

Few-layer antimonene decorated microfiber: ultra-short thresholding with enhanced long term stability

2D Materials

4, 045010

DOI: [10.1088/2053-1583/aa87c1](https://doi.org/10.1088/2053-1583/aa87c1)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Black phosphorus saturable absorber for dual-wavelength polarization-locked vector soliton generation. Optics Express, 2017, 25, 32380.	1.7	43
2	Nonlinear Few-Layer Antimonene-Based All-Optical Signal Processing: Ultrafast Optical Switching and High-Speed Wavelength Conversion. Advanced Optical Materials, 2018, 6, 1701287.	3.6	97
3	All-Optical Phosphorene Phase Modulator with Enhanced Stability Under Ambient Conditions. Laser and Photonics Reviews, 2018, 12, 1800016.	4.4	155
4	Excellent nonlinear absorption properties of I^2 -antimonene nanosheets. Journal of Materials Chemistry C, 2018, 6, 2848-2853.	2.7	42
5	Recent progress in 2D group-VA semiconductors: from theory to experiment. Chemical Society Reviews, 2018, 47, 982-1021.	18.7	697
6	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
7	Femtosecond mode-locking of a fiber laser using a CoSb_3 -skutterudite-based saturable absorber. Photonics Research, 2018, 6, C36.	3.4	27
8	Antimonene: a long-term stable two-dimensional saturable absorption material under ambient conditions for the mid-infrared spectral region. Photonics Research, 2018, 6, 900.	3.4	62
9	Passively Q-switched Nd^{3+} solid-state lasers with antimonene as saturable absorber. Optics Express, 2018, 26, 4085.	1.7	38
10	Optical properties and applications for MoS_2 - Sb_2Te_3 - MoS_2 heterostructure materials. Photonics Research, 2018, 6, 220.	3.4	141
11	Bismuth nanosheets as a Q-switcher for a mid-infrared erbium-doped SrF_2 laser. Photonics Research, 2018, 6, 762.	3.4	65
12	Sub-200 fs soliton mode-locked fiber laser based on bismuthene saturable absorber. Optics Express, 2018, 26, 22750.	1.7	289
13	Nonlinear optical properties of WSe_2 and MoSe_2 films and their applications in passively Q-switched erbium doped fiber lasers. Photonics Research, 2018, 6, C15.	3.4	71
14	Antimonene: From Experimental Preparation to Practical Application. Angewandte Chemie - International Edition, 2019, 58, 1574-1584.	7.2	111
15	Antimonen: von der experimentellen Herstellung zur praktischen Anwendung. Angewandte Chemie, 2019, 131, 1588-1599.	1.6	4
16	2D VX Binary Materials: Status and Challenges. Advanced Materials, 2019, 31, e1902352.	11.1	303
17	Recent progress in ultrafast lasers based on 2D materials as a saturable absorber. Applied Physics Reviews, 2019, 6, .	5.5	143
18	Halogenated Antimonene: One-Step Synthesis, Structural Simulation, Tunable Electronic and Photoresponse Property. Advanced Functional Materials, 2019, 29, 1905857.	7.8	33

