Fengqiu Wang

List of Publications by Year
in descending order

124 papers	9,004 citations	94269 37 h-index	39575 94 g-index
124 all docs	124 docs citations	124 times ranked	6710 citing authors

#	Article	IF	Citations
1	Graphene Mode-Locked Ultrafast Laser. ACS Nano, 2010, 4, 803-810.	7.3	1,795
2	Nanotubeâ€“Polymer Composites for Ultrafast Photonics. Advanced Materials, 2009, 21, 3874-3899.	11.1	778
3	Wideband-tuneable, nanotube mode-locked, fibre laser. Nature Nanotechnology, 2008, 3, 738-742.	15.6	596
4	Graphene Q-switched, tunable fiber laser. Applied Physics Letters, 2011, 98, .	1.5	402
5	Sub 200 fs pulse generation from a graphene mode-locked fiber laser. Applied Physics Letters, 2010, 97, .	1.5	398
6	A stable, wideband tunable, near transform-limited, graphene-mode-locked, ultrafast laser. Nano Research, 2010, 3, 653-660.	5.8	351
7	Versatile multi-wavelength ultrafast fiber laser mode-locked by carbon nanotubes. Scientific Reports, 2013, 3, 2718.	1.6	280
8	Tm-doped fiber laser mode-locked by graphene-polymer composite. Optics Express, 2012, 20, 25077.	1.7	272
9	Planar carbon nanotubeâ€“graphene hybrid films for high-performance broadband photodetectors. Nature Communications, 2015, 6, 8589.	5.8	258
10	Two-dimensional material-based saturable absorbers: towards compact visible-wavelength all-fiber pulsed lasers. Nanoscale, 2016, 8, 1066-1072.	2.8	246
11	A self-powered high-performance graphene/silicon ultraviolet photodetector with ultra-shallow junction: breaking the limit of silicon?. Npj 2D Materials and Applications, 2017, 1, .	3.9	211
12	A light-stimulated synaptic device based on graphene hybrid phototransistor. 2D Materials, 2017, 4, 035022.	2.0	186
13	A robust and tuneable mid-infrared optical switch enabled by bulk Dirac fermions. Nature Communications, 2017, 8, 14111.	5.8	174
14	Graphene Q-switched 278ÂÎ¼m Er^3+-doped fluoride fiber laser. Optics Letters, 2013, 38, 3233.	1.7	152
15	Carbon Nanotube Polycarbonate Composites for Ultrafast Lasers. Advanced Materials, 2008, 20, 4040-4043.	11.1	148
16	Ultrafast stretched-pulse fiber laser mode-locked by carbon nanotubes. Nano Research, 2010, 3, 404-411.	5.8	133
17	Graphene Hybrid Structures for Integrated and Flexible Optoelectronics. Advanced Materials, 2020, 32, e1902039.	11.1	127
18	74-fs nanotube-mode-locked fiber laser. Applied Physics Letters, 2012, 101, 153107.	1.5	122

