Feng Zhang

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6765367/publications.pdf

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269 papers 38,249 citations

107 h-index 189

272 all docs

 $\begin{array}{c} 272 \\ \text{docs citations} \end{array}$

times ranked

272

20156 citing authors

g-index

#	Article	IF	CITATIONS
1	Atomicâ€Layer Graphene as a Saturable Absorber for Ultrafast Pulsed Lasers. Advanced Functional Materials, 2009, 19, 3077-3083.	7.8	2,310
2	Ultrasmall Black Phosphorus Quantum Dots: Synthesis and Use as Photothermal Agents. Angewandte Chemie - International Edition, 2015, 54, 11526-11530.	7.2	906
3	Mechanically exfoliated black phosphorus as a new saturable absorber for both Q-switching and Mode-locking laser operation. Optics Express, 2015, 23, 12823.	1.7	866
4	From Black Phosphorus to Phosphorene: Basic Solvent Exfoliation, Evolution of Raman Scattering, and Applications to Ultrafast Photonics. Advanced Functional Materials, 2015, 25, 6996-7002.	7.8	862
5	Biodegradable black phosphorus-based nanospheres for in vivo photothermal cancer therapy. Nature Communications, 2016, 7, 12967.	5.8	835
6	Black Phosphorus Nanosheets as a Robust Delivery Platform for Cancer Theranostics. Advanced Materials, 2017, 29, 1603276.	11.1	721
7	Novel concept of the smart NIR-light–controlled drug release of black phosphorus nanostructure for cancer therapy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 501-506.	3.3	657
8	Ultra-short pulse generation by a topological insulator based saturable absorber. Applied Physics Letters, 2012, 101, 211106.	1.5	551
9	Broadband Nonlinear Photonics in Few‣ayer MXene Ti ₃ C ₂ T _x (T =) Tj ET	ТQq <u>1</u> 41 0.7	784314 rgB <mark>T</mark>
10	Emerging two-dimensional monoelemental materials (Xenes) for biomedical applications. Chemical Society Reviews, 2019, 48, 2891-2912.	18.7	482
11	Ultrasensitive detection of miRNA with an antimonene-based surface plasmon resonance sensor. Nature Communications, 2019, 10, 28.	5 . 8	475
12	Antimonene Quantum Dots: Synthesis and Application as Nearâ€Infrared Photothermal Agents for Effective Cancer Therapy. Angewandte Chemie - International Edition, 2017, 56, 11896-11900.	7.2	465
13	Large energy soliton erbium-doped fiber laser with a graphene-polymer composite mode locker. Applied Physics Letters, 2009, 95, .	1.5	450
14	2D Black Phosphorus–Based Biomedical Applications. Advanced Functional Materials, 2019, 29, 1808306.	7.8	438
15	Metalâ€Ionâ€Modified Black Phosphorus with Enhanced Stability and Transistor Performance. Advanced Materials, 2017, 29, 1703811.	11.1	431
16	MXene/Polymer Membranes: Synthesis, Properties, and Emerging Applications. Chemistry of Materials, 2020, 32, 1703-1747.	3.2	429
17	Emerging combination strategies with phototherapy in cancer nanomedicine. Chemical Society Reviews, 2020, 49, 8065-8087.	18.7	427
18	Ytterbium-doped fiber laser passively mode locked by few-layer Molybdenum Disulfide (MoS2) saturable absorber functioned with evanescent field interaction. Scientific Reports, 2014, 4, 6346.	1.6	407