#	ARTICLE	IF	CITATIONS
19	Third-order nonlinear optical responses and carrier dynamics in antimonene. Optical Materials, 2019, 95, 109209.	1.7	20
20	Emerging 2D materials beyond graphene for ultrashort pulse generation in fiber lasers. Nanoscale, 2019, 11, 2577-2593.	2.8	236
21	2D group-VA fluorinated antimonene: synthesis and saturable absorption. Nanoscale, 2019, 11, 1762-1769.	2.8	49
22	An All-Optical, Actively Q-Switched Fiber Laser by an Antimonene-Based Optical Modulator. Laser and Photonics Reviews, 2019, 13, 1800313.	4.4	122
23	Recent progress of study on optical solitons in fiber lasers. Applied Physics Reviews, 2019, 6, .	5.5	295
24	Few-Layer Antimonene Nanosheet: A Metal-Free Bifunctional Electrocatalyst for Effective Water Splitting. ACS Applied Energy Materials, 2019, 2, 4774-4781.	2.5	46
25	Lead monoxide: a promising two-dimensional layered material for applications in nonlinear photonics in the infrared band. Nanoscale, 2019, 11, 12595-12602.	2.8	36
26	Saturable Absorption in 2D Nanomaterials and Related Photonic Devices. Laser and Photonics Reviews, 2019, 13, 1800282.	4.4	111
27	Feasible fabrication of graphitic nano-layer saturable absorbers on fiber-ends for ultrashort pulse generation. Laser Physics Letters, 2019, 16, 075101.	0.6	0
28	Single- and Dual-Wavelength Passively Mode-Locked Erbium-Doped Fiber Laser Based on Antimonene Saturable Absorber. IEEE Photonics Journal, 2019, 11, 1-11.	1.0	17
29	High efficiency diode-pumped continuous-wave and passively Q-switched Nd:CSAG laser with a two-dimensional WS ₂ saturable absorber at 1060 nm. Infrared Physics and Technology, 2019, 97, 371-375.	1.3	5
30	Two-dimensional pnictogens: A review of recent progresses and future research directions. Applied Physics Reviews, 2019, 6, .	5.5	143
31	Recent advances in nanomaterial-enabled acoustic devices for audible sound generation and detection. Nanoscale, 2019, 11, 5839-5860.	2.8	38
32	Optical Nonlinearity of ZrS ₂ and Applications in Fiber Laser. Nanomaterials, 2019, 9, 315.	1.9	41
33	Discovery of Several New Families of Saturable Absorbers for Ultrashort Pulsed Laser Systems. Scientific Reports, 2019, 9, 19910.	1.6	21
34	2D Layered Materials: Synthesis, Nonlinear Optical Properties, and Device Applications. Laser and Photonics Reviews, 2019, 13, 1800327.	4.4	353
35	Emerging two-dimensional noncarbon nanomaterials for flexible lithium-ion batteries: opportunities and challenges. Journal of Materials Chemistry A, 2019, 7, 25227-25246.	5.2	44
36	Two-dimensional group-VA nanomaterials beyond black phosphorus: synthetic methods, properties, functional nanostructures and applications. Journal of Materials Chemistry A, 2019, 7, 25712-25771.	5.2	49

#	ARTICLE	IF	CITATIONS
37	Ternary chalcogenide Ta ₂ NiS ₅ nanosheets for broadband pulse generation in ultrafast fiber lasers. Nanophotonics, 2020, 9, 2341-2349.	2.9	22
38	Physical vapor deposition of large-scale PbSe films and its applications in pulsed fiber lasers. Nanophotonics, 2020, 9, 2367-2375.	2.9	11
39	Resonance-enhanced all-optical modulation of WSe ₂ -based micro-resonator. Nanophotonics, 2020, 9, 2387-2396.	2.9	17
40	Fiber all-optical light control with low-dimensional materials (LDMs): thermo-optic effect and saturable absorption. Nanoscale Advances, 2019, 1, 4190-4206.	2.2	5
41	Recent Progress in Two-Dimensional Nanomaterials for Laser Protection. Chemistry, 2019, 1, 17-43.	0.9	22
42	Cytotoxicity of Shear Exfoliated Pnictogen (As, Sb, Bi) Nanosheets. Chemistry - A European Journal, 2019, 25, 2242-2249.	1.7	34
43	Antimonene-based flexible photodetector. Nanoscale Horizons, 2020, 5, 124-130.	4.1	51
44	Optical Properties of Buckled Bismuthene. Physica Status Solidi (B): Basic Research, 2020, 257, 1900408.	0.7	7
45	Recent advances in two-dimensional ferromagnetism: materials synthesis, physical properties and device applications. Nanoscale, 2020, 12, 2309-2327.	2.8	67
46	Recent advances in solution-processed photodetectors based on inorganic and hybrid photo-active materials. Nanoscale, 2020, 12, 2201-2227.	2.8	71
47	VSe ₂ nanosheets for ultrafast fiber lasers. Journal of Materials Chemistry C, 2020, 8, 1104-1109.	2.7	82
48	Recent Progress in 2D Material-Based Saturable Absorbers for All Solid-State Pulsed Bulk Lasers. Laser and Photonics Reviews, 2020, 14, 1900240.	4.4	111
49	Bismuthene Nanosheets for 1 1/4m Multipulse Generation. Langmuir, 2020, 36, 3-8.	1.6	25
50	Mid-Infrared Photonics Using 2D Materials: Status and Challenges. Laser and Photonics Reviews, 2020, 14, 1900098.	4.4	106
51	Ultra-Narrow-Band Filter Based on High Q Factor in Metallic Nanoslit Arrays. Sensors, 2020, 20, 5205.	2.1	7
52	Two-Dimensional Black Arsenic Phosphorus for Ultrafast Photonics in Near- and Mid-Infrared Regimes. ACS Applied Materials & Interfaces, 2020, 12, 46509-46518.	4.0	47
53	Bi ₂ Se ₃ /mica optical modulator for high-energy mode-locked Er-doped fiber laser. Infrared Physics and Technology, 2020, 111, 103453.	1.3	10
54	Two-Step Synthesis of Large-Area 2D Bi ₂ S ₃ Nanosheets Featuring High In-Plane Anisotropy. Advanced Materials Interfaces, 2020, 7, 2001131.	1.9	27

