Jun Wang

List of Publications by Year
in descending order

109	7,784	76326	49909
papers	citations	40 h-index	87 g-index

109	109	109	7653
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Liquid exfoliation of solvent-stabilized few-layer black phosphorus for applications beyond electronics. Nature Communications, 2015, 6, 8563.	12.8	921
2	Ultrafast Saturable Absorption of Two-Dimensional MoS₂ Nanosheets. ACS Nano, 2013, 7, 9260-9267.	14.6	905
3	Broadband Nonlinear Optical Response of Graphene Dispersions. Advanced Materials, 2009, 21, 2430-2435.	21.0	486
4	WS_2 as a saturable absorber for ultrafast photonic applications of mode-locked and Q-switched lasers. Optics Express, 2015, 23, 11453.	3.4	338
5	Broadband ultrafast nonlinear absorption and nonlinear refraction of layered molybdenum dichalcogenide semiconductors. Nanoscale, 2014, 6, 10530-10535.	5.6	328
6	Direct Observation of Degenerate Two-Photon Absorption and Its Saturation in WS₂ and MoS₂ Monolayer and Few-Layer Films. ACS Nano, 2015, 9, 7142-7150.	14.6	322
7	Graphene oxide covalently functionalized with zinc phthalocyanine for broadband optical limiting. Carbon, 2011, 49, 1900-1905.	10.3	255
8	Optical Limiting and Theoretical Modelling of Layered Transition Metal Dichalcogenide Nanosheets. Scientific Reports, 2015, 5, 14646.	3.3	236
9	Ultrafast Nonlinear Excitation Dynamics of Black Phosphorus Nanosheets from Visible to Mid-Infrared. ACS Nano, 2016, 10, 6923-6932.	14.6	231
10	Carbon nanotubes and nanotube composites for nonlinear optical devices. Journal of Materials Chemistry, 2009, 19, 7425.	6.7	217
11	Bilayered Hybrid Perovskite Ferroelectric with Giant Two-Photon Absorption. Journal of the American Chemical Society, 2018, 140, 6806-6809.	13.7	185
12	Inorganic and hybrid nanostructures for optical limiting. Journal of Optics, 2009, 11, 024001.	1.5	178
13	Giant twoâ€photon absorption in monolayer MoS₂. Laser and Photonics Reviews, 2015, 9, 427-434.	8.7	161
14	High-performance mode-locked and Q-switched fiber lasers based on novel 2D materials of topological insulators, transition metal dichalcogenides and black phosphorus: review and perspective (invited). Optics Communications, 2018, 406, 214-229.	2.1	139
15	Graphene and its derivatives for laser protection. Progress in Materials Science, 2016, 84, 118-157.	32.8	128
16	463-MHz fundamental mode-locked fiber laser based on few-layer MoS_2 saturable absorber. Optics Letters, 2015, 40, 1374.	3.3	116
17	All-optical phase shifter and switch near 1550nm using tungsten disulfide (WS_2) deposited tapered fiber. Optics Express, 2017, 25, 17639.	3.4	107
18	Nonlinear Absorption Induced Transparency and Optical Limiting of Black Phosphorus Nanosheets. ACS Photonics, 2017, 4, 3063-3070.	6.6	92