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19	Wavelength-tunable picosecond soliton fiber laser with Topological Insulator: Bi_2Se_3 as a mode locker. Optics Express, 2012, 20, 27888.	1.7	406
20	Microfiber-based few-layer black phosphorus saturable absorber for ultra-fast fiber laser. Optics Express, 2015, 23, 20030.	1.7	399
21	Femtosecond pulse erbium-doped fiber laser by a few-layer MoS_2 saturable absorber. Optics Letters, 2014, 39, 4591.	1.7	356
22	2D Layered Materials: Synthesis, Nonlinear Optical Properties, and Device Applications. Laser and Photonics Reviews, 2019, 13, 1800327.	4.4	353
23	Omnipotent phosphorene: a next-generation, two-dimensional nanoplatform for multidisciplinary biomedical applications. Chemical Society Reviews, 2018, 47, 5588-5601.	18.7	352
24	Ultrathin 2D Nonlayered Tellurium Nanosheets: Facile Liquidâ€Phase Exfoliation, Characterization, and Photoresponse with High Performance and Enhanced Stability. Advanced Functional Materials, 2018, 28, 1705833.	7.8	348
25	Environmentally Robust Black Phosphorus Nanosheets in Solution: Application for Selfâ€Powered Photodetector. Advanced Functional Materials, 2017, 27, 1606834.	7.8	342
26	Solvothermal Synthesis and Ultrafast Photonics of Black Phosphorus Quantum Dots. Advanced Optical Materials, 2016, 4, 1223-1229.	3.6	326
27	A Novel Topâ€Down Synthesis of Ultrathin 2D Boron Nanosheets for Multimodal Imagingâ€Guided Cancer Therapy. Advanced Materials, 2018, 30, e1803031.	11.1	318
28	Twoâ€Dimensional Antimoneneâ€Based Photonic Nanomedicine for Cancer Theranostics. Advanced Materials, 2018, 30, e1802061.	11.1	314
29	Fewâ€ayer Bismuthene: Sonochemical Exfoliation, Nonlinear Optics and Applications for Ultrafast Photonics with Enhanced Stability. Laser and Photonics Reviews, 2018, 12, 1700221.	4.4	311
30	2D Vâ€V Binary Materials: Status and Challenges. Advanced Materials, 2019, 31, e1902352.	11.1	303
31	Photothermal cancer immunotherapy by erythrocyte membrane-coated black phosphorus formulation. Journal of Controlled Release, 2019, 296, 150-161.	4.8	303
32	Photonics and optoelectronics using nano-structured hybrid perovskite media and their optical cavities. Physics Reports, 2019, 795, 1-51.	10.3	303
33	Two-Dimensional CH ₃ NH ₃ Pbl ₃ Perovskite Nanosheets for Ultrafast Pulsed Fiber Lasers. ACS Applied Materials & Interfaces, 2017, 9, 12759-12765.	4.0	296
34	Recent advances in black phosphorus-based photonics, electronics, sensors and energy devices. Materials Horizons, 2017, 4, 997-1019.	6.4	296
35	Sub-200 fs soliton mode-locked fiber laser based on bismuthene saturable absorber. Optics Express, 2018, 26, 22750.	1.7	289
36	Emerging Trends in Phosphorene Fabrication towards Next Generation Devices. Advanced Science, 2017, 4, 1600305.	5.6	285