#	ARTICLE	IF	CITATIONS
55	Recent Advances in Twisted Structures of Flatland Materials and Crafting Moiré Superlattices. <i>Advanced Functional Materials</i> , 2020, 30, 2000878.	7.8	41
56	Ti ₃ C ₂ T _x MXene Quantum Dots with Enhanced Stability for Ultrafast Photonics. <i>ACS Applied Nano Materials</i> , 2020, 3, 11850-11860.	2.4	38
57	Short-wave IR ultrafast fiber laser systems: Current challenges and prospective applications. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	29
58	Advancing Applications of Black Phosphorus and BP Analog Materials in Photo/Electrocatalysis through Structure Engineering and Surface Modulation. <i>Advanced Science</i> , 2020, 7, 2001431.	5.6	51
59	Tunable nonlinear optical responses and carrier dynamics of two-dimensional antimonene nanosheets. <i>Nanoscale Horizons</i> , 2020, 5, 1420-1429.	4.1	15
60	Structures, properties and application of 2D monoelemental materials (Xenes) as graphene analogues under defect engineering. <i>Nano Today</i> , 2020, 35, 100906.	6.2	107
61	Role of carrier-transfer in the optical nonlinearity of graphene/Bi ₂ Te ₃ heterojunctions. <i>Nanoscale</i> , 2020, 12, 16956-16966.	2.8	20
62	Recent developments in mid-infrared fiber lasers: Status and challenges. <i>Optics and Laser Technology</i> , 2020, 132, 106497.	2.2	57
63	Janus nanoparticles for cellular delivery chemotherapy: Recent advances and challenges. <i>Coordination Chemistry Reviews</i> , 2020, 422, 213467.	9.5	34
64	Recent Progress, Challenges, and Prospects in Two-Dimensional Photo-Catalyst Materials and Environmental Remediation. <i>Nano-Micro Letters</i> , 2020, 12, 167.	14.4	57
65	Emerging High-Performance SnS/CdS Nanoflower Heterojunction for Ultrafast Photonics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 43098-43105.	4.0	74
66	Preparation of antimonene by laser irradiation in different solvents for optical limiting. <i>Optical Materials</i> , 2020, 109, 110132.	1.7	2
67	Recent Advances in Strain-Induced Piezoelectric and Piezoresistive Effect-Engineered 2D Semiconductors for Adaptive Electronics and Optoelectronics. <i>Nano-Micro Letters</i> , 2020, 12, 106.	14.4	89
68	Synthesis Techniques, Optoelectronic Properties, and Broadband Photodetection of Thin Film Black Phosphorus. <i>Advanced Optical Materials</i> , 2020, 8, 2000045.	3.6	39
69	Tin selenide for high-power and ultrafast Q-switched fiber laser. <i>Optik</i> , 2020, 216, 164951.	1.4	2
70	Engineering Mono-Chalcogen Nanomaterials for Omnipotent Anticancer Applications: Progress and Challenges. <i>Advanced Healthcare Materials</i> , 2020, 9, 2000273.	3.9	11
71	Zinc phthalocyanine thin film as saturable absorber for Q-switched pulse generation. <i>Optical Fiber Technology</i> , 2020, 57, 102235.	1.4	5
72	Progress in the therapeutic applications of polymer-decorated black phosphorus and black phosphorus analog nanomaterials in biomedicine. <i>Journal of Materials Chemistry B</i> , 2020, 8, 7076-7120.	2.9	34

