

# Wenhao Huang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2411968/publications.pdf>

Version: 2024-02-01

95  
papers

1,691  
citations

331670

21  
h-index

302126

39  
g-index

95  
all docs

95  
docs citations

95  
times ranked

1442  
citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental temperature effect on dimensional measurements of atomic force microscopy. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2021, 4, 023003.	3.2	1
2	Two-stage optical recording: photoinduced birefringence and surface-mediated bits storage in bisazo-containing copolymers towards ultrahigh data memory. Optics Express, 2016, 24, 23557.	3.4	12
3	Effects of temperature and humidity on atomic force microscopy dimensional measurement. Microscopy Research and Technique, 2015, 78, 562-568.	2.2	6
4	Parallel direct laser writing of micro-optical and photonic structures using spatial light modulator. Optics and Lasers in Engineering, 2015, 70, 26-32.	3.8	99
5	An improved multi-exposure approach for high quality holographic femtosecond laser patterning. Applied Physics Letters, 2014, 105, .	3.3	28
6	Numerical and Experimental Study of the Structural Color by Widening the Pore Size of Nanoporous Anodic Alumina. Journal of Nanomaterials, 2014, 2014, 1-10.	2.7	7
7	Two-photon polymerization of cylinder microstructures by femtosecond Bessel beams. Applied Physics Letters, 2014, 105, 041110.	3.3	44
8	Focused Ion Beam Fabrication and Atomic Force Microscopy Characterization of Micro/Nanoroughness Artifacts With Specified Statistic Quantities. IEEE Nanotechnology Magazine, 2014, 13, 563-573.	2.0	5
9	Fast Bits Recording in Photoisomeric Polymers by Phase-Modulated Femtosecond Laser. IEEE Photonics Technology Letters, 2014, 26, 1154-1156.	2.5	8
10	Spectral Analysis of Irregular Roughness Artifacts Measured by Atomic Force Microscopy and Laser Scanning Microscopy. Microscopy and Microanalysis, 2014, 20, 1682-1691.	0.4	3
11	Analysis and correction of drift-induced distortions on quantitative SPM surface roughness evaluations. Proceedings of SPIE, 2014, , .	0.8	1
12	Dynamics Analysis and Motion Planning for Automated Cell Transportation With Optical Tweezers. IEEE/ASME Transactions on Mechatronics, 2013, 18, 706-713.	5.8	94
13	Design and laser fabrication of controllable non-Gaussian roughness surfaces at microscale. Applied Surface Science, 2013, 276, 95-100.	6.1	8
14	Fabrication and characterization of areal roughness specimens for applications in scanning probe microscopy. Measurement Science and Technology, 2013, 24, 055402.	2.6	14
15	A comparative experimental study on sample excitation and probe excitation in force modulation atomic force microscopy. Measurement Science and Technology, 2013, 24, 025403.	2.6	4
16	Individually controlled multi-focus on a line for two-photon polymerization based on computer-generated holograms. , 2013, , .		0
17	An improved method for computer generation of three-dimensional digital holography. Journal of Optics (United Kingdom), 2013, 15, 125704.	2.2	1
18	High-efficiency fabrication of aspheric microlens arrays by holographic femtosecond laser-induced photopolymerization. Applied Physics Letters, 2013, 103, .	3.3	55

#	ARTICLE	IF	CITATIONS
19	Topographic Contrast in Force Modulation Atomic Force Microscopy Images. Japanese Journal of Applied Physics, 2012, 51, 056601.	1.5	2
20	Femtosecond laser induced surface deformation in multi-dimensional data storage. Applied Physics Letters, 2012, 101, .	3.3	13
21	Optimal design and fabrication of three-dimensional calibration specimens for scanning probe microscopy. Review of Scientific Instruments, 2012, 83, 053708.	1.3	8
22	Fabrication and characterization of piezoelectric cantilever array with nano-assembly carbon nanotube tips. , 2012, , .		1
23	Two-photon induced data storage in hydrogen bonded supramolecular azopolymers. Optics Communications, 2012, 285, 4941-4945.	2.1	22
24	AM-derivative Spectrophotometry with High Signal-to-Noise Ratio for UV-Vis Spectrophotometer. , 2012, , .		0
25	Force and motion analysis for automated cell transportation with optical tweezers. , 2011, , .		4
26	Effect of tunable structural color caused by colloidal crystal. , 2011, , .		0
27	Methods for Vertical Drift Measurements of Scanning Probe Microscopes. Analytical Sciences, 2011, 27, 149.	1.6	2
28	Automatic Glitch Elimination of Scanning Probe Microscopy Images. Analytical Sciences, 2011, 27, 153.	1.6	2
29	Tunable structural colour on the basis of colloidal crystal. Micro and Nano Letters, 2011, 6, 530.	1.3	2
30	Relationship between the size of SiO <sub>2</sub> nanospheres and the structure colour. Micro and Nano Letters, 2011, 6, 527.	1.3	2
31	Influence of microstructure-confined fluids on the atomic force microscope probe dynamics. Micro and Nano Letters, 2011, 6, 914.	1.3	1
32	Study on the rewritability of bisazobenzene-containing films in optical storage based on two-photon process. Optics Communications, 2011, 284, 802-806.	2.1	4
33	Mechanical force characterization in manipulating live cells with optical tweezers. Journal of Biomechanics, 2011, 44, 741-746.	2.1	98
34	Relationship between the size of SiO <sub>2</sub> nano spheres and the structure color. , 2011, , .		0
35	The comparison of fabricating colorful patterns on stainless steel with femtosecond and nanosecond laser pulses. , 2011, , .		0
36	Controllable multiple structural colours on the same substrate. International Journal of Nanomanufacturing, 2011, 7, 528.	0.3	0