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37	Third order nonlinear optical property of Bi_2Se_3. Optics Express, 2013, 21, 2072.	1.7	271
38	Broadband Nonlinear Optical Response in Fewâ€Layer Antimonene and Antimonene Quantum Dots: A Promising Optical Kerr Media with Enhanced Stability. Advanced Optical Materials, 2017, 5, 1700301.	3 . 6	269
39	Ultrathin Metal–Organic Framework: An Emerging Broadband Nonlinear Optical Material for Ultrafast Photonics. Advanced Optical Materials, 2018, 6, 1800561.	3.6	268
40	Few-layer antimonene decorated microfiber: ultra-short pulse generation and all-optical thresholding with enhanced long term stability. 2D Materials, 2017, 4, 045010.	2.0	260
41	Black phosphorus as saturable absorber for the Q-switched Er:ZBLAN fiber laser at 28 \hat{l} 4m. Optics Express, 2015, 23, 24713.	1.7	259
42	Highâ€Performance Photoâ€Electrochemical Photodetector Based on Liquidâ€Exfoliated Fewâ€Layered InSe Nanosheets with Enhanced Stability. Advanced Functional Materials, 2018, 28, 1705237.	7.8	258
43	Manyâ€Body Complexes in 2D Semiconductors. Advanced Materials, 2019, 31, e1706945.	11.1	255
44	Broadband Nonlinear Photoresponse of 2D TiS ₂ for Ultrashort Pulse Generation and Allâ€Optical Thresholding Devices. Advanced Optical Materials, 2018, 6, 1701166.	3 . 6	248
45	Selfâ€Powered Photodetectors Based on 2D Materials. Advanced Optical Materials, 2020, 8, 1900765.	3.6	245
46	Many-body Effect, Carrier Mobility, and Device Performance of Hexagonal Arsenene and Antimonene. Chemistry of Materials, 2017, 29, 2191-2201.	3.2	244
47	Black phosphorus: a two-dimension saturable absorption material for mid-infrared Q-switched and mode-locked fiber lasers. Scientific Reports, 2016, 6, 30361.	1.6	242
48	Ultrafast fiber lasers mode-locked by two-dimensional materials: review and prospect. Photonics Research, 2020, 8, 78.	3 . 4	242
49	Biocompatible and biodegradable inorganic nanostructures for nanomedicine: Silicon and black phosphorus. Nano Today, 2019, 25, 135-155.	6.2	240
50	Recent progress in black phosphorus and black-phosphorus-analogue materials: properties, synthesis and applications. Nanoscale, 2019, 11, 14491-14527.	2.8	239
51	Emerging 2D materials beyond graphene for ultrashort pulse generation in fiber lasers. Nanoscale, 2019, 11, 2577-2593.	2.8	236
52	2D Black Phosphorus Saturable Absorbers for Ultrafast Photonics. Advanced Optical Materials, 2019, 7, 1800224.	3.6	235
53	Flexible Transparent Electronic Gas Sensors. Small, 2016, 12, 3748-3756.	5.2	234
54	Ultrasmall Bismuth Quantum Dots: Facile Liquid-Phase Exfoliation, Characterization, and Application in High-Performance UVâ€"Vis Photodetector. ACS Photonics, 2018, 5, 621-629.	3.2	230

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55	Black Phosphorus–Polymer Composites for Pulsed Lasers. Advanced Optical Materials, 2015, 3, 1447-1453.	3.6	228
56	Flexible Transparent Films Based on Nanocomposite Networks of Polyaniline and Carbon Nanotubes for Highâ€Performance Gas Sensing. Small, 2015, 11, 5409-5415.	5.2	225
57	Few-layer black phosphorus based saturable absorber mirror for pulsed solid-state lasers. Optics Express, 2015, 23, 22643.	1.7	220
58	Recent Advances in Functional 2D MXeneâ€Based Nanostructures for Nextâ€Generation Devices. Advanced Functional Materials, 2020, 30, 2005223.	7.8	216
59	2D Material Optoelectronics for Information Functional Device Applications: Status and Challenges. Advanced Science, 2020, 7, 2000058.	5.6	215
60	Fewâ€Layer Tin Sulfide: A Promising Blackâ€Phosphorusâ€Analogue 2D Material with Exceptionally Large Nonlinear Optical Response, High Stability, and Applications in Allâ€Optical Switching and Wavelength Conversion. Advanced Optical Materials, 2018, 6, 1700985.	3.6	212
61	Topological insulator as an optical modulator for pulsed solidâ€state lasers. Laser and Photonics Reviews, 2013, 7, L77.	4.4	208
62	Graphene oxide/black phosphorus nanoflake aerogels with robust thermo-stability and significantly enhanced photothermal properties in air. Nanoscale, 2017, 9, 8096-8101.	2.8	207
63	Large Energy, Wavelength Widely Tunable, Topological Insulator Q-Switched Erbium-Doped Fiber Laser. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 315-322.	1.9	201
64	Vector soliton fiber laser passively mode locked by few layer black phosphorus-based optical saturable absorber. Optics Express, 2016, 24, 25933.	1.7	200
65	Few-layer bismuthene for ultrashort pulse generation in a dissipative system based on an evanescent field. Nanoscale, 2018, 10, 17617-17622.	2.8	189
66	Kerr Nonlinearity in 2D Graphdiyne for Passive Photonic Diodes. Advanced Materials, 2019, 31, e1807981.	11.1	187
67	Recent advances in emerging Janus two-dimensional materials: from fundamental physics to device applications. Journal of Materials Chemistry A, 2020, 8, 8813-8830.	5.2	185
68	Applications of Few-Layer Nb ₂ C MXene: Narrow-Band Photodetectors and Femtosecond Mode-Locked Fiber Lasers. ACS Nano, 2021, 15, 954-965.	7.3	176
69	Broadband and enhanced nonlinear optical response of MoS2/graphene nanocomposites for ultrafast photonics applications. Scientific Reports, 2015, 5, 16372.	1.6	174
70	Black Phosphorus Based All-Optical-Signal-Processing: Toward High Performances and Enhanced Stability. ACS Photonics, 2017, 4, 1466-1476.	3.2	173
71	Graphdiyneâ€Based Flexible Photodetectors with High Responsivity and Detectivity. Advanced Materials, 2020, 32, e2001082.	11.1	171
72	Photonics and Optoelectronics of 2D Metalâ€Halide Perovskites. Small, 2018, 14, e1800682.	5.2	168

