

# Fengqiu Wang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2309840/publications.pdf>

Version: 2024-02-01

124  
papers

9,004  
citations

94433

37  
h-index

39675

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.	14.6	1,795
2	Nanotube-Polymer Composites for Ultrafast Photonics. Advanced Materials, 2009, 21, 3874-3899.	21.0	778
3	Wideband-tuneable, nanotube mode-locked, fibre laser. Nature Nanotechnology, 2008, 3, 738-742.	31.5	596
4	Graphene Q-switched, tunable fiber laser. Applied Physics Letters, 2011, 98, .	3.3	402
5	Sub 200 fs pulse generation from a graphene mode-locked fiber laser. Applied Physics Letters, 2010, 97, .	3.3	398
6	A stable, wideband tunable, near transform-limited, graphene-mode-locked, ultrafast laser. Nano Research, 2010, 3, 653-660.	10.4	351
7	Versatile multi-wavelength ultrafast fiber laser mode-locked by carbon nanotubes. Scientific Reports, 2013, 3, 2718.	3.3	280
8	Tm-doped fiber laser mode-locked by graphene-polymer composite. Optics Express, 2012, 20, 25077.	3.4	272
9	Planar carbon nanotube-graphene hybrid films for high-performance broadband photodetectors. Nature Communications, 2015, 6, 8589.	12.8	258
10	Two-dimensional material-based saturable absorbers: towards compact visible-wavelength all-fiber pulsed lasers. Nanoscale, 2016, 8, 1066-1072.	5.6	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, .	7.9	211
12	A light-stimulated synaptic device based on graphene hybrid phototransistor. 2D Materials, 2017, 4, 035022.	4.4	186
13	A robust and tuneable mid-infrared optical switch enabled by bulk Dirac fermions. Nature Communications, 2017, 8, 14111.	12.8	174
14	Graphene Q-switched 278-nm Er <sup>3+</sup> -doped fluoride fiber laser. Optics Letters, 2013, 38, 3233.	3.3	152
15	Carbon Nanotube Polycarbonate Composites for Ultrafast Lasers. Advanced Materials, 2008, 20, 4040-4043.	21.0	148
16	Ultrafast stretched-pulse fiber laser mode-locked by carbon nanotubes. Nano Research, 2010, 3, 404-411.	10.4	133
17	Graphene Hybrid Structures for Integrated and Flexible Optoelectronics. Advanced Materials, 2020, 32, e1902039.	21.0	127
18	74-fs nanotube-mode-locked fiber laser. Applied Physics Letters, 2012, 101, 153107.	3.3	122

#	ARTICLE	IF	CITATIONS
19	Graphene Mode-Locked Fiber Laser at 2.8 $\mu\text{m}$ . IEEE Photonics Technology Letters, 2016, 28, 7-10.	2.5	119
20	A compact, high power, ultrafast laser mode-locked by carbon nanotubes. Applied Physics Letters, 2009, 95, .	3.3	114
21	L-band ultrafast fiber laser mode locked by carbon nanotubes. Applied Physics Letters, 2008, 93, .	3.3	106
22	Flexible high-repetition-rate ultrafast fiber laser. Scientific Reports, 2013, 3, 3223.	3.3	106
23	Sensitive and Ultrabroadband Phototransistor Based on Two-Dimensional Bi <sub>2</sub> O <sub>2</sub> Se Nanosheets. Advanced Functional Materials, 2019, 29, 1905806.	14.9	106
24	An Ultrabroadband Mid-Infrared Pulsed Optical Switch Employing Solution-Processed Bismuth Oxyselenide. Advanced Materials, 2018, 30, e1801021.	21.0	96
25	Improving the Performance of Graphene Phototransistors Using a Heterostructure as the Light-Absorbing Layer. Nano Letters, 2017, 17, 6391-6396.	9.1	87
26	Carbon Nanotube Mode-Locked Thulium Fiber Laser With 200 nm Tuning Range. Scientific Reports, 2017, 7, 45109.	3.3	83
27	Double-Wall Carbon Nanotubes for Wide-Band, Ultrafast Pulse Generation. ACS Nano, 2014, 8, 4836-4847.	14.6	66
28	Graphene-carbon nanotube hybrid films for high-performance flexible photodetectors. Nano Research, 2017, 10, 1880-1887.	10.4	64
29	Three-dimensional Dirac semimetal thin-film absorber for broadband pulse generation in the near-infrared. Optics Letters, 2018, 43, 1503.	3.3	52
30	$2\text{-}\mu\text{m}$ Wavelength Grating Coupler, Bent Waveguide, and Tunable Microring on Silicon Photonic MPW. IEEE Photonics Technology Letters, 2018, 30, 471-474.	2.5	48
31	Sensitive and Robust Ultraviolet Photodetector Array Based on Self-Assembled Graphene/C <sub>60</sub> Hybrid Films. ACS Applied Materials & Interfaces, 2018, 10, 38326-38333.	8.0	48
32	Pulse dynamics in carbon nanotube mode-locked fiber lasers near zero cavity dispersion. Optics Express, 2015, 23, 9947.	3.4	46
33	Ultrafast saturable absorption in TiS <sub>2</sub> induced by non-equilibrium electrons and the generation of a femtosecond mode-locked laser. Nanoscale, 2018, 10, 9608-9615.	5.6	46
34	Fast Photoelectric Conversion in the Near-Infrared Enabled by Plasmon-Induced Hot-Electron Transfer. Advanced Materials, 2019, 31, e1903829.	21.0	44
35	Broadband hot-carrier dynamics in three-dimensional Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . Applied Physics Letters, 2017, 111, 091101.	3.3	42
36	Generation of ultra-fast laser pulses using nanotube mode-lockers. Physica Status Solidi (B): Basic Research, 2006, 243, 3551-3555.	1.5	40