#	ARTICLE	IF	CITATIONS
73	All-optical modulation with 2D layered materials: status and prospects. Nanophotonics, 2020, 9, 2107-2124.	2.9	51
74	Novel two-dimensional monoelemental and ternary materials: growth, physics and application. Nanophotonics, 2020, 9, 2147-2168.	2.9	29
75	Broadband nonlinear optical response in GeSe nanoplates and its applications in all-optical diode. Nanophotonics, 2020, 9, 2007-2015.	2.9	20
76	Ultrafast Pulse Generation for Er- and Tm- Doped Fiber Lasers With Sb Thin Film Saturable Absorber. Journal of Lightwave Technology, 2020, 38, 3710-3716.	2.7	8
77	Present advances and perspectives of broadband photo-detectors based on emerging 2D-Xenes beyond graphene. Nano Research, 2020, 13, 891-918.	5.8	36
78	Recent progress in high-performance photo-detectors enabled by the pulsed laser deposition technology. Journal of Materials Chemistry C, 2020, 8, 4988-5014.	2.7	18
79	Solution-processed two-dimensional materials for ultrafast fiber lasers (invited). Nanophotonics, 2020, 9, 2169-2189.	2.9	43
80	Yttrium oxide as a Q-switcher for the near-infrared erbium-doped fiber laser. Nanophotonics, 2020, 9, 2887-2894.	2.9	17
81	Generation and categories of solitons in various mode-locked fiber lasers. Optik, 2020, 220, 165168.	1.4	16
82	Two-dimensional porous coordination polymers and nano-composites for electrocatalysis and electrically conductive applications. Journal of Materials Chemistry A, 2020, 8, 14356-14383.	5.2	33
83	Low threshold Q-switched fiber laser incorporating titanium dioxide saturable absorber from waste material. Optik, 2020, 218, 164998.	1.4	7
84	Mode-locked laser at 1066 nm by using Alq3 as saturable absorber in all-fiber based cavity. Optik, 2020, 219, 165179.	1.4	10
85	Plasmon-Assisted Broadband All-Optical Control of Highly Intense Femtosecond Laser by Weak Continuous-Wave Laser. Advanced Optical Materials, 2020, 8, 2000560.	3.6	6
86	A nano-lateral heterojunction of selenium-coated tellurium for infrared-band soliton fiber lasers. Nanoscale, 2020, 12, 15252-15260.	2.8	11
87	Two dimensional nanomaterials-enabled smart light regulation technologies: Recent advances and developments. Optik, 2020, 220, 165191.	1.4	18
88	Few-layer silicene nanosheets as saturable absorber for subpicosecond pulse generation in all-fiber laser. Optics and Laser Technology, 2020, 131, 106397.	2.2	12
89	Transport and Thermoelectric Properties of SnX (X = S or Se) Bilayers and Heterostructures. ACS Applied Energy Materials, 2020, 3, 6946-6955.	2.5	13
90	Tunable passively Q-switched erbium-doped fiber laser based on Ti3C2Tx MXene as saturable absorber. Optical Fiber Technology, 2020, 58, 102287.	1.4	21

#	ARTICLE	IF	CITATIONS
91	Phosphorene-assisted silicon photonic modulator with fast response time. <i>Nanophotonics</i> , 2020, 9, 1973-1979.	2.9	24
92	Liquidâ€Exfoliated Fewâ€Layer InSe Nanosheets for Broadband Nonlinear Allâ€Optical Applications. <i>Advanced Optical Materials</i> , 2020, 8, 1901862.	3.6	20
93	Unveiling the oxidation behavior of liquid-phase exfoliated antimony nanosheets. <i>2D Materials</i> , 2020, 7, 025039.	2.0	33
94	Tellurene-based saturable absorber to demonstrate large-energy dissipative soliton and noise-like pulse generations. <i>Nanophotonics</i> , 2020, 9, 2783-2795.	2.9	149
95	Semiconducting polymer dots as broadband saturable absorbers for Q-switched fiber lasers. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4919-4925.	2.7	23
96	2D graphdiyne: an excellent ultraviolet nonlinear absorption material. <i>Nanoscale</i> , 2020, 12, 6243-6249.	2.8	40
97	Emerging black phosphorus analogue nanomaterials for high-performance device applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 1172-1197.	2.7	54
98	The Rise of 2D Photothermal Materials beyond Graphene for Clean Water Production. <i>Advanced Science</i> , 2020, 7, 1902236.	5.6	206
99	Emerging pnictogen-based 2D semiconductors: sensing and electronic devices. <i>Nanoscale</i> , 2020, 12, 10430-10446.	2.8	22
100	Recent advances in emerging Janus two-dimensional materials: from fundamental physics to device applications. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8813-8830.	5.2	185
101	MXene (Ti ₂ NTx): Synthesis, characteristics and application as a thermo-optical switcher for all-optical wavelength tuning laser. <i>Science China Materials</i> , 2021, 64, 259-265.	3.5	40
102	2D Material Based Synaptic Devices for Neuromorphic Computing. <i>Advanced Functional Materials</i> , 2021, 31, 2005443.	7.8	165
103	2.3 Âµm nanosecond passive Q-switching of an LD-pumped Tm:YLF laser using gold nanorods as a saturable absorber. <i>Frontiers of Information Technology and Electronic Engineering</i> , 2021, 22, 312-317.	1.5	5
104	Low-dimensional nanomaterials enabled autoimmune disease treatments: Recent advances, strategies, and future challenges. <i>Coordination Chemistry Reviews</i> , 2021, 432, 213697.	9.5	5
105	Fast solution method to prepare hexagonal tellurium nanosheets for optoelectronic and ultrafast photonic applications. <i>Journal of Materials Chemistry C</i> , 2021, 9, 508-516.	2.7	17
106	Recent advances on TMDCs for medical diagnosis. <i>Biomaterials</i> , 2021, 269, 120471.	5.7	30
107	Two-dimensional Janus van der Waals heterojunctions: A review of recent research progresses. <i>Frontiers of Physics</i> , 2021, 16, 1.	2.4	37
108	Recent advances in anisotropic two-dimensional materials and device applications. <i>Nano Research</i> , 2021, 14, 897-919.	5.8	69

