

# Guangyong Li

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11261553/publications.pdf>

Version: 2024-02-01

109  
papers

1,650  
citations

361413

20  
h-index

315739

38  
g-index

109  
all docs

109  
docs citations

109  
times ranked

1801  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanometrology and Nanocharacterization: Keys to the Advancement of Nanotechnology [Guest Editorial]. IEEE Nanotechnology Magazine, 2021, 15, 3-3.	1.3	0
2	Advances in Scanning Ion Conductance Microscopy: Principles and Applications. IEEE Nanotechnology Magazine, 2021, 15, 17-25.	1.3	3
3	Advances in Dielectric Microspherical Lens Nanoscopy: Label-Free Superresolution Imaging. IEEE Nanotechnology Magazine, 2021, 15, 38-C3.	1.3	2
4	Multi-modal Intent Recognition Method for the Soft Hand Rehabilitation Exoskeleton. , 2020, , .		2
5	Novel Electron Transport Layer Material for Perovskite Solar Cells with Over 22% Efficiency and Long-Term Stability. Advanced Functional Materials, 2020, 30, 2004933.	14.9	55
6	Imaging with Optogenetically Engineered Living Cells as a Photodetector. Advanced Biology, 2019, 3, 1800319.	3.0	5
7	Bio-Syncretic Light-gated Field-Effect Transistor: Fabrication and Characterization. , 2019, , .		0
8	Revealing the Working Mechanisms of Planar Perovskite Solar Cells With Cross-Sectional Surface Potential Profiling. IEEE Journal of Photovoltaics, 2018, 8, 125-131.	2.5	20
9	Micro-Nano Fabrication: Fabrication of Sub-Micrometer-Sized MoS <sub>2</sub> Thin-Film Transistor by Phase Mode AFM Lithography (Small 49/2018). Small, 2018, 14, 1870239.	10.0	1
10	Fabrication of Sub-Micrometer-Sized MoS <sub>2</sub> Thin-Film Transistor by Phase Mode AFM Lithography. Small, 2018, 14, e1803273.	10.0	14
11	Multi-image encryption scheme based on quantum 3D Arnold transform and scaled Zhongtang chaotic system. Quantum Information Processing, 2018, 17, 1.	2.2	85
12	The application of Al <sub>2</sub> TiO <sub>5</sub> at the TiO <sub>2</sub> /perovskite interface to decrease carrier losses in solar cells. Journal of Materials Chemistry A, 2017, 5, 3691-3698.	10.3	10
13	Quantum image encryption scheme with iterative generalized Arnold transforms and quantum image cycle shift operations. Quantum Information Processing, 2017, 16, 1.	2.2	106
14	Reconstruction of Kelvin probe force microscopy image with experimentally calibrated point spread function. Review of Scientific Instruments, 2017, 88, 033704.	1.3	2
15	A novel approach for extracting viscoelastic parameters of living cells through combination of inverse finite element simulation and Atomic Force Microscopy. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 373-384.	1.6	5
16	The characterization of defects states and charge injection barriers in perovskite solar cells. , 2017, , .		3
17	Fabrication, calibration, and recovery of chemical nanosensor array for ammonia detection. , 2017, , .		1
18	Tandem polymer solar cells: simulation and optimization through a multiscale scheme. Beilstein Journal of Nanotechnology, 2017, 8, 123-133.	2.8	9

#	ARTICLE	IF	CITATIONS
19	Observation of lower defect density in CH <sub>3</sub> NH <sub>3</sub> Pb(I,Cl) <sub>3</sub> solar cells by admittance spectroscopy. Applied Physics Letters, 2016, 108, .	3.3	22
20	Study of annealing induced nanoscale morphology change in organic solar cells with machine learning. , 2016, , .		1
21	Poroelectricity of cell nuclei revealed through atomic force microscopy characterization. Applied Physics Letters, 2016, 109, .	3.3	15
22	A novel approach for preparation of CuO nanostructures on conductive substrate. , 2015, , .		0
23	Finite element simulation of stress relaxation process in living cells. , 2015, , .		0
24	Investigation of electrical properties of contact between Molybdenum disulfide and different metals. , 2015, , .		1
25	Simulation study of dielectrophoretic assembly of nanowire between electrode pairs. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	6
26	Investigation of Printingâ€Based Graded Bulkâ€Heterojunction Organic Solar Cells. Energy Technology, 2015, 3, 414-422.	3.8	4
27	Amplitude Modulation Mode of Scanning Ion Conductance Microscopy. Journal of the Association for Laboratory Automation, 2015, 20, 457-462.	2.8	11
28	Enhancing the performance of planar organo-lead halide perovskite solar cells by using a mixed halide source. Journal of Materials Chemistry A, 2015, 3, 963-967.	10.3	91
29	Nanostructured solar cell based on solution processed Cu <sub>2</sub> ZnSnS <sub>4</sub> nanoparticles and vertically aligned ZnO nanorod array. Physica Status Solidi - Rapid Research Letters, 2014, 8, 971-975.	2.4	9
30	Cu <sub>2</sub> ZnSn(S <sub>1-x</sub> Se <sub>x</sub> ) <sub>4</sub> thin film solar cells prepared by waterâ€based solution process. Physica Status Solidi - Rapid Research Letters, 2014, 8, 223-227.	2.4	34
31	Simulation study on 3D trajectory of dielectrophoretic force assembled nanowires. , 2014, , .		1
32	Development of Mechanostimulated Patch-Clamp System for Cellular Physiological Study. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1138-1147.	5.8	15
33	Optimal shape for optical absorption in organic thin film solar cells. Structural and Multidisciplinary Optimization, 2014, 50, 437-451.	3.5	2
34	Multiscale Modeling and Simulation for Optimizing Polymer Bulk Heterojunction Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 300-309.	2.5	12
35	Investigation of charge transfer in nanostructured hybrid solar cell using Kelvin Probe Force Microscopy. , 2013, , .		0
36	Direct Observation of Hole Transfer from Semiconducting Polymer to Carbon Nanotubes. Nano Letters, 2013, 13, 2086-2091.	9.1	40