#	ARTICLE	IF	CITATIONS
37	Modulation of photocarrier relaxation dynamics in two-dimensional semiconductors. <i>Light: Science and Applications</i> , 2020, 9, 192.	16.6	40
38	Ultrafast nonlinear photoresponse of single-wall carbon nanotubes: a broadband degenerate investigation. <i>Nanoscale</i> , 2016, 8, 9304-9309.	5.6	39
39	Dirac semimetal saturable absorber with actively tunable modulation depth. <i>Optics Letters</i> , 2019, 44, 582.	3.3	38
40	Charge transfer at carbon nanotube-graphene van der Waals heterojunctions. <i>Nanoscale</i> , 2016, 8, 12883-12886.	5.6	37
41	Ultrafast free carrier dynamics in black phosphorus-molybdenum disulfide (BP/MoS <sub>2</sub> ) heterostructures. <i>Nanoscale Horizons</i> , 2019, 4, 1099-1105.	8.0	36
42	Nanotube mode-locked, wavelength and pulsewidth tunable thulium fiber laser. <i>Optics Express</i> , 2019, 27, 3518.	3.4	35
43	Tuning the transport behavior of centimeter-scale WTe <sub>2</sub> ultrathin films fabricated by pulsed laser deposition. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	34
44	500fs wideband tunable fiber laser mode-locked by nanotubes. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012, 44, 1078-1081.	2.7	33
45	Broadband photocarrier dynamics and nonlinear absorption of PLD-grown WTe <sub>2</sub> semimetal films. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	31
46	Atomic-Scale Interfacial Magnetism in Fe/Graphene Heterojunction. <i>Scientific Reports</i> , 2015, 5, 11911.	3.3	30
47	Planar graphene-C60-graphene heterostructures for sensitive UV-Visible photodetection. <i>Carbon</i> , 2019, 146, 486-490.	10.3	30
48	Carbon nanotubes for ultrafast photonics. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 4303-4307.	1.5	29
49	Two-dimensional materials for ultrafast lasers. <i>Chinese Physics B</i> , 2017, 26, 034202.	1.4	28
50	Enhanced Photocatalytic Activity of 2H-MoSe <sub>2</sub> by 3d Transition-Metal Doping. <i>Journal of Physical Chemistry C</i> , 2018, 122, 26570-26575.	3.1	28
51	Fabrication, characterization and mode locking application of single-walled carbon nanotube/polymer composite saturable absorbers. <i>International Journal of Material Forming</i> , 2008, 1, 107.	2.0	27
52	Tailoring exciton dynamics of monolayer transition metal dichalcogenides by interfacial electron-phonon coupling. <i>Communications Physics</i> , 2019, 2, .	5.3	27
53	716-nm deep-red passively Q-switched Pr:ZBLAN all-fiber laser using a carbon-nanotube saturable absorber. <i>Optics Letters</i> , 2017, 42, 671.	3.3	26
54	Broadband nonlinear optical response of monolayer MoSe <sub>2</sub> under ultrafast excitation. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	25

