Zhaona Wang

List of Publications by Year
in descending order

72 papers	2,862 citations	257357 24 h-index	168321 53 g-index
73 all docs	73 docs citations	73 times ranked	3293 citing authors

#	Article	IF	Citations
1	Eardrumâ€Inspired Active Sensors for Selfâ€Powered Cardiovascular System Characterization and Throatâ€Attached Antiâ€Interference Voice Recognition. Advanced Materials, 2015, 27, 1316-1326.	11.1	487
2	Stretchableâ€Rubberâ€Based Triboelectric Nanogenerator and Its Application as Selfâ€Powered Body Motion Sensors. Advanced Functional Materials, 2015, 25, 3688-3696.	7.8	320
3	Light-induced pyroelectric effect as an effective approach for ultrafast ultraviolet nanosensing. Nature Communications, 2015, 6, 8401.	5.8	261
4	Ultrafast Response pâ€Si/nâ€ZnO Heterojunction Ultraviolet Detector Based on Pyroâ€Phototronic Effect. Advanced Materials, 2016, 28, 6880-6886.	11.1	176
5	Optimizing Performance of Silicon-Based pâ€“n Junction Photodetectors by the Piezo-Phototronic Effect. ACS Nano, 2014, 8, 12866-12873.	7.3	120
6	Triboelectric Nanogenerator Tree for Harvesting Wind Energy and Illuminating in Subway Tunnel. Advanced Materials Technologies, 2018, 3, 1700317.	3.0	98
7	Comprehensive Pyroâ€Phototronic Effect Enhanced Ultraviolet Detector with ZnO/Ag Schottky Junction. Advanced Functional Materials, 2019, 29, 1807111.	7.8	95
8	Temperature dependence of pyro-phototronic effect on self-powered ZnO/perovskite heterostructured photodetectors. Nano Research, 2016, 9, 3695-3704.	5.8	87
9	Ultrastable and Lowâ€Threshold Random Lasing from Narrowâ€Bandwidthâ€Emission Triangular Carbon Quantum Dots. Advanced Optical Materials, 2019, 7, 1801202.	3.6	67
10	Enhanced performances of p-si/n-ZnO self-powered photodetector by interface state modification and pyro-phototronic effect. Nano Energy, 2020, 71, 104630.	8.2	64
11	Piezoâ€Phototronic UV/Visible Photosensing with Opticalâ€Fiberâ€“Nanowire Hybridized Structures. Advanced Materials, 2015, 27, 1553-1560.	11.1	60
12	Random Lasing with a High Quality Factor over the Whole Visible Range Based on Cascade Energy Transfer. Advanced Optical Materials, 2014, 2, 88-93.	3.6	57
13	Programmable Writing of Graphene Oxide/Reduced Graphene Oxide Fibers for Sensible Networks with <i>in Situ</i> Welded Junctions. ACS Nano, 2014, 8, 4325-4333.	7.3	56
14	Frequency response characteristics of pyroelectric effect in p-n junction UV detectors. Nano Energy, 2018, 54, 429-436.	8.2	52
15	Piezoâ€phototronic Boolean Logic and Computation Using Photon and Strain Dualâ€Gated Nanowire Transistors. Advanced Materials, 2015, 27, 940-947.	11.1	46
16	ZnO-based photodetector: from photon detector to pyro-phototronic effect enhanced detector. Journal Physics D: Applied Physics, 2019, 52, 223001.	1.3	46
17	Broadband plasmonic silver nanoflowers for high-performance random lasing covering visible region. Nanophotonics, 2017, 6, 1151-1160.	2.9	43
18	Tunable plasmonic bound states in the continuum in the visible range. Physical Review B, 2021, 103, .	1.1	43