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19	Dispersion of nonlinear refractive index in layered WS_2 and WSe_2 semiconductor films induced by two-photon absorption. Optics Letters, 2016, 41, 3936.	3.3	86
20	Tunable effective nonlinear refractive index of graphene dispersions during the distortion of spatial self-phase modulation. Applied Physics Letters, 2014, 104, .	3.3	84
21	Saturation of Two-Photon Absorption in Layered Transition Metal Dichalcogenides: Experiment and Theory. ACS Photonics, 2018, 5, 1558-1565.	6.6	79
22	Tin diselenide as a new saturable absorber for generation of laser pulses at 1Î¼m. Optics Express, 2017, 25, 6132.	3.4	69
23	Bacterially synthesized tellurium nanostructures for broadband ultrafast nonlinear optical applications. Nature Communications, 2019, 10, 3985.	12.8	68
24	Exfoliation of Stable 2D Black Phosphorus for Device Fabrication. Chemistry of Materials, 2017, 29, 6445-6456.	6.7	66
25	Saturable absorption behavior of free-standing graphene polymer composite films over broad wavelength and time ranges. Optics Express, 2015, 23, 559.	3.4	65
26	Nonlinear Optical Signatures of the Transition from Semiconductor to Semimetal in PtSe₂. Laser and Photonics Reviews, 2019, 13, 1900052.	8.7	64
27	Ultrafast Carrier Dynamics and Bandgap Renormalization in Layered PtSe₂. Small, 2019, 15, e1902728.	10.0	60
28	Facile fabrication of wafer-scale MoS₂ neat films with enhanced third-order nonlinear optical performance. Nanoscale, 2015, 7, 2978-2986.	5.6	58
29	Q-switching of waveguide lasers based on graphene/WS_2 van der Waals heterostructure. Photonics Research, 2017, 5, 406.	7.0	58
30	Giant Nonlinear Optical Response in 2D Perovskite Heterostructures. Advanced Optical Materials, 2019, 7, 1900398.	7.3	58
31	88 GHz Q-switched mode-locked waveguide lasers modulated by PtSe₂ saturable absorber. Optics Express, 2019, 27, 8727.	3.4	58
32	MoS₂/Carbon Nanotube Coreâ€“Shell Nanocomposites for Enhanced Nonlinear Optical Performance. Chemistry - A European Journal, 2017, 23, 3321-3327.	3.3	57
33	Donorâ€“acceptor type blends composed of black phosphorus and C₆₀ for solid-state optical limiters. Chemical Communications, 2018, 54, 366-369.	4.1	51
34	Tailoring the nonlinear optical performance of two-dimensional MoS₂ nanofilms via defect engineering. Nanoscale, 2018, 10, 17924-17932.	5.6	50
35	Regulation of the luminescence mechanism of two-dimensional tin halide perovskites. Nature Communications, 2022, 13, 60.	12.8	48
36	Slow and fast absorption saturation of black phosphorus: experiment and modelling. Nanoscale, 2016, 8, 17374-17382.	5.6	46