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19	Graphene Mode-Locked Fiber Laser at 2.8 <inline-formula> <tex-math notation="LaTeX">$mu ext{m}$ </tex-math></inline-formula>. IEEE Photonics Technology Letters, 2016, 28, 7-10.	1.3	119
20	A compact, high power, ultrafast laser mode-locked by carbon nanotubes. Applied Physics Letters, 2009, 95, .	1.5	114
21	L -band ultrafast fiber laser mode locked by carbon nanotubes. Applied Physics Letters, 2008, 93, .	1.5	106
22	Flexible high-repetition-rate ultrafast fiber laser. Scientific Reports, 2013, 3, 3223.	1.6	106
23	Sensitive and Ultrabroadband Phototransistor Based on Twoâ€Dimensional Bi₂O₂Se Nanosheets. Advanced Functional Materials, 2019, 29, 1905806.	7.8	106
24	An Ultrabroadband Midâ€Infrared Pulsed Optical Switch Employing Solutionâ€Processed Bismuth Oxyselenide. Advanced Materials, 2018, 30, e1801021.	11.1	96
25	Improving the Performance of Graphene Phototransistors Using a Heterostructure as the Light-Absorbing Layer. Nano Letters, 2017, 17, 6391-6396.	4.5	87
26	Carbon Nanotube Mode-Locked Thulium Fiber Laser With 200 nm Tuning Range. Scientific Reports, 2017, 7, 45109.	1.6	83
27	Double-Wall Carbon Nanotubes for Wide-Band, Ultrafast Pulse Generation. ACS Nano, 2014, 8, 4836-4847.	7.3	66
28	Graphene-carbon nanotube hybrid films for high-performance flexible photodetectors. Nano Research, 2017, 10, 1880-1887.	5.8	64
29	Three-dimensional Dirac semimetal thin-film absorber for broadband pulse generation in the near-infrared. Optics Letters, 2018, 43, 1503.	1.7	52
30	$2-mu$ m Wavelength Grating Coupler, Bent Waveguide, and Tunable Microring on Silicon Photonic MPW. IEEE Photonics Technology Letters, 2018, 30, 471-474.	1.3	48
31	Sensitive and Robust Ultraviolet Photodetector Array Based on Self-Assembled Graphene/C₆₀ Hybrid Films. ACS Applied Materials & Interfaces, 2018, 10, 38326-38333.	4.0	48
32	Pulse dynamics in carbon nanotube mode-locked fiber lasers near zero cavity dispersion. Optics Express, 2015, 23, 9947.	1.7	46
33	Ultrafast saturable absorption in TiS₂induced by non-equilibrium electrons and the generation of a femtosecond mode-locked laser. Nanoscale, 2018, 10, 9608-9615.	2.8	46
34	Fast Photoelectric Conversion in the Nearâ€Infrared Enabled by Plasmonâ€Induced Hotâ€Electron Transfer. Advanced Materials, 2019, 31, e1903829.	11.1	44
35	Broadband hot-carrier dynamics in three-dimensional Dirac semimetal Cd3As2. Applied Physics Letters, 2017, 111, 091101.	1.5	42
36	Generation of ultra-fast laser pulses using nanotube mode-lockers. Physica Status Solidi (B): Basic Research, 2006, 243, 3551-3555.	0.7	40

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37	Modulation of photocarrier relaxation dynamics in two-dimensional semiconductors. Light: Science and Applications, 2020, 9, 192.	7.7	40
38	Ultrafast nonlinear photoresponse of single-wall carbon nanotubes: a broadband degenerate investigation. Nanoscale, 2016, 8, 9304-9309.	2.8	39
39	Dirac semimetal saturable absorber with actively tunable modulation depth. Optics Letters, 2019, 44, 582.	1.7	38
40	Charge transfer at carbon nanotubeâ€“graphene van der Waals heterojunctions. Nanoscale, 2016, 8, 12883-12886.	2.8	37
41	Ultrafast free carrier dynamics in black phosphorusâ€“molybdenum disulfide (BP/MoS₂) heterostructures. Nanoscale Horizons, 2019, 4, 1099-1105.	4.1	36
42	Nanotube mode-locked, wavelength and pulsewidth tunable thulium fiber laser. Optics Express, 2019, 27, 3518.	1.7	35
43	Tuning the transport behavior of centimeter-scale WTe2 ultrathin films fabricated by pulsed laser deposition. Applied Physics Letters, 2017, 111, .	1.5	34
44	500fs wideband tunable fiber laser mode-locked by nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1078-1081.	1.3	33
45	Broadband photocarrier dynamics and nonlinear absorption of PLD-grown WTe2 semimetal films. Applied Physics Letters, 2018, 112, .	1.5	31
46	Atomic-Scale Interfacial Magnetism in Fe/Graphene Heterojunction. Scientific Reports, 2015, 5, 11911.	1.6	30
47	Planar graphene-C60-graphene heterostructures for sensitive UV-Visible photodetection. Carbon, 2019, 146, 486-490.	5.4	30
48	Carbon nanotubes for ultrafast photonics. Physica Status Solidi (B): Basic Research, 2007, 244, 4303-4307.	0.7	29
49	Two-dimensional materials for ultrafast lasers. Chinese Physics B, 2017, 26, 034202.	0.7	28
50	Enhanced Photocatalytic Activity of 2H-MoSe₂ by 3d Transition-Metal Doping. Journal of Physical Chemistry C, 2018, 122, 26570-26575.	1.5	28
51	Fabrication, characterization and mode locking application of single-walled carbon nanotube/polymer composite saturable absorbers. International Journal of Material Forming, 2008, 1, 107.	0.9	27
52	Tailoring exciton dynamics of monolayer transition metal dichalcogenides by interfacial electron-phonon coupling. Communications Physics, 2019, 2, .	2.0	27
53	716â€‰â€‰nm deep-red passively Q-switched Pr:ZBLAN all-fiber laser using a carbon-nanotube saturable absorber. Optics Letters, 2017, 42, 671.	1.7	26
54	Broadband nonlinear optical response of monolayer MoSe2 under ultrafast excitation. Applied Physics Letters, 2018, 112, .	1.5	25