#	ARTICLE	IF	CITATIONS
37	Simultaneous topography imaging and molecular recognition with low crosstalk and high sensitivity. , 2013, , .		0
38	Prior knowledge based fast imaging for scanning ion conductance microscopy. , 2013, , .		0
39	Theoretical and experimental study of dielectrophoretic force controlled nanowires assembly. , 2013, , .		1
40	Multiscale modeling and simulation for optimizing polymer bulk heterojunction solar cells. , 2013, , .		0
41	Atomic Force Microscope-Based Nanorobotic System for Nanoassembly. , 2012, , 51-79.		2
42	Simulation study on trajectory of dielectrophoretic force controlled nanowires. , 2012, , .		3
43	Multiscale modeling and simulation for optimizing polymer bulk heterojunction solar cells. , 2012, , .		0
44	Recent Progress in Modeling, Simulation, and Optimization of Polymer Solar Cells. IEEE Journal of Photovoltaics, 2012, 2, 320-340.	2.5	60
45	Drift Compensation in AFM-Based Nanomanipulation by Strategic Local Scan. IEEE Transactions on Automation Science and Engineering, 2012, 9, 755-762.	5.2	20
46	Practical aspects of single-pass scan Kelvin probe force microscopy. Review of Scientific Instruments, 2012, 83, 113701.	1.3	47
47	Imaging and measuring the protein distribution of lymphoma cells using atomic force microscopy. , 2011, , .		0
48	Thickness optimization of organic solar cells by optical transfer matrix. , 2011, , .		8
49	Carbon Nanotubes for Organic Solar Cells. IEEE Nanotechnology Magazine, 2011, 5, 18-24.	1.3	14
50	Investigation of recombination loss in organic solar cells by simulating intensity-dependent current-voltage measurements. Solar Energy Materials and Solar Cells, 2011, 95, 2557-2563.	6.2	42
51	Probing protein-protein interaction forces using single-molecule force spectroscopy. , 2011, , .		0
52	Selective manipulation of ZnO nanowires by controlled dielectrophoretic force. , 2011, , .		4
53	Atomic Force Microscopy as Nanorobot. Methods in Molecular Biology, 2011, 736, 485-503.	0.9	6
54	Measuring the physical properties of the lymphoma cells using atomic force microscopy. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
55	Performance investigation for a silicon nanowire FET biosensor using numerical simulation. , 2010, , .		8
56	An experimental study on imaging burkitt's lymphoma cells by atomic force microscope. , 2010, , .		0
57	Modeling and simulation of organic solar cells. , 2010, , .		2
58	Simulation of a silicon nanowire FET biosensor for detecting Biotin/Streptavidin binding. , 2010, , .		7
59	Measuring the molecular force of Burkitt's lymphoma patient cells using AFM. , 2010, , .		0
60	Scanning Kelvin Probe Force Microscopy for investigation of charge transport in carbon-nanotube enhanced organic photovoltaics. , 2010, , .		0
61	An experimental study on protein-protein interaction using atomic force microscopy. , 2010, , .		0
62	Effects of semiconducting and metallic single-walled carbon nanotubes on performance of bulk heterojunction organic solar cells. Applied Physics Letters, 2009, 94, .	3.3	51
63	Design, Manufacturing, and Testing of Single-Carbon-Nanotube-Based Infrared Sensors. IEEE Nanotechnology Magazine, 2009, 8, 245-251.	2.0	44
64	Compensation of drift contamination in AFM image by local scan. , 2009, , .		0
65	Performance analysis of bulk heterojunction solar cells fabricated by polymer:fullerene:carbon-nanotube composites. , 2009, , .		1
66	Local scan for compensation of drift contamination in AFM based nanomanipulation. , 2009, , .		2
67	Enhanced Performance of Bulk Heterojunction Solar Cells Fabricated by Polymer:Fullerene:Carbon-Nanotube Composites. , 2008, , .		2
68	Atomic force yields a master nanomanipulator. IEEE Nanotechnology Magazine, 2008, 2, 13-17.	1.3	13
69	Sensor Referenced Real-Time Videolization of Atomic Force Microscopy for Nanomanipulations. IEEE/ASME Transactions on Mechatronics, 2008, 13, 76-85.	5.8	72
70	Detection and real-time correction of faulty visual feedback in atomic force microscopy based nanorobotic manipulation. , 2008, , .		0
71	System positioning error compensated by local scan in atomic force microscope based nanomanipulation. , 2008, , .		1
72	Real-time State Estimation and Fault Detection for Controlling Atomic Force Microscope Based Nano Manipulation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8263-8268.	0.4	0