#	Article	IF	Citations
37	Hydrothermal synthesis of two-dimensional MoS2 and its applications. Tungsten, 2019, 1, 59-79.	4.8	45
38	Invited Article: Mode-locked waveguide lasers modulated by rhenium diselenide as a new saturable absorber. APL Photonics, 2018, 3, .	5.7	44
39	Control of Optical Limiting of Carbon Nanotube Dispersions by Changing Solvent Parameters. Journal of Physical Chemistry C, 2010, 114, 6148-6156.	3.1	42
40	The Role of Chloride Incorporation in Leadâ€Free 2D Perovskite (BA)₂SnI₄: Morphology, Photoluminescence, Phase Transition, and Charge Transport. Advanced Science, 2019, 6, 1802019.	11.2	42
41	Lithium Niobate Crystal with Embedded Au Nanoparticles: A New Saturable Absorber for Efficient Modeâ€Locking of Ultrafast Laser Pulses at 1 Âµm. Advanced Optical Materials, 2018, 6, 1800357.	7.3	41
42	Direct synthesis of large-scale hierarchical MoS₂ films nanostructured with orthogonally oriented vertically and horizontally aligned layers. Nanoscale, 2016, 8, 431-439.	5.6	39
43	Ultrafast Nonlinear Optical Properties of a Graphene Saturable Mirror in the 2 Î¼m Wavelength Region. Laser and Photonics Reviews, 2017, 11, 1700166.	8.7	38
44	Surface-State Assisted Carrier Recombination and Optical Nonlinearities in Bulk to 2D Nonlayered PtS. ACS Nano, 2019, 13, 13390-13402.	14.6	37
45	Covalent Modification of MoS₂ with Poly(Nâ€vinylcarbazole) for Solidâ€State Broadband Optical Limiters. Chemistry - A European Journal, 2016, 22, 4500-4507.	3.3	35
46	Lattice reconstruction of La-incorporated CsPbI₂Br with suppressed phase transition for air-processed all-inorganic perovskite solar cells. Journal of Materials Chemistry C, 2020, 8, 3351-3358.	5.5	35
47	Optically Induced Transparency and Extinction in Dispersed MoS₂, MoSe₂, and Graphene Nanosheets. Advanced Optical Materials, 2017, 5, 1700543.	7.3	34
48	Nonlinear optical performance of few-layer molybdenum diselenide as a slow-saturable absorber. Photonics Research, 2018, 6, 674.	7.0	34
49	Enhanced two-photon absorption and two-photon luminescence in monolayer MoS₂ and WS₂ by defect repairing. Optics Express, 2019, 27, 13744.	3.4	33
50	Direct observation of interlayer coherent acoustic phonon dynamics in bilayer and few-layer PtSe₂. Photonics Research, 2019, 7, 1416.	7.0	33
51	Giant Enhancement of Nonlinear Optical Response in Nd:YAG Single Crystals by Embedded Silver Nanoparticles. ACS Omega, 2017, 2, 1279-1286.	3.5	32
52	Passively Q-Switched Laser at 1.3 Î¼m With Few-Layered MoS2 Saturable Absorber. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 71-75.	2.9	30
53	Fabrication and nonlinear optical characterization of fluorinated zinc phthalocyanine covalently modified black phosphorus/PMMA films using the nanosecond Z-scan technique. Journal of Materials Chemistry C, 2019, 7, 10789-10794.	5.5	30
54	Fused Silica with Embedded 2Dâ€Like Ag Nanoparticle Monolayer: Tunable Saturable Absorbers by Interparticle Spacing Manipulation. Laser and Photonics Reviews, 2020, 14, 1900302.	8.7	30

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55	MoS₂ nanosheets covalently functionalized with polyacrylonitrile: synthesis and broadband laser protection performance. Journal of Materials Chemistry C, 2017, 5, 11920-11926.	5.5	28
56	Liquid Exfoliation of Two-Dimensional PbI₂ Nanosheets for Ultrafast Photonics. ACS Photonics, 2019, 6, 1051-1057.	6.6	28
57	Perfluorinated gallium phthalocyanine axially grafted black phosphorus nanosheets for optical limiting. Journal of Materials Chemistry C, 2020, 8, 10197-10203.	5.5	28
58	Enhanced nonlinear optical response of graphene by silver-based nanoparticle modification for pulsed lasing. Optical Materials Express, 2018, 8, 1368.	3.0	27
59	Monolithic waveguide laser mode-locked by embedded Ag nanoparticles operating at 1 Î¼m. Nanophotonics, 2019, 8, 859-868.	6.0	26
60	Defect-Enhanced Excitonâ€“Exciton Annihilation in Monolayer Transition Metal Dichalcogenides at High Exciton Densities. ACS Photonics, 2021, 8, 2770-2780.	6.6	26
61	Nonlinear Absorption Response Correlated to Embedded Ag Nanoparticles in BGO Single Crystal: From Two-Photon to Three-Photon Absorption. Scientific Reports, 2018, 8, 1977.	3.3	23
62	Thickness-Dependent Ultrafast Photocarrier Dynamics in Selenizing Platinum Thin Films. Journal of Physical Chemistry C, 2020, 124, 10719-10726.	3.1	23
63	Tailoring optical nonlinearities of LiNbO₃ crystals by plasmonic silver nanoparticles for broadband saturable absorbers. Optics Express, 2018, 26, 31276.	3.4	23
64	Vertical Heterostructure of SnSâ€“MoS₂ Synthesized by Sulfur-Preloaded Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2020, 12, 7423-7431.	8.0	22
65	Layer-modulated two-photon absorption in MoS₂: probing the shift of the excitonic dark state and band-edge. Photonics Research, 2019, 7, 762.	7.0	22
66	Ether-linked porphyrin covalent organic framework with broadband optical switch. IScience, 2021, 24, 102526.	4.1	21
67	Broadband Î³-graphyne saturable absorber for Q-switched solid-state laser. Applied Physics Express, 2019, 12, 122006.	2.4	18
68	Auger-type process in ultrathin ReS₂. Optical Materials Express, 2020, 10, 1092.	3.0	17
69	Broadband saturable absorption and exciton-exciton annihilation in MoSe₂ composite thin films. Optical Materials Express, 2019, 9, 483.	3.0	17
70	Broadband Nonlinear Photoresponse and Ultrafast Carrier Dynamics of 2D PdSe₂. Advanced Optical Materials, 2022, 10, 2101963.	7.3	17
71	Anisotropic luminescence and third-order electric susceptibility of Mg-doped gallium oxide under the half-bandgap edge. Optics Express, 2021, 29, 18587.	3.4	16
72	Copper Nanoparticles Embedded in Lithium Tantalate Crystals for Multi-GHz Lasers. ACS Applied Nano Materials, 2019, 2, 5871-5877.	5.0	15

