Laxman Saggere

List of Publications by Year
in descending order

36	359	840585 11	839398 18
papers	citations	h-index	g-index

39	39	39	343
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tailoring unconventional actuators using compliant transmissions: design methods and applications. IEEE/ASME Transactions on Mechatronics, 1999, 4, 396-408.	3.7	93
2	An analytical model and working equations for static deflections of a circular multi-layered diaphragm-type piezoelectric actuator. Sensors and Actuators A: Physical, 2007, 136, 673-689.	2.0	50
3	PZT thin films for low voltage actuation: Fabrication and characterization of the transverse piezoelectric coefficient. Sensors and Actuators A: Physical, 2007, 135, 690-699.	2.0	26
4	Prototype chemical synapse chip for spatially patterned neurotransmitter stimulation of the retina ex vivo. Microsystems and Nanoengineering, 2017, 3, 17052.	3.4	24
5	Chemical stimulation of rat retinal neurons: feasibility of an epiretinal neurotransmitter-based prosthesis. Journal of Neural Engineering, 2015, 12, 016010.	1.8	22
6	A Benchtop System to Assess Cortical Neural Interface Micromechanics. IEEE Transactions on Biomedical Engineering, 2007, 54, 1089-1096.	2.5	18
7	A multi-fingered micromechanism for coordinated micro/nano manipulation. Journal of Micromechanics and Microengineering, 2007, 17, 576-585.	1.5	16
8	Microfluidics-Based Subretinal Chemical Neuromodulation of Photoreceptor Degenerated Retinas. , 2018, 59, 418.		16
9	Differential stimulation of the retina with subretinally injected exogenous neurotransmitter: A biomimetic alternative to electrical stimulation. Scientific Reports, 2016, 6, 38505.	1.6	14
10	Modeling and Design of an Optically Powered Microactuator for a Microfluidic Dispenser. Journal of Mechanical Design, Transactions of the ASME, 2005, 127, 825-836.	1.7	12
11	Design and development of a novel micro-clasp gripper for micromanipulation of complex-shaped objects. Sensors and Actuators A: Physical, 2012, 176, 110-123.	2.0	12
12	Mechanical Stimulation of the Retina: Therapeutic Feasibility and Cellular Mechanism. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1075-1083.	2.7	12
13	A high-frequency, high-stiffness piezoelectric actuator for microhydraulic applications. Sensors and Actuators A: Physical, 2002, 97-98, 620-631.	2.0	11
14	Light-driven actuation of fluids at microscale. , 2004, , .		4
15	Methodology for Biomimetic Chemical Neuromodulation of Rat Retinas with the Neurotransmitter Glutamate In Vitro. Journal of Visualized Experiments, 2017, , .	0.2	4
16	Correlation between retinal ganglion cell loss and nerve crush force-impulse established with instrumented tweezers in mice. Neurological Research, 2020, 42, 379-386.	0.6	4
17	A Thin-Film Piezoelectric Microactuator Optically Powered via an Integrated Micro-Solar Cell. , 2006, , 41.		3
18	Investigation of Injection Depth for Subretinal Delivery of Exogenous Glutamate to Restore Vision via Biomimetic Chemical Neuromodulation. IEEE Transactions on Biomedical Engineering, 2020, 67, 464-470.	2.5	3

#	Article	IF	Citations
19	Neuromodulation using electroosmosis. Journal of Neural Engineering, 2021, 18, 046072.	1.8	3
20	Development of a chemical retinal prosthesis: Stimulation of rat retina with glutamate. , 2013, 2013, 3134-7.		2
21	Novel imaging technique for non-destructive metrology and characterization of ultraviolet-sensitive polymeric microstructures. Review of Scientific Instruments, 2020, 91, 033710.	0.6	2
22	Membrane Actuation for Micropumps. , 2015, , 1741-1746.		2
23	Development of a Light-Driven Thin-Film Piezoelectric Microactuator. , 2005, , 425.		1
24	Design of a Compliant Micro-Clasp Mechanism for Micromanipulation Tasks. , 2007, , .		1
25	Metrology and characterization of SU-8 microstructures using autofluorescence emission. Journal of Micromechanics and Microengineering, 2021, 31, 045014.	1.5	1
26	Membrane Actuation for Micropumps. , 2008, , 1078-1082.		1
27	Picoliter Fluidic Flow Characterization Using Ion-Selective Measurement. , 2005, , .		1
28	A Multi-Fingered Micromechanism for Coordinated Micro/Nano Manipulation. , 2005, , .		1
29	An Improved Analytical Model for Deflections of a Circular Multi-Layer Piezoelectric Actuator. , 2005, , 415.		0
30	Functionality Evaluation of Photo-definable Polyimide, Flexible Interface for the Central Nervous System. , 0, , .		0
31	Special Issue on Dynamic Modeling, Control and Manipulation at the Nanoscale. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2009, 131, .	0.9	0
32	Design and Development of a Chipscale Multifingered Micromanipulator System for Coordinated Microassembly. , 2009, , .		0
33	Measurement and Characterization of Stiction Force in Microstructures With Tapered Features. , 2011, , .		0
34	Biomimetic stimulation of rat retinal ganglion cells with the neurotransmitter glutamate. , 2014, 2014, 2593-6.		0
35	Dynamics of Micromanipulation Using a Compliant Micromanipulator. , 2006, , .		0
36	Development of a chemical retinal prosthesis. Journal of Vision, 2019, 19, 16.	0.1	0