#	ARTICLE	IF	CITATIONS
55	Indium selenide film: a promising saturable absorber in 3- to 4- $\mu$ m band for mid-infrared pulsed laser. <i>Nanophotonics</i> , 2020, 9, 2045-2052.	6.0	25
56	Bidirectional Red-Light Passively Q-Switched All-Fiber Ring Lasers With Carbon Nanotube Saturable Absorber. <i>Journal of Lightwave Technology</i> , 2018, 36, 2694-2701.	4.6	23
57	Coupled relaxation channels of excitons in monolayer MoSe <sub>2</sub> . <i>Nanoscale</i> , 2017, 9, 18546-18551.	5.6	22
58	Soliton fiber laser mode-locked by a single-wall carbon nanotube-polymer composite. <i>Physica Status Solidi (B): Basic Research</i> , 2008, 245, 2319-2322.	1.5	21
59	Graphene mode-locked femtosecond Cr <sup>2+</sup> :ZnS laser with ~300 nm tuning range. <i>Optics Express</i> , 2016, 24, 20774.	3.4	21
60	Third harmonic generation in Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . <i>Applied Physics Letters</i> , 2020, 117, .	3.3	21
61	Slowing down photocarrier relaxation in Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> via Mn doping. <i>Optics Letters</i> , 2019, 44, 4103.	3.3	20
62	Recent advances in graphene and black phosphorus nonlinear plasmonics. <i>Nanophotonics</i> , 2020, 9, 1695-1715.	6.0	19
63	InAs-Nanowire-Based Broadband Ultrafast Optical Switch. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4429-4436.	4.6	18
64	Stable Gain-Switched Thulium Fiber Laser With 140-nm Tuning Range. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 1340-1343.	2.5	17
65	Robust, flexible and broadband photodetectors based on van der Waals graphene/C60 heterostructures. <i>Carbon</i> , 2020, 167, 668-674.	10.3	17
66	Layered Semiconductor Bi <sub>2</sub> O <sub>2</sub> Se for Broadband Pulse Generation in the Near-Infrared. <i>IEEE Photonics Technology Letters</i> , 2019, 31, 1056-1059.	2.5	16
67	Progress on mid-IR graphene photonics and biochemical applications. <i>Frontiers of Optoelectronics</i> , 2016, 9, 259-269.	3.7	15
68	Highly Sensitive and Ultrafast Organic Phototransistor Based on Rubrene Single Crystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 57735-57742.	8.0	15
69	Photoresponsivity of an all-semimetal heterostructure based on graphene and WTe <sub>2</sub> . <i>Scientific Reports</i> , 2018, 8, 12840.	3.3	14
70	20 GHz actively mode-locked thulium fiber laser. <i>Optics Express</i> , 2018, 26, 25769.	3.4	14
71	Pushing Optical Switch into Deep Mid-Infrared Region: Band Theory, Characterization, and Performance of Topological Semimetal Antimonene. <i>ACS Nano</i> , 2021, 15, 7430-7438.	14.6	13
72	Spin-ARPES EUV Beamline for Ultrafast Materials Research and Development. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 370.	2.5	12