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73	Plasmonic Ag nanoparticles embedded in lithium tantalate crystal for ultrafast laser generation. Nanotechnology, 2019, 30, 334001.	2.6	14
74	Photonic-crystal-based broadband graphene saturable absorber. Optics Letters, 2019, 44, 4785.	3.3	14
75	86â€...GHz Q-switched mode-locked waveguide lasing based on LiNbO₃ crystal embedded Cu nanoparticles. Optical Materials Express, 2019, 9, 3808.	3.0	14
76	Nonlinear Optical Properties and Ultrafast Carrier Dynamics of 2D Indium Selenide Nanosheets. Advanced Optical Materials, 2021, 9, 2101432.	7.3	14
77	Optical limiting properties of a nonlinear multilayer Fabryâ€“Perot resonator containing niobium pentoxide as nonlinear medium. Optics Letters, 2014, 39, 4847.	3.3	13
78	Machine Learning Analysis of Raman Spectra of MoS2. Nanomaterials, 2020, 10, 2223.	4.1	13
79	MXeneâ€Based Broadband Ultrafast Nonlinear Activator for Optical Computing. Advanced Optical Materials, 2022, 10, .	7.3	12
80	Donorâ€“acceptor type black phosphorus nanosheets covalently functionalized with a conjugated polymer for laser protection. Polymer Chemistry, 2019, 10, 6003-6009.	3.9	11
81	Electrochemical synthesis of annealing-free and highly stable black-phase CsPbI₃ perovskite. Chemical Communications, 2021, 57, 8981-8984.	4.1	11
82	Two-dimensional Î³-graphyne for ultrafast nonlinear optical applications. Optical Materials Express, 2020, 10, 293.	3.0	11
83	Enhanced optical limiting properties of composite films consisting of hyperbranched phthalocyanine and polyphenylsulfone with high linear transmittance. Synthetic Metals, 2020, 265, 116405.	3.9	10
84	Visible nonlinear optical properties of tellurium and application as saturable absorber. Optics and Laser Technology, 2021, 137, 106817.	4.6	9
85	Ultrafast electron transfer dynamics in Ag/TiO2 nanocomposite for tailoring of optical nonlinearity. Applied Surface Science, 2021, 539, 148258.	6.1	8
86	Anisotropic Raman scattering and intense broadband second-harmonic generation in tellurium nanosheets. Optics Letters, 2021, 46, 1812.	3.3	8
87	Femtosecond-scale all-optical switching in oxyfluorogallate glass induced by nonlinear multiphoton absorption. RSC Advances, 2021, 11, 32446-32453.	3.6	8
88	Vertical Stacking of Copper Sulfide Nanoparticles and Molybdenum Sulfide Nanosheets for Enhanced Nonlinear Absorption. ACS Applied Materials & Interfaces, 2019, 11, 35835-35844.	8.0	7
89	Two-dimensional tellurium saturable absorber for ultrafast solid-state laser. Chinese Optics Letters, 2021, 19, 031401.	2.9	7
90	Ultrafast nonlinear optical response of molybdenum nano-film in wide wavelength range. Optical Materials, 2019, 95, 109244.	3.6	6

