Sen Gu

List of Publications by Year
in descending order

34 papers	625 citations	840776 11 h-index	580821 25 g-index
34 all docs	34 docs citations	34 times ranked	857 citing authors

#	Article	IF	Citations
1	Piezoresistivity Characterization of Synthetic Silicon Nanowires Using a MEMS Device. Journal of Microelectromechanical Systems, 2011, 20, 959-967.	2.5	91
2	Suspended, Shrinkage-Free, Electrospun PLGA Nanofibrous Scaffold for Skin Tissue Engineering. ACS Applied Materials & Interfaces, 2015, 7, 10872-10877.	8.0	82
3	A hysteresis compensation method of piezoelectric actuator: Model, identification and control. Control Engineering Practice, 2009, 17, 1107-1114.	5.5	73
4	Automated Pick-Place of Silicon Nanowires. IEEE Transactions on Automation Science and Engineering, 2013, 10, 554-561.	5.2	59
5	A Closed-Loop Controlled Nanomanipulation System for Probing Nanostructures Inside Scanning Electron Microscopes. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1233-1241.	5.8	48
6	Automated Vitrification of Embryos: A Robotics Approach. IEEE Robotics and Automation Magazine, 2015, 22, 33-40.	2.0	36
7	MEMS-based platforms for mechanical manipulation and characterization of cells. Journal of Micromechanics and Microengineering, 2017, 27, 123003.	2.6	36
8	A Stick-Slip Positioning Stage Robust to Load Variations. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2165-2173.	5.8	33
9	Automated Non-Invasive Measurement of Single Spermâ€™s Motility and Morphology. IEEE Transactions on Medical Imaging, 2018, 37, 2257-2265.	8.9	28
10	Contact detection for nanomanipulation in a scanning electron microscope. Ultramicroscopy, 2012, 118, 61-66.	1.9	15
11	Wrinkle-Free, Sandwich, Electrospun PLGA/SF Nanofibrous Scaffold for Skin Tissue Engineering. IEEE Nanotechnology Magazine, 2018, 17, 675-679.	2.0	14
12	Injectable Silkâ€“Vaterite Composite Hydrogels with Tunable Sustained Drug Release Capacity. ACS Biomaterials Science and Engineering, 2019, 5, 6602-6609.	5.2	12
13	An Improved Visual Tracking Method in Scanning Electron Microscope. Microscopy and Microanalysis, 2012, 18, 612-620.	0.4	11
14	A novel mathematical model for controllable near-field electrospinning. AIP Advances, 2014, 4, .	1.3	9
15	The Development of Piezo-Driven Tools for Cellular Piercing. Applied Sciences (Switzerland), 2016, 6, 314.	2.5	9
16	Electrospinning system with tunable collector for fabricating threeâ€dimensional nanofibrous structures. Micro and Nano Letters, 2014, 9, 24-27.	1.3	8
17	Effect of Cell Inner Pressure on Deposition Volume in Microinjection. Langmuir, 2018, 34, 10287-10292.	3.5	8
18	Development of stickâ€“slip nanopositioning stage capable of moving in vertical direction. Microsystem Technologies, 2020, 26, 2945-2954.	2.0	8

#	Article	IF	Citations
19	A new open-loop driving method of piezoelectric actuator for periodic reference inputs. Ultrasonics, 2006, 44, e633-e637.	3.9	7
20	Automated Laser Ablation of Motile Sperm for Immobilization. IEEE Robotics and Automation Letters, 2019, 4, 323-329.	5.1	6
21	Study of polarization control model for piezoelectric actuator. Ultrasonics, 2006, 44, e731-e735.	3.9	5
22	An adaptive inverse method of control for a piezoelectric actuator. Smart Materials and Structures, 2006, 15, N14-N18.	3.5	5
23	Controlled ultrasonic micro-dissection of thin tissue sections. Biomedical Microdevices, 2014, 16, 567-573.	2.8	5
24	A piezoelectric stickâ€“slip drive nanopositioner with large velocity under high load. AIP Advances, 2020, 10, 105027.	1.3	4
25	MGRO Recognition Algorithm-Based Artificial Potential Field for Mobile Robot Navigation. Journal of Sensors, 2016, 2016, 1-7.	1.1	3
26	A novel PRC signal drift reduction method for new developed SEM-based nanoindentation/nanoscratch instrument integrated with AFM. Precision Engineering, 2021, 69, 8-18.	3.4	3
27	A hysteresis model based on ellipse polar coordinate and microscopic polarization theory. Journal of Electroceramics, 2012, 28, 240-245.	2.0	2
28	Location detection of key areas in medical images based on Haar-like fusion contour feature learning. Technology and Health Care, 2020, 28, 391-399.	1.2	2
29	Note: Mechanical and electrical characterization of nanowires in scanning electron microscope. Review of Scientific Instruments, 2011, 82, 106105.	1.3	1
30	A Miniature Piezoresistive Transducer and a New Temperature Compensation Method for New Developed SEM-Based Nanoindentation Instrument Integrated With AFM Function. IEEE Access, 2020, 8, 104326-104335.	4.2	1
31	Stereo Matching Method Based on Combination Characteristic Cost Computing and Unstable Tree Reconstruction Optimization and Its Application in Medical Images. Journal of Medical Imaging and Health Informatics, 2020, 10, 646-653.	0.3	1
32	Current Control Amplifier for Piezoelectric Actuator in Precision Positioning Control. , 2007, , 1579.		0
33	The research on a novel PZT actuated precise tilt positioning system. , 2009, , .		0
34	A Simple Method Based on Vision for Obtaining Depth Information in Nanomanipulation. Applied Physics Express, 2011, 4, 126601.	2.4	0