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73	Facile fabrication and characterization of two-dimensional bismuth(<scp>iii</scp>) sulfide nanosheets for high-performance photodetector applications under ambient conditions. Nanoscale, 2018, 10, 2404-2412.	2.8	166
74	2D Tellurium Based Highâ€Performance Allâ€Optical Nonlinear Photonic Devices. Advanced Functional Materials, 2019, 29, 1806346.	7.8	165
75	All-Optical Switching of Two Continuous Waves in Few Layer Bismuthene Based on Spatial Cross-Phase Modulation. ACS Photonics, 2017, 4, 2852-2861.	3.2	164
76	2D Nonlayered Selenium Nanosheets: Facile Synthesis, Photoluminescence, and Ultrafast Photonics. Advanced Optical Materials, 2017, 5, 1700884.	3.6	162
77	Two-dimensional non-layered selenium nanoflakes: facile fabrications and applications for self-powered photo-detector. Nanotechnology, 2019, 30, 114002.	1.3	161
78	A black/red phosphorus hybrid as an electrode material for high-performance Li-ion batteries and supercapacitors. Journal of Materials Chemistry A, 2017, 5, 6581-6588.	5.2	160
79	Critical coupling with graphene-based hyperbolic metamaterials. Scientific Reports, 2014, 4, 5483.	1.6	158
80	High Efficiency Mesoscopic Solar Cells Using CsPbl ₃ Perovskite Quantum Dots Enabled by Chemical Interface Engineering. Journal of the American Chemical Society, 2020, 142, 3775-3783.	6.6	156
81	Allâ€Optical Phosphorene Phase Modulator with Enhanced Stability Under Ambient Conditions. Laser and Photonics Reviews, 2018, 12, 1800016.	4.4	155
82	Black phosphorus as broadband saturable absorber for pulsed lasers from $1 < i > \hat{l} / 4 < i > m $ to $2.7 < i > \hat{l} / 4 < i > m $ wavelength. Laser Physics Letters, 2016, 13, 045801.	0.6	154
83	Black-phosphorus-analogue tin monosulfide: an emerging optoelectronic two-dimensional material for high-performance photodetection with improved stability under ambient/harsh conditions. Journal of Materials Chemistry C, 2018, 6, 9582-9593.	2.7	153
84	Healable, Transparent, Roomâ€Temperature Electronic Sensors Based on Carbon Nanotube Networkâ€Coated Polyelectrolyte Multilayers. Small, 2015, 11, 5807-5813.	5.2	151
85	Size-dependent nonlinear optical properties of black phosphorus nanosheets and their applications in ultrafast photonics. Journal of Materials Chemistry C, 2017, 5, 3007-3013.	2.7	150
86	Fluorinated Phosphorene: Electrochemical Synthesis, Atomistic Fluorination, and Enhanced Stability. Small, 2017, 13, 1702739.	5.2	150
87	Heteroâ€MXenes: Theory, Synthesis, and Emerging Applications. Advanced Materials, 2021, 33, e2004129.	11.1	150
88	Ultrathin 2D Transition Metal Carbides for Ultrafast Pulsed Fiber Lasers. ACS Photonics, 2018, 5, 1808-1816.	3.2	148
89	Biocompatible Two-Dimensional Titanium Nanosheets for Multimodal Imaging-Guided Cancer Theranostics. ACS Applied Materials & Interfaces, 2019, 11, 22129-22140.	4.0	147
90	Black phosphorus-based photothermal therapy with aCD47-mediated immune checkpoint blockade for enhanced cancer immunotherapy. Light: Science and Applications, 2020, 9, 161.	7.7	145