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55	Indium selenide film: a promising saturable absorber in 3- to 4-Î¼m band for mid-infrared pulsed laser. Nanophotonics, 2020, 9, 2045-2052.	2.9	25
56	Bidirectional Red-Light Passively Q-Switched All-Fiber Ring Lasers With Carbon Nanotube Saturable Absorber. Journal of Lightwave Technology, 2018, 36, 2694-2701.	2.7	23
57	Coupled relaxation channels of excitons in monolayer MoSe₂. Nanoscale, 2017, 9, 18546-18551.	2.8	22
58	Soliton fiber laser modeâ€locked by a singleâ€wall carbon nanotubeâ€polymer composite. Physica Status Solidi (B): Basic Research, 2008, 245, 2319-2322.	0.7	21
59	Graphene mode-locked femtosecond Cr^2+:ZnS laser with ~300 nm tuning range. Optics Express, 2016, 24, 20774.	1.7	21
60	Third harmonic generation in Dirac semimetal Cd3As2. Applied Physics Letters, 2020, 117, .	1.5	21
61	Slowing down photocarrier relaxation in Dirac semimetal Cd₃As₂ via Mn doping. Optics Letters, 2019, 44, 4103.	1.7	20
62	Recent advances in graphene and black phosphorus nonlinear plasmonics. Nanophotonics, 2020, 9, 1695-1715.	2.9	19
63	InAs-Nanowire-Based Broadband Ultrafast Optical Switch. Journal of Physical Chemistry Letters, 2019, 10, 4429-4436.	2.1	18
64	Stable Gain-Switched Thulium Fiber Laser With 140-nm Tuning Range. IEEE Photonics Technology Letters, 2016, 28, 1340-1343.	1.3	17
65	Robust, flexible and broadband photodetectors based on van der Waals graphene/C60 heterostructures. Carbon, 2020, 167, 668-674.	5.4	17
66	Layered Semiconductor Bi₂O₂Se for Broadband Pulse Generation in the Near-Infrared. IEEE Photonics Technology Letters, 2019, 31, 1056-1059.	1.3	16
67	Progress on mid-IR graphene photonics and biochemical applications. Frontiers of Optoelectronics, 2016, 9, 259-269.	1.9	15
68	Highly Sensitive and Ultrafast Organic Phototransistor Based on Rubrene Single Crystals. ACS Applied Materials & Interfaces, 2021, 13, 57735-57742.	4.0	15
69	Photoresponsivity of an all-semimetal heterostructure based on graphene and WTe2. Scientific Reports, 2018, 8, 12840.	1.6	14
70	20 GHz actively mode-locked thulium fiber laser. Optics Express, 2018, 26, 25769.	1.7	14
71	Pushing Optical Switch into Deep Mid-Infrared Region: Band Theory, Characterization, and Performance of Topological Semimetal Antimonene. ACS Nano, 2021, 15, 7430-7438.	7.3	13
72	Spin-ARPES EUV Beamline for Ultrafast Materials Research and Development. Applied Sciences (Switzerland), 2019, 9, 370.	1.3	12