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19	High performance plasmonic random laser based on nanogaps in bimetallic porous nanowires. Applied Physics Letters, 2013, 103, .	1.5	42
20	Dissolvable and Recyclable Random Lasers. ACS Nano, 2017, 11, 7600-7607.	7.3	41
21	Pulse-duration-dependent and temperature-tunable random lasing in a weakly scattering structure formed by speckles. Physical Review A, 2010, 82, .	1.0	39
22	A ring-shaped random laser in momentum space. Nanoscale, 2020, 12, 3166-3173.	2.8	34
23	Line Width-Tunable Random Laser Based on Manipulating Plasmonic Scattering. ACS Photonics, 2019, 6, 2245-2251.	3.2	30
24	Chromaticity-tunable white random lasing based on a microfluidic channel. Optics Express, 2020, 28, 13576.	1.7	26
25	Complete Band Gaps in the Visible Range Achieved by a Lowâ€Refractiveâ€Index Material. Advanced Materials, 2008, 20, 2337-2340.	11.1	25
26	Grooved nanoplate assembly for rapid detection of surface enhanced Raman scattering. Nanoscale, 2017, 9, 15390-15396.	2.8	25
27	Programmable Random Lasing Pulses Based on Waveguideâ€Assisted Random Scattering Feedback. Laser and Photonics Reviews, 2021, 15, 2000506.	4.4	24
28	Cascade-pumped random lasers with coherent emission formed by Agâ€"Au porous nanowires. Optics Letters, 2014, 39, 5.	1.7	23
29	A few points on omnidirectional band gaps in one-dimensional photonic crystals. Applied Physics B: Lasers and Optics, 2007, 86, 473-476.	1.1	22
30	Second Harmonic Generation Covering the Entire Visible Range from a 2D Materialâ€"Plasmon Hybrid Metasurface. Advanced Optical Materials, 2021, 9, 2100625.	3.6	22
31	Coherent plasmonic random laser pumped by nanosecond pulses far from the resonance peak of silver nanowires. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2523.	0.9	21
32	General laws of reflection and refraction for metasurface with phase discontinuity. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 104201.	0.2	21
33	Long-range ordered silver nanoflower array structure for surface enhanced Raman scattering detecting. Applied Surface Science, 2020, 505, 144520.	3.1	20
34	Single-excitation dual-color coherent lasing by tuning resonance energy transfer processes in porous structured nanowires. Nanoscale, 2015, 7, 15091-15098.	2.8	19
35	Two-threshold silver nanowire-based random laser with different dye concentrations. Laser Physics Letters, 2014, 11, 095002.	0.6	17
36	Resonance energy transfer process in nanogap-based dual-color random lasing. Applied Physics Letters, 2017, 110, .	1.5	16

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37	Cavity coupling in a random laser formed by ZnO nanoparticles with gain materials. Laser Physics Letters, 2013, 10, 055006.	0.6	15
38	Hierarchical forest-like photoelectrodes with ZnO nanoleaves on a metal dendrite array. Journal of Materials Chemistry A, 2016, 4, 9816-9821.	5.2	15
39	Flexible and smart fibers decorated with Ag nanoflowers for highly active surfaceâ€enhanced Raman scattering detection. Journal of Raman Spectroscopy, 2019, 50, 1468-1476.	1.2	14
40	Graded strain-enhanced pyro-phototronic photodetector with a broad and plateau band. Nano Energy, 2022, 97, 107163.	8.2	14
41	Complex diamond lattice with wide band gaps in the visible range prepared by holography using a material with a low index of refraction. Physical Review B, 2007, 76, .	1.1	13
42	The rule for broadening of band-gaps in biperiodic photonic crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 324, 489-493.	0.9	11
43	Investigation of a peculiar bifurcation phenomenon in diffraction spectra of volume holograms. Optics Letters, 2006, 31, 3270.	1.7	11
44	A humidity-tailored film random laser. Organic Electronics, 2020, 86, 105923.	1.4	11
45	Effect of surface truncation on mode density in photonic crystals. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 2416.	0.9	10
46	Temporal profiles for measuring threshold of random lasers pumped by ns pulses. Scientific Reports, 2017, 7, 5325.	1.6	10
47	Characteristics of band structures in 1D photonic crystals containing alternate leftâ€"right handed materials. Solid State Communications, 2005, 136, 495-498.	0.9	9
48	Special kind of photonic crystals with omnidirectional bandgaps. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 2601.	0.9	9
49	Guided Resonances in Periodic Dielectric Waveguides. Journal of Lightwave Technology, 2009, 27, 4544-4547.	2.7	9
50	Blowup Properties for a Semilinear Reaction-Diffusion System with Nonlinear Nonlocal Boundary Conditions. Abstract and Applied Analysis, 2010, 2010, 1-17.	0.3	9
51	Electromagnetic localization based on transformation optics. Optics Express, 2010, 18, 11891.	1.7	8
52	Omnidirectional polarization beam splitter for white light. Optics Express, 2019, 27, 7673.	1.7	8
53	A Dnv point group structure possessing complete band gap based on gradual heterostructure and self-simulating sphere. Applied Physics Letters, 2008, 93, 201902.	1.5	7
54	Effect of refractive index of environment medium on electromagnetic mode density in photonic band gaps. Applied Physics B: Lasers and Optics, 2006, 82, 549-553.	1.1	5