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91	Recent progress in ultrafast lasers based on 2D materials as a saturable absorber. Applied Physics Reviews, 2019, 6, .	5.5	143
92	Order–disorder transition in a two-dimensional boron–carbon–nitride alloy. Nature Communications, 2013, 4, 2681.	5.8	138
93	Black phosphorus analogue tin sulfide nanosheets: synthesis and application as near-infrared photothermal agents and drug delivery platforms for cancer therapy. Journal of Materials Chemistry B, 2018, 6, 4747-4755.	2.9	137
94	Stabilization of Black Phosphorous Quantum Dots in PMMA Nanofiber Film and Broadband Nonlinear Optics and Ultrafast Photonics Application. Advanced Functional Materials, 2017, 27, 1702437.	7.8	136
95	Solarâ€Inspired Water Purification Based on Emerging 2D Materials: Status and Challenges. Solar Rrl, 2020, 4, 1900400.	3.1	133
96	Topological Insulator: <formula formulatype="inline"><tex notation="TeX">\$hbox{Bi}_{2}hbox{Te}_{3}\$ </tex></formula> Saturable Absorber for the Passive Q-Switching Operation of an in-Band Pumped 1645-nm Er:YAG Ceramic Laser. IEEE Photonics Journal, 2013, 5, 1500707-1500707.	1.0	132
97	Fewâ€Layer Phosphoreneâ€Decorated Microfiber for Allâ€Optical Thresholding and Optical Modulation. Advanced Optical Materials, 2017, 5, 1700026.	3.6	125
98	2 νm passively Q-switched laser based on black phosphorus. Optical Materials Express, 2016, 6, 2374.	1.6	124
99	An Allâ€Optical, Actively Qâ€Switched Fiber Laser by an Antimoneneâ€Based Optical Modulator. Laser and Photonics Reviews, 2019, 13, 1800313.	4.4	122
100	Enhanced Photodetection Properties of Tellurium@Selenium Rollâ€toâ€Roll Nanotube Heterojunctions. Small, 2019, 15, e1900902.	5.2	120
101	MXenes: Synthesis, Optical Properties, and Applications in Ultrafast Photonics. Small, 2021, 17, e2006054.	5.2	119
102	Polarization rotation vector solitons in a graphene mode-locked fiber laser. Optics Express, 2012, 20, 27283.	1.7	118
103	MXeneâ€Based Nonlinear Optical Information Converter for Allâ€Optical Modulator and Switcher. Laser and Photonics Reviews, 2018, 12, 1800215.	4.4	117
104	MXene Ti ₃ C ₂ T <i>_x</i> : A Promising Photothermal Conversion Material and Application in Allâ€Optical Modulation and Allâ€Optical Information Loading. Advanced Optical Materials, 2019, 7, 1900060.	3.6	115
105	Fundamental and harmonic mode-locking at 21 \hat{l} /4m with black phosphorus saturable absorber. Optics Express, 2017, 25, 16916.	1.7	114
106	Recent Developments in Stability and Passivation Techniques of Phosphorene toward Nextâ€Generation Device Applications. Advanced Functional Materials, 2019, 29, 1903419.	7.8	113
107	Recent Progress in 2D Materialâ€Based Saturable Absorbers for All Solidâ€State Pulsed Bulk Lasers. Laser and Photonics Reviews, 2020, 14, 1900240.	4.4	111
108	Fully photon modulated heterostructure for neuromorphic computing. Nano Energy, 2019, 65, 104000.	8.2	110