#	ARTICLE	IF	CITATIONS
73	Enhancing photocatalytic activity in monolayer MoS <sub>2</sub> by charge compensated co-doping with P and Cl: First principles study. <i>Molecular Catalysis</i> , 2019, 468, 94-99.	2.0	12
74	Two-dimensional Au & Ag hybrid plasmonic nanoparticle network: broadband nonlinear optical response and applications for pulsed laser generation. <i>Nanophotonics</i> , 2020, 9, 2537-2548.	6.0	12
75	Harmonic Generation in Low-Dimensional Materials. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	12
76	All-Fiber Passively Q-Switched Laser Based on Tm <sup>3+</sup> -Doped Tellurite Fiber. <i>IEEE Photonics Technology Letters</i> , 2015, 27, 689-692.	2.5	10
77	Bandgap renormalization in single-wall carbon nanotubes. <i>Scientific Reports</i> , 2017, 7, 11221.	3.3	10
78	Hot carrier relaxation in three dimensional gapped Dirac semi-metals. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 015101.	2.8	10
79	Observation of bimolecular recombination in high mobility semiconductor Bi <sub>2</sub> O <sub>2</sub> Se using ultrafast spectroscopy. <i>Applied Physics Letters</i> , 2018, 113, 061104.	3.3	10
80	Electrically and Magnetically Tunable Valley Polarization in Monolayer MoSe <sub>2</sub> Proximitized by a 2D Ferromagnetic Semiconductor. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	10
81	Phosphorus doping effect on linear and nonlinear optical properties of Si/SiO <sub>2</sub> multilayers. <i>Optical Materials Express</i> , 2017, 7, 304.	3.0	7
82	Manipulating valley-polarized photoluminescence of MoS <sub>2</sub> monolayer at off resonance wavelength with a double-resonance strategy. <i>Applied Physics Letters</i> , 2021, 119, 031106.	3.3	7
83	All-carbon hybrids for high-performance electronics, optoelectronics and energy storage. <i>Science China Information Sciences</i> , 2019, 62, 1.	4.3	6
84	Probing the mode-locking pattern in the parameter space of a Figure-9 laser. <i>Optics Letters</i> , 2022, 47, 2606.	3.3	6
85	2- $\mu$ m Repetition-Rate Tunable (1 $\times$ 6 GHz) Picosecond Source. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 2234-2237.	2.5	5
86	Magnetism in monolayer InSe by nonmetal doping: First-principles study. <i>Solid State Communications</i> , 2019, 288, 56-59.	1.9	5
87	Bi <sub>2</sub> O <sub>2</sub> Se/Au-Based Schottky Phototransistor With Fast Response and Ultrahigh Responsivity. <i>IEEE Electron Device Letters</i> , 2020, 41, 1464-1467.	3.9	5
88	Controlling relaxation dynamics of excitonic states in monolayer transition metal dichalcogenides WS <sub>2</sub> through interface engineering. <i>Applied Physics Letters</i> , 2021, 118, 121104.	3.3	5
89	High energy (>40 nJ), sub-100 fs, 950 nm laser for two-photon microscopy. <i>Optics Express</i> , 2021, 29, 38979.	3.4	5
90	Ultrafast lattice and electronic dynamics in single-walled carbon nanotubes. <i>Nanoscale Advances</i> , 2020, 2, 2808-2813.	4.6	4

#	ARTICLE	IF	CITATIONS
91	950 nm Femtosecond Laser by Directly Frequency-Doubling of a Thulium-Doped Fiber Laser. IEEE Photonics Technology Letters, 2022, 34, 498-501.	2.5	4
92	Coherent vibrational dynamics of $\text{NbO}_2$ film. Physical Review Materials, 2022, 6, .	2.4	1
93	Pulsed Lasers: An Ultrabroadband Mid-Infrared Pulsed Optical Switch Employing Solution-Processed Bismuth Oxyselenide (Adv. Mater. 31/2018). Advanced Materials, 2018, 30, 1870233.	21.0	2
94	Magnetic anisotropy of half-metallic $\text{Co}_2\text{FeAl}$ ultra-thin films epitaxially grown on GaAs(001). AIP Advances, 2019, 9, 065002.	1.3	2
95	Observation of Small Polaron and Acoustic Phonon Coupling in Ultrathin $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{SrTiO}_3$ Structures. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800657.	2.4	2
96	10 $\mu\text{m}$ regenerative mode-locked thulium fiber laser with a stabilized repetition rate. Optics Express, 2021, 29, 37695.	3.4	2
97	Sub-Femtosecond Timing Jitter From a SESAM Mode-Locked Yb-Fiber Laser. IEEE Photonics Technology Letters, 2021, 33, 1309-1312.	2.5	2
98	Characteristics of saturable absorption of $\text{MoS}_2$ 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 $\text{PbTe}$ . Chinese Physics Letters, 2017, 34, 026201.	3.3	1
101	1550 nm Compatible Ultrafast Photoconductive Material Based on a $\text{GaAs}/\text{ErAs}/\text{GaAs}$ Heterostructure. Advanced Optical Materials, 2021, 9, 2100062.	7.3	1
102	Broadband Nonlinear Photoresponse of Monolayer $\text{MoSe}_2$ . , 2016, , .		1
103	Three-dimensional Dirac semimetal $\text{Cd}_3\text{As}_2$ as high-performance 2-5 $\mu\text{m}$ saturable absorbers. , 2016, , .		1
104	Different ultrafast dynamics of neutral and charged excitons in monolayer $\text{WS}_2$ . , 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 $\text{Cd}_3\text{As}_2$ . , 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

#	ARTICLE	IF	CITATIONS
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 $\mu$ m 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 Cd <sub>3</sub> As <sub>2</sub> . , 2020, , .		0
120	A SESAM-like Device Operating beyond 3 Micron. , 2020, , .		0
121	2 $\mu$ m 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 $\mu$ m. , 2021, , .		0
124	Observation of an anisotropic ultrafast spin relaxation process in large-area WTe <sub>2</sub> films. Journal of Applied Physics, 2022, 131, 163903.	2.5	0