#	ARTICLE	IF	CITATIONS
73	Sensor referenced guidance and control for robotic nanomanipulation. , 2007, , .		3
74	On-line sensing and display in Atomic Force Microscope based nanorobotic manipulation. , 2007, , .		8
75	Study of DNA properties under controlled conditions using AFM based nano-robotics. , 2007, , .		0
76	Packaging carbon nanotube based infrared detector. , 2007, , .		9
77	Real-time position error detecting in nanomanipulation using Kalman filter. , 2007, , .		2
78	Recognition of Membrane Receptor by Atomic Force Microscopy. , 2007, , .		0
79	Nanotechnology and Membrane Receptors: Focus on Angiotensin II Receptors. Medical Clinics of North America, 2007, 91, 929-936.	2.5	0
80	Single carbon nanotube based photodiodes for infrared detection. , 2007, , .		18
81	CAD-guided automated nanoassembly using atomic force microscopy-based nonrobotics. IEEE Transactions on Automation Science and Engineering, 2006, 3, 208-217.	5.2	80
82	In Situ Sensing and Manipulation in Nano Bio Systems. , 2006, , .		0
83	Adaptable End Effector for Atomic Force Microscopy Based Nanomanipulation. IEEE Nanotechnology Magazine, 2006, 5, 628-642.	2.0	46
84	Nanoassembly and Packaging of Single Carbon Nanotube Based Transistors. , 2006, , .		0
85	Probing membrane proteins using atomic force microscopy. Journal of Cellular Biochemistry, 2006, 97, 1191-1197.	2.6	27
86	An AFM Method for in situ Probing Membrane Proteins under Physiological Condition. , 2006, , .		2
87	Atomic Force Microscopy Sensing Using Multiple Modes. , 2006, , .		5
88	Tuning Semiconducting Properties of Single Carbon Nanotube for Fabrication of Nano Devices. , 2006, , .		2
89	In situ sensing and manipulation of molecules in biological samples using a nanorobotic system. Nanomedicine: Nanotechnology, Biology, and Medicine, 2005, 1, 31-40.	3.3	36
90	Investigation of angiotensin II type 1 receptor by atomic force microscopy with functionalized tip. Nanomedicine: Nanotechnology, Biology, and Medicine, 2005, 1, 306-312.	3.3	13

#	ARTICLE	IF	CITATIONS
91	Optimal control of flexible end effector in AFM based nanomanipulation. , 2005, , .		4
92	Atomic Force Microscopy for Interactive Nanomanipulation and Nanoassembly. IEEE Nanotechnology Magazine, 2005, 4, 605-615.	2.0	92
93	Calibration of AFM based nanomanipulation system. , 2004, , .		7
94	Assembly of nanostructure using AFM based nanomanipulation system. , 2004, , .		21
95	Development of Augmented Reality System for AFM-Based Nanomanipulation. IEEE/ASME Transactions on Mechatronics, 2004, 9, 358-365.	5.8	199
96	Calibration of a micromanipulation system. , 0, , .		8
97	3D nanomanipulation using atomic force microscopy. , 0, , .		18
98	Modeling of 3-d interactive forces in nanomanipulation. , 0, , .		11
99	Manipulating nano scale biological specimen in liquid. , 0, , .		3
100	Augmented reality system for real-time nanomanipulation. , 0, , .		25
101	CAD-guided manufacturing of nanostructures using nanoparticles. , 0, , .		1
102	Interactive DNA sequence and structure design for DNA nanotechnology and DNA computation. , 0, , .		0
103	Augmented reality enhanced "top-down" nano-manufacturing. , 0, , .		1
104	Experimental studies of DNA electrical properties using AFM based nano-manipulator. , 0, , .		0
105	In situ single bio-molecule recognition by atomic force microscopy using functionalized tip. , 0, , .		1
106	Functionalized Nano-Robot End Effector for in situ Sensing and Manipulation of Biological Specimen. , 0, , .		2
107	Planning and Control for Automated Nanorobotic Assembly. , 0, , .		8
108	An AFM Method for in situ Probing Membrane Proteins under Physiological Condition. , 0, , .		0

#	ARTICLE	IF	CITATIONS
109	Nanoassembly and Packaging of Single Carbon Nanotube Based Transistors. , 0, , .		0