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109	Few-layer selenium-doped black phosphorus: synthesis, nonlinear optical properties and ultrafast photonics applications. Journal of Materials Chemistry C, 2017, 5, 6129-6135.	2.7	109
110	Structures, properties and application of 2D monoelemental materials (Xenes) as graphene analogues under defect engineering. Nano Today, 2020, 35, 100906.	6.2	107
111	Midâ€Infrared Photonics Using 2D Materials: Status and Challenges. Laser and Photonics Reviews, 2020, 14, 1900098.	4.4	106
112	Two-dimensional tellurium–polymer membrane for ultrafast photonics. Nanoscale, 2019, 11, 6235-6242.	2.8	104
113	Chemistry, Functionalization, and Applications of Recent Monoelemental Two-Dimensional Materials and Their Heterostructures. Chemical Reviews, 2022, 122, 1127-1207.	23.0	103
114	Emerging Monoâ€Elemental Bismuth Nanostructures: Controlled Synthesis and Their Versatile Applications. Advanced Functional Materials, 2021, 31, 2007584.	7.8	102
115	Graphdiyneâ€Polymer Nanocomposite as a Broadband and Robust Saturable Absorber for Ultrafast Photonics. Laser and Photonics Reviews, 2020, 14, 1900367.	4.4	99
116	Two-dimensional bismuth nanosheets as prospective photo-detector with tunable optoelectronic performance. Nanotechnology, 2018, 29, 235201.	1.3	98
117	Nonlinear Fewâ€Layer Antimoneneâ€Based Allâ€Optical Signal Processing: Ultrafast Optical Switching and Highâ€5peed Wavelength Conversion. Advanced Optical Materials, 2018, 6, 1701287.	3.6	97
118	Topological Insulator Solution Filled in Photonic Crystal Fiber for Passive Mode-Locked Fiber Laser. IEEE Photonics Technology Letters, 2015, 27, 264-267.	1.3	96
119	Niobium Carbide MXenes with Broad-Band Nonlinear Optical Response and Ultrafast Carrier Dynamics. ACS Nano, 2020, 14, 10492-10502.	7. 3	96
120	Recent Advances in Semiconducting Monoelemental Selenium Nanostructures for Device Applications. Advanced Functional Materials, 2020, 30, 2003301.	7.8	93
121	Highâ€Speed and Highâ€Responsivity Hybrid Silicon/Blackâ€Phosphorus Waveguide Photodetectors at 2ÂÂμm. Laser and Photonics Reviews, 2019, 13, 1900032.	4.4	91
122	Perovskite CsPbX ₃ : A Promising Nonlinear Optical Material and Its Applications for Ambient Allâ€Optical Switching with Enhanced Stability. Advanced Optical Materials, 2018, 6, 1800400.	3.6	90
123	Generation, optimization, and application of ultrashort femtosecond pulse in mode-locked fiber lasers. Progress in Quantum Electronics, 2020, 71, 100264.	3.5	89
124	Dual-wavelength Q-switched Er:SrF_2 laser with a black phosphorus absorber in the mid-infrared region. Optics Express, 2016, 24, 30289.	1.7	88
125	2D Nanomaterials for Tissue Engineering and Regenerative Nanomedicines: Recent Advances and Future Challenges. Advanced Healthcare Materials, 2021, 10, e2001743.	3.9	88
126	Fewâ€Layer Topological Insulator for Allâ€Optical Signal Processing Using the Nonlinear Kerr Effect. Advanced Optical Materials, 2015, 3, 1769-1778.	3.6	87