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55	Simultaneous excitation of cavity resonance and surface plasmon resonance in Ag/Al2O3/Ag layer structure. Applied Physics B: Lasers and Optics, 2008, 92, 585-588.	1.1	4
56	The influence of asymmetric expansion properties and random fluctuation on the bandwidth of a hologram. Journal of Optics, 2008, 10, 085205.	1.5	3
57	Wavelength Variation of a Random Laser with Concentration of a Gain Material. Chinese Physics Letters, 2011, 28, 104204.	1.3	3
58	Defect modes in silver-doped photonic crystals made by holography using dichromated gelatin. Applied Physics B: Lasers and Optics, 2012, 109, 15-18.	1.1	3
59	High transmission with narrow bandwidth of metallic defect mode in 1-D dielectric photonic crystals. Applied Physics B: Lasers and Optics, 2008, 93, 853-857.	1.1	2
60	Band-edge oscillations of the diffraction spectrum of a volume hologram investigated by the air-doping model. Applied Optics, 2011, 50, 2049.	2.1	2
61	Localization of electromagnetic wave with continuous eigenmodes in free space cavities of cylindrical or arbitrary shapes. Optics Express, 2013, 21, 30746.	1.7	2
62	Narrow Band Longitude Mode Selector of Laser Based on Conjugated Photonic Crystals. Chinese Physics Letters, 2009, 26, 104204.	1.3	2
63	Carpet anti-cloak based on transformation optics. Chinese Optics Letters, 2014, 12, 121601.	1.3	2
64	Doping Defects in Two-Dimensional Holographic Photonic Crystals Using a Continuous-Wave Visible Laser. Chinese Physics Letters, 2009, 26, 054201.	1.3	1
65	Analytical Solution of Band Gaps in 2-D Photonic Crystals Made by Multi-Beam Interference. IEEE Journal of Quantum Electronics, 2009, 45, 1297-1301.	1.0	1
66	Improvements of Dielectric Columniation Triangular Lattice for Obtaining Absolute Band Gap in Visible Range. IEEE Photonics Technology Letters, 2009, 21, 1849-1851.	1.3	1
67	Electromagnetic detection of a perfect cloak based on the material nonlinear response. Applied Physics B: Lasers and Optics, 2011, 105, 225-229.	1.1	1
68	Different emission properties of a band edge laser pumped by picosecond and nanosecond pulses. Laser Physics Letters, 2012, 9, 570-574.	0.6	1
69	Defect mode of one-dimensional holographic photonic crystals modulated by the intensity ratio of two constructive beams. Applied Physics B: Lasers and Optics, 2012, 107, 361-367.	1.1	1
70	Achieving Complete Bandgaps by Self-Similar Spherical Structure Using Low Refractive Index Materials. IEEE Photonics Technology Letters, 2008, 20, 1066-1068.	1.3	0
71	A 2-dimensional gradual period photonic heterostructure possessing omnidirectional band gap in visible range made by holography. Optics Communications, 2012, 285, 1248-1252.	1.0	0
72	Cascade pumped random lasers with coherent emission formed by Ag-Au porous nanowires. , 2013, , .		0