#	ARTICLE	IF	CITATIONS
37	Optimization of Zero-Reference Grating Considering Tip Distortions for Scanning Probe Microscopy Drift Measurement. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 7055-7059.	0.9	4
38	Multi-carbazole derivatives for two-photon absorption data storage: Synthesis, optical properties and theoretical calculation. <i>Science China Chemistry</i> , 2010, 53, 884-890.	8.2	7
39	Mechanical Characterization of Human Red Blood Cells Under Different Osmotic Conditions by Robotic Manipulation With Optical Tweezers. <i>IEEE Transactions on Biomedical Engineering</i> , 2010, 57, 1816-1825.	4.2	146
40	Morphology and composition on Al surface irradiated by femtosecond laser pulses. <i>Applied Surface Science</i> , 2010, 256, 4344-4349.	6.1	36
41	Ag nanoparticle/azopolymer nanocomposites: In situ synthesis, microstructure, rewritable optically induced birefringence and optical recording. <i>Polymer</i> , 2010, 51, 1395-1403.	3.8	24
42	Dynamics of an atomic force microscope probe in liquid investigated via three-dimensional mode. <i>Measurement Science and Technology</i> , 2010, 21, 105503.	2.6	4
43	Comparative study on the nonperiodic and periodic gratings for scanning probe microscopy drift measurements. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 1070-1072.	1.2	6
44	Micro device mould fabrication based on two-photon polymerization and electroforming. , 2010, , .		4
45	Force analysis and path planning of the trapped cell in robotic manipulation with optical tweezers. , 2010, , .		9
46	Robotic manipulation of human red blood cells with optical tweezers for cell property characterization. , 2010, , .		0
47	Force characterization of live cells in automated transportation with robot-tweezers manipulation system. , 2010, , .		2
48	Mechanism and analysis of structural color in two typical butterfly scales. , 2010, , .		2
49	Elimination of periodic damped artifacts in scanning probe microscopy images. <i>Measurement Science and Technology</i> , 2010, 21, 045501.	2.6	2
50	Mechanical Modeling of Red Blood Cells During Optical Stretching. <i>Journal of Biomechanical Engineering</i> , 2010, 132, 044504.	1.3	25
51	Two-photon-induced polarization-multiplexed and multilevel storage in photoisomeric copolymer film. <i>Optics Letters</i> , 2010, 35, 46.	3.3	22
52	Characterizing Mechanical Properties of Biological Cells by Microinjection. <i>IEEE Transactions on Nanobioscience</i> , 2010, 9, 171-180.	3.3	39
53	Path planning in automated manipulation of biological cells with optical tweezers. , 2009, , .		7
54	Mechanical characterization of human red blood cells by robotic manipulation with optical tweezers. , 2009, , .		1