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127	MZIâ€Based Allâ€Optical Modulator Using MXene Ti ₃ C ₂ T <i>_x</i> (T =) T	j ETQq1	1 0.784314 rg
128	MXene Ti ₃ C ₂ T _{<i>x</i>} absorber for a 1.06 <i>$\hat{l}^{1}/4$</i>	0.6	86
129	Nonlinear Fewâ€Layer MXeneâ€Assisted Allâ€Optical Wavelength Conversion at Telecommunication Band. Advanced Optical Materials, 2019, 7, 1801777.	3.6	86
130	Polydopamine-functionalized black phosphorus quantum dots for cancer theranostics. Applied Materials Today, 2019, 15, 297-304.	2.3	86
131	Ultrafast Relaxation Dynamics and Nonlinear Response of Fewâ€Layer Niobium Carbide MXene. Small Methods, 2020, 4, 2000250.	4.6	84
132	Highly stable MXene (V ₂ CT _x)-based harmonic pulse generation. Nanophotonics, 2020, 9, 2577-2585.	2.9	83
133	Broadband photodetectors based on 2D group IVA metal chalcogenides semiconductors. Applied Materials Today, 2019, 15, 115-138.	2.3	82
134	Monolayer tellurene–metal contacts. Journal of Materials Chemistry C, 2018, 6, 6153-6163.	2.7	81
135	2D GeP as a Novel Broadband Nonlinear Optical Material for Ultrafast Photonics. Laser and Photonics Reviews, 2019, 13, 1900123.	4.4	76
136	Tuning of Interlayer Coupling in Large-Area Graphene/WSe ₂ van der Waals Heterostructure via Ion Irradiation: Optical Evidences and Photonic Applications. ACS Photonics, 2017, 4, 1531-1538.	3.2	75
137	Two-dimensional nanomaterial-based plasmonic sensing applications: Advances and challenges. Coordination Chemistry Reviews, 2020, 410, 213218.	9.5	74
138	Monolayer Bismuthene-Metal Contacts: A Theoretical Study. ACS Applied Materials & Samp; Interfaces, 2017, 9, 23128-23140.	4.0	73
139	Recent advances in solution-processed photodetectors based on inorganic and hybrid photo-active materials. Nanoscale, 2020, 12, 2201-2227.	2.8	71
140	Black phosphorus: A novel nanoplatform with potential in the field of bio-photonic nanomedicine. Journal of Innovative Optical Health Sciences, 2018, 11, .	0.5	70
141	2D Materials Enabled Nextâ€Generation Integrated Optoelectronics: from Fabrication to Applications. Advanced Science, 2021, 8, e2003834.	5.6	70
142	A solid-state passively Q-switched Tm,Gd:CaF ₂ laser with a Ti ₃ C ₂ T _{<i>x</i>} MXene absorber near 2 <i>µ</i> m. Laser Physics Letters, 2019, 16, 015803.	0.6	69
143	Recent advances in anisotropic two-dimensional materials and device applications. Nano Research, 2021, 14, 897-919.	5.8	69
144	A bismuthene-based multifunctional all-optical phase and intensity modulator enabled by photothermal effect. Journal of Materials Chemistry C, 2019, 7, 871-878.	2.7	67