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73	Enhancing photocatalytic activity in monolayer MoS2 by charge compensated co-doping with P and Cl: First principles study. Molecular Catalysis, 2019, 468, 94-99.	1.0	12
74	Two-dimensional Au & Ag hybrid plasmonic nanoparticle network: broadband nonlinear optical response and applications for pulsed laser generation. Nanophotonics, 2020, 9, 2537-2548.	2.9	12
75	Harmonic Generation in Lowâ€Dimensional Materials. Advanced Optical Materials, 2022, 10, .	3.6	12
76	All-Fiber Passively Q-Switched Laser Based on Tm3+-Doped Tellurite Fiber. IEEE Photonics Technology Letters, 2015, 27, 689-692.	1.3	10
77	Bandgap renormalization in single-wall carbon nanotubes. Scientific Reports, 2017, 7, 11221.	1.6	10
78	Hot carrier relaxation in three dimensional gapped Dirac semi-metals. Journal Physics D: Applied Physics, 2018, 51, 015101.	1.3	10
79	Observation of bimolecular recombination in high mobility semiconductor Bi2O2Se using ultrafast spectroscopy. Applied Physics Letters, 2018, 113, 061104.	1.5	10
80	Electrically and Magnetically Tunable Valley Polarization in Monolayer MoSe₂ Proximitized by a 2D Ferromagnetic Semiconductor. Advanced Functional Materials, 2022, 32, .	7.8	10
81	Phosphorus doping effect on linear and nonlinear optical properties of Si/SiO_2 multilayers. Optical Materials Express, 2017, 7, 304.	1.6	7
82	Manipulating valley-polarized photoluminescence of MoS2 monolayer at off resonance wavelength with a double-resonance strategy. Applied Physics Letters, 2021, 119, 031106.	1.5	7
83	All-carbon hybrids for high-performance electronics, optoelectronics and energy storage. Science China Information Sciences, 2019, 62, 1.	2.7	6
84	Probing the mode-locking pattern in the parameter space of a Figure-9 laser. Optics Letters, 2022, 47, 2606.	1.7	6
85	2- mu m Repetition-Rate Tunable (1â€“6 GHz) Picosecond Source. IEEE Photonics Technology Letters, 2017, 29, 2234-2237.	1.3	5
86	Magnetism in monolayer InSe by nonmetal doping: First-principles study. Solid State Communications, 2019, 288, 56-59.	0.9	5
87	Bi₂O₂Se/Au-Based Schottky Phototransistor With Fast Response and Ultrahigh Responsivity. IEEE Electron Device Letters, 2020, 41, 1464-1467.	2.2	5
88	Controlling relaxation dynamics of excitonic states in monolayer transition metal dichalcogenides WS2 through interface engineering. Applied Physics Letters, 2021, 118, 121104.	1.5	5
89	High energy (>40 nJ), sub-100 fs, 950 nm laser for two-photon microscopy. Optics Express, 2021, 29, 38979.	1.7	5
90	Ultrafast lattice and electronic dynamics in single-walled carbon nanotubes. Nanoscale Advances, 2020, 2, 2808-2813.	2.2	4