#	ARTICLE	IF	CITATIONS
55	Fabrication of micro gear with new technologies. , 2009, , .		0
56	Mechanical modeling characterization of biological cells using microrobotics cell injection test bed. , 2009, , .		5
57	Mechanical Properties of RF Magnetron Sputtering ZnO Thin Film by Nanoindentation. Journal of Nanoscience and Nanotechnology, 2009, 9, 1048-1050.	0.9	1
58	Magnetic Field Analysis of a New 3-Axis Optical Pickup Actuator Based on ANSYS. , 2009, , .		0
59	Polarization storage by two-photon-induced anisotropy in bisazobenzene copolymer film. Optics Communications, 2009, 282, 3282-3285.	2.1	18
60	A mechanical model of biological cells in microinjection. , 2009, , .		7
61	Influences of Geometrical Factors on Quantitative Surface Roughness Evaluations by Atomic Force Microscopy. Journal of Nanoscience and Nanotechnology, 2009, 9, 893-896.	0.9	6
62	Synchronizing focus error detection of dual-pickup heads in a multi-layer data storage system. Frontiers of Optoelectronics in China, 2008, 1, 183-187.	0.2	0
63	Mechanical Modeling of Biological Cells in Microinjection. IEEE Transactions on Nanobioscience, 2008, 7, 257-266.	3.3	93
64	Polarization storage by two-photon absorption method in a diazobenzene/MMA copolymer. , 2008, , .		1
65	Measurement of optical near field of a nanoscale aperture. Proceedings of SPIE, 2008, , .	0.8	0
66	PZT Film and Si Substrate Two-Layer System Patterning Morphology by Femtosecond Pulsed Laser. , 2007, , 1309.		0
67	Application of a novel nonperiodic grating in scanning probe microscopy drift measurement. Review of Scientific Instruments, 2007, 78, 073701.	1.3	9
68	Micro lens fabrication by means of femtosecond two photon photopolymerization. Optics Express, 2006, 14, 810.	3.4	232
69	Analysis of micro lens fabrication via femtosecond laser. , 2006, 6149, 734.		0
70	New method of two-photon multi-layer optical disc storage. , 2006, 6150, 753.		2
71	Photochromic diarylethene for two-photon 3D optical storage. Materials Letters, 2006, 60, 3553-3557.	2.6	106
72	A new type of three-finger micro-tweezers. Measurement Science and Technology, 2006, 17, 510-512.	2.6	2

#	ARTICLE	IF	CITATIONS
73	Single-beam two-photon recording and one-photon fluorescent reading three-dimensional optical data storage system. , 2006, , .		0
74	Three-dimensional optical storage recording by microexplosion in a doped PMMA polymer. , 2005, , .		2
75	Investigation of novel two-photon diarylethene for 3D optical data storage. , 2005, 5643, 1.		0
76	Three-dimensional optical data storage in a novel dye doped polymer film using two-photon bleaching. , 2005, , .		1
77	Optical properties of a novel nonlinear chromophore doped polymer and application for two-photon microfabrication. Physica Status Solidi A, 2005, 202, 2515-2520.	1.7	7
78	Log-pile photonic crystal fabricated by two-photon photopolymerization. Journal of Optics, 2005, 7, 396-399.	1.5	39
79	Microdevice assembling by adhesive type probe in humid environment. Review of Scientific Instruments, 2005, 76, 085104.	1.3	1
80	Sm(DBM)_3Phen - doped poly(methyl methacrylate) for three-dimensional multilayered optical memory. Optics Letters, 2005, 30, 774.	3.3	26
81	Analysis of vibrating mode scanning polarization force microscope. Review of Scientific Instruments, 2004, 75, 4721-4726.	1.3	2
82	Numerical simulation of the geometrical factors affecting surface roughness measurements by AFM. Measurement Science and Technology, 2004, 15, 2005-2010.	2.6	72
83	<title>2-photon microfabrication of log-pile photonic crystal and theoretical analysis on its character</title>. , 2004, , .		0
84	Microstructure and electrical properties of Pb(Zr, Ti)O <sub>3</sub> thick film prepared by electrostatic spray deposition. Sensors and Actuators A: Physical, 2003, 108, 2-6.	4.1	18
85	Design and analysis of two-dimensional zero-reference marks for alignment systems. Review of Scientific Instruments, 2003, 74, 3549-3553.	1.3	13
86	Preparation of Thick Pb(Zr, Ti)O <sub>3</sub> (PZT) Film by Electrostatic Spray Deposition (ESD) for Application in Micro-System Technology. Japanese Journal of Applied Physics, 2002, 41, 4317-4320.	1.5	24
87	Annealing effect for surface morphology and luminescence of ZnO film on silicon. Chemical Physics Letters, 2002, 364, 57-63.	2.6	63
88	Microsensors and actuator arrays based on Pb(Zr,Ti)O <sub>3</sub> thin film for AFM data storage. , 2001, , .		7
89	Optimization of two-photon excitation for 3D optical data storage. , 2001, , .		0
90	Nanoalignment mask fabricated directly on Si by AFM. Surface and Interface Analysis, 2001, 32, 130-132.	1.8	5

#	ARTICLE	IF	CITATIONS
91	Time-stability measurement and compensation of a scanning probe microscope instrument. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2027.	1.6	12
92	Three-dimensional displacements of a piezoelectric tube scanner. Review of Scientific Instruments, 1998, 69, 226-229.	1.3	10
93	Transient responses of a piezoelectric tube scanner. Review of Scientific Instruments, 1997, 68, 4483-4487.	1.3	8
94	<title>Analysis of near-field light intensity</title>. , 1996, , .		0
95	Dynamic analysis of piezoelectric elements. Review of Scientific Instruments, 1995, 66, 4157-4160.	1.3	8