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145	Status and Outlook of Metal–Inorganic Semiconductor–Metal Photodetectors. Laser and Photonics Reviews, 2021, 15, .	4.4	67
146	Brain-targeted delivery shuttled by black phosphorus nanostructure to treat Parkinson's disease. Biomaterials, 2020, 260, 120339.	5.7	66
147	Bismuth nanosheets as a Q-switcher for a mid-infrared erbium-doped SrF ₂ laser. Photonics Research, 2018, 6, 762.	3.4	65
148	Synthesis, properties and novel electrocatalytic applications of the 2D-borophene Xenes. Progress in Solid State Chemistry, 2020, 59, 100283.	3.9	65
149	Ultrafast photonics applications of emerging 2D-Xenes beyond graphene. Nanophotonics, 2022, 11, 1261-1284.	2.9	65
150	2D–Materialsâ€Based Quantum Dots: Gateway Towards Nextâ€Generation Optical Devices. Advanced Optical Materials, 2017, 5, 1700257.	3.6	64
151	Zeroâ€Dimensional MXeneâ€Based Optical Devices for Ultrafast and Ultranarrow Photonics Applications. Advanced Science, 2020, 7, 2002209.	5.6	60
152	Nonlinear Photonics Using Lowâ€Dimensional Metalâ€Halide Perovskites: Recent Advances and Future Challenges. Advanced Materials, 2021, 33, e2004446.	11.1	58
153	Ultraeffective Cancer Therapy with an Antimoneneâ€Based Xâ€Ray Radiosensitizer. Advanced Functional Materials, 2020, 30, 1906010.	7.8	57
154	Recent Progress, Challenges, and Prospects in Two-Dimensional Photo-Catalyst Materials and Environmental Remediation. Nano-Micro Letters, 2020, 12, 167.	14.4	57
155	Twoâ€Dimensional Materials for Integrated Photonics: Recent Advances and Future Challenges. Small Science, 2021, 1, 2000053.	5.8	56
156	<i>In situ</i> preparation of a CsPbBr ₃ /black phosphorus heterostructure with an optimized interface and photodetector application. Nanoscale, 2019, 11, 16852-16859.	2.8	55
157	MXene: two dimensional inorganic compounds, for generation of bound state soliton pulses in nonlinear optical system. Nanophotonics, 2020, 9, 2505-2513.	2.9	55
158	Stability of Perovskite Light Sources: Status and Challenges. Advanced Optical Materials, 2020, 8, 1902012.	3.6	54
159	Emerging black phosphorus analogue nanomaterials for high-performance device applications. Journal of Materials Chemistry C, 2020, 8, 1172-1197.	2.7	54
160	Photodynamic immunotherapy of cancers based on nanotechnology: recent advances and future challenges. Journal of Nanobiotechnology, 2021, 19, 160.	4.2	54
161	Broadband third order nonlinear optical responses of bismuth telluride nanosheets. Optical Materials Express, 2016, 6, 2244.	1.6	52
162	Engineering ultrafast charge transfer in a bismuthene/perovskite nanohybrid. Nanoscale, 2019, 11, 2637-2643.	2.8	51

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163	Broadband Nonlinear Optical Response of InSe Nanosheets for the Pulse Generation From 1 to 2 μm. ACS Applied Materials & Diterfaces, 2019, 11, 48281-48289.	4.0	51
164	Advancing Applications of Black Phosphorus and BPâ€Analog Materials in Photo/Electrocatalysis through Structure Engineering and Surface Modulation. Advanced Science, 2020, 7, 2001431.	5.6	51
165	Ultraâ€Small 2D PbS Nanoplatelets: Liquidâ€Phase Exfoliation and Emerging Applications for Photoâ€Electrochemical Photodetectors. Small, 2021, 17, e2005913.	5.2	50
166	MXene saturable absorber enabled hybrid mode-locking technology: a new routine of advancing femtosecond fiber lasers performance. Nanophotonics, 2020, 9, 2451-2458.	2.9	50
167	(Q) -Switched Mode-Locked Nd:YVO ₄ Laser by Topological Insulator Bi ₂ Te ₃ Saturable Absorber. IEEE Photonics Technology Letters, 2014, 26, 1912-1915.	1.3	49
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