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91	950 nm Femtosecond Laser by Directly Frequency-Doubling of a Thulium-Doped Fiber Laser. IEEE Photonics Technology Letters, 2022, 34, 498-501.	1.3	4
92	Coherent vibrational dynamics of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NbO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml film. Physical Review Materials, 2022, 6, .	3	3
93	Pulsed Lasers: An Ultrabroadband Mid-Infrared Pulsed Optical Switch Employing Solution-Processed Bismuth Oxyselenide (Adv. Mater. 31/2018). Advanced Materials, 2018, 30, 1870233.	11.1	2
94	Magnetic anisotropy of half-metallic Co2FeAl ultra-thin films epitaxially grown on GaAs(001). AIP Advances, 2019, 9, 065002.	0.6	2
95	Observation of Small Polaron and Acoustic Phonon Coupling in Ultrathin La 0.7 Sr 0.3 MnO 3 /SrTiO 3 Structures. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800657.	1.2	2
96	10â€…GHz regeneratively mode-locked thulium fiber laser with a stabilized repetition rate. Optics Express, 2021, 29, 37695.	1.7	2
97	Sub-Femtosecond Timing Jitter From a SESAM Mode-Locked Yb-Fiber Laser. IEEE Photonics Technology Letters, 2021, 33, 1309-1312.	1.3	2
98	Characteristics of saturable absorption of MoS2 films in the visible to near-infrared range. , 2014, , .		1
99	Ultrafast nonlinear absorption in SWNTs: An ultra-broadband investigation. , 2015, , .		1
100	Weak Anti-Localization and Quantum Oscillations in Topological Crystalline Insulator PbTe. Chinese Physics Letters, 2017, 34, 026201.	1.3	1
101	1550 nm Compatible Ultrafast Photoconductive Material Based on a GaAs/ErAs/GaAs Heterostructure. Advanced Optical Materials, 2021, 9, 2100062.	3.6	1
102	Broadband Nonlinear Photoresponse of Monolayer MoSe2. , 2016, , .		1
103	Three-dimensional Dirac semimetal Cd3As2 as high-performance 2-5 Î¼m saturable absorbers. , 2016, , .		1
104	Different ultrafast dynamics of neutral and charged excitons in monolayer WS2. , 2020, , .		1
105	Light-activated artificial synapses based on graphene hybrid phototransistors. , 2016, , .		1
106	Ultrafast Mid-IR carrier dynamics in three-dimensional dirac semimetal Cd<inf>3</inf>AS<inf>2</inf>. , 2015, , .		0
107	Resolving the optical modulation mechanism of graphene-hybridized plasmonic metamaterials. , 2015, , .		0
108	Long-cavity nanosecond thulium fiber laser: A compact source of energetic mid-IR pulses. , 2015, , .		0

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109	Bandwidth Tunable, Dispersion-managed Mode-locked Thulium/holmium Fiber Laser. , 2018, , .		0
110	Novel Optoelectronic Devices based on Planar Graphene-Nanotube Hybrid Film. , 2016, , .		0
111	All-carbon flexible photodetectors. , 2017, , .		0
112	High repetition-rate 2 Î¼m ultrafast source for data communication and processing. , 2017, , .		0
113	Photonic synaptic device capable of optical memory and logic operations. , 2017, , .		0
114	Light-actuation of carbon nanotubes in liquids. , 2018, , .		0
115	15 GHz actively mode-locked fiber laser at 2 micron. , 2018, , .		0
116	Nonlinear Reflectance of Planar Plasmonic Nanostructure. , 2018, , .		0
117	Mid-infrared saturable absorber mirror (MIR-SAM) based on Dirac semimetal thin films. , 2018, , .		0
118	Spectroscopic signature of interlayer coupling in Black phosphorus-graphite heterostructure. , 2018, , .		0
119	Third Harmonic Generation (THG) in Three-Dimensional Dirac Semimetal Cd3As2. , 2020, , .		0
120	A SESAM-like Device Operating beyond 3 Micron. , 2020, , .		0
121	2 Î¼m Actively Mode-locked External-cavity Semiconductor Laser. , 2020, , .		0
122	2 GHz Regeneratively Mode-locked Laser at 2 Micron. , 2020, , .		0
123	QCL-seeded femtosecond optical parametric amplifier operating beyond 4.5 Î¼m. , 2021, , .		0
124	Observation of an anisotropic ultrafast spin relaxation process in large-area WTe₂ films. Journal of Applied Physics, 2022, 131, 163903.	1.1	0