1
183	Trade-off between the control bandwidth and the measurement accuracy in Atomic Force Microscopy. , 2012, , .		1
184	Shack-Hartmann wavefront sensor based on an industrial smart camera. , 2012, , .		1
185	Implementation guidelines for closed loop control algorithms on PLCs. , 2013, , .		1
186	Vision-based probabilistic absolute position sensor. , 2015, , .		1
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