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91	Organic Small Molecule Covalently Functionalized Molybdenum Disulfide Hybrid Material for Optical Limiting. Bulletin of the Chemical Society of Japan, 2020, 93, 26-31.	3.2	6
92	Plasmonic coreâ€“shell nano-heterostructures with temperature-dependent optical nonlinearity. Nanoscale, 2020, 12, 22995-23002.	5.6	6
93	Q-switched mode-locked Nd:GGG waveguide laser with tin disulfide as saturable absorber. Optical Materials, 2020, 100, 109702.	3.6	6
94	Nearâ€Infrared Allâ€Optical Switching Based on Nano/Micro Optical Structures in YVO₄ Matrix: Embedded Plasmonic Nanoparticles and Laserâ€Written Waveguides. Advanced Photonics Research, 2021, 2, 2000064.	3.6	6
95	Facile synthesis of aqueous silver nanoparticles and silver/molybdenum disulfide nanocomposites and investigation of their nonlinear optical properties. Tungsten, 2021, 3, 482-491.	4.8	6
96	WS2 based 523â€…MHz mode-locked erbium-doped fiber laser for microwave photonic application. Optical Materials Express, 2019, 9, 4688.	3.0	6
97	Microscopic optical nonlinearities and transient carrier dynamics in indium selenide nanosheet. Optics Express, 2022, 30, 17967.	3.4	6
98	Tellurium as the saturable absorber for the passively Q-switched laser at 134 Âµm. Applied Optics, 2020, 59, 2892.	1.8	5
99	Competition between stimulated Brillouin scattering and two-photon absorption in dispersed boron nitride. Optics Express, 2019, 27, 11029.	3.4	4
100	Two-photon absorption towards pulse modulation in mechanically exfoliated and CVD monolayer cascaded MoS2 structures. Chinese Optics Letters, 2019, 17, 081901.	2.9	4
101	Effects on the emission discrepancy between two-dimensional Sn-based and Pb-based perovskites. Chinese Optics Letters, 2022, 20, 021602.	2.9	4
102	Regulating the Auger Recombination Process in Two-Dimensional Sn-Based Halide Perovskites. ACS Photonics, 2022, 9, 1627-1637.	6.6	4
103	Ultrafast Saturable Absorbers: Fused Silica with Embedded 2Dâ€Like Ag Nanoparticle Monolayer: Tunable Saturable Absorbers by Interparticle Spacing Manipulation (Laser Photonics Rev. 14(2)/2020). Laser and Photonics Reviews, 2020, 14, 2070014.	8.7	3
104	Nonlinear optical fullerene and graphene-based polymeric 1D photonic crystals: perspectives for slow and fast optical bistability. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C198.	2.1	2
105	Q-switched mode-locked laser generation by Au nanoparticles embedded in LiTaO3 crystals. Optical Materials, 2021, 122, 111714.	3.6	2
106	Nonlinear Optical Response and Ultrafast Carrier Dynamics in Single-Crystalline Sb Nanosheets with van der Waals Epitaxy. Journal of Physical Chemistry C, 2021, 125, 19866-19873.	3.1	1
107	Atomic Defect Induced Saturable Absorption of Hexagonal Boron Nitride in Near Infrared Band for Ultrafast Lasing Applications. Nanomaterials, 2021, 11, 3203.	4.1	1
108	Excitonâ€Like and Midâ€Gap Absorption Dynamics of PtS in Resonant and Transparent Regions. Laser and Photonics Reviews, 2022, 16, .	8.7	1

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109	2D materials in nonlinear optics. , 2021, , 347-385.		0