#	ARTICLE	IF	CITATIONS
109	Recent Advances in Hybridization, Doping, and Functionalization of 2D Xenes. Advanced Functional Materials, 2021, 31, .	7.8	33
110	Traditional soliton erbium-doped fiber laser with InSe as saturable absorber. Frontiers of Information Technology and Electronic Engineering, 2021, 22, 325-333.	1.5	8
111	Few-layer TaSe ₂ as a saturable absorber for passively Q-switched erbium-doped fiber lasers. Optical Materials Express, 2021, 11, 385.	1.6	18
112	2D Nanomaterials for Tissue Engineering and Regenerative Nanomedicines: Recent Advances and Future Challenges. Advanced Healthcare Materials, 2021, 10, e2001743.	3.9	88
113	Indium selenide saturable absorber for high-energy nanosecond Q-switched pulse generation. Applied Optics, 2021, 60, 427.	0.9	0
114	2D-antimonene-based surface plasmon resonance sensor for improvement of sensitivity. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	18
115	Passively Q-Switched Erbium-Doped Fiber Laser Based on GeSe Saturable Absorber. Optics and Photonics Journal, 2021, 11, 89-103.	0.3	1
116	MXenes: Synthesis, Optical Properties, and Applications in Ultrafast Photonics. Small, 2021, 17, e2006054.	5.2	119
117	Enhanced broadband nonlinear optical response of TiO ₂ /CuO nanosheets via oxygen vacancy engineering. Nanophotonics, 2021, 10, 1541-1551.	2.9	28
118	Four-wave-mixing assisted multi-wavelength short pulse generation in an erbium-doped-fiber laser based tellurium nanorod saturable absorber. Photonics and Nanostructures - Fundamentals and Applications, 2021, 43, 100884.	1.0	8
119	Theoretical investigation on stability and electronic properties of Janus MoSSe nanotubes for optoelectronic applications. Optik, 2021, 227, 166105.	1.4	11
120	Smart nano-micro platforms for ophthalmological applications: The state-of-the-art and future perspectives. Biomaterials, 2021, 270, 120682.	5.7	32
121	Ultrathin 2D Nonlayered Tellurene Nanosheets as Saturable Absorber for Picosecond Pulse Generation in All-Fiber Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-6.	1.9	18
122	Nonlinear saturable absorption in antimonene quantum dots for passively Q-switching Pr:YLF laser. Nano Select, 2021, 2, 1741-1749.	1.9	4
123	The versatile device with MoTe ₂ mode-locker for ultrafast optics application. Optics and Laser Technology, 2021, 135, 106692.	2.2	4
124	Antimony Thin Film as a Robust Broadband Saturable Absorber. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-7.	1.9	9
125	Optoelectronic characteristics and application of black phosphorus and its analogs. Frontiers of Physics, 2021, 16, 1.	2.4	17
126	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

#	ARTICLE	IF	CITATIONS
127	Sub-Band Gap Absorption and Optical Nonlinear Response of MnPSe ₃ Nanosheets for Pulse Generation in the L-Band. ACS Applied Materials & Interfaces, 2021, 13, 13524-13533.	4.0	16
128	An Insightful Picture of Nonlinear Photonics in 2D Materials and their Applications: Recent Advances and Future Prospects. Advanced Optical Materials, 2021, 9, 2001671.	3.6	23
129	Enhancing Q-Switched Fiber Laser Performance Based on Reverse Saturable and Saturable Absorption Properties of CuCrO ₂ Nanoparticle-Polyimide Films. ACS Applied Materials & Interfaces, 2021, 13, 21748-21755.	4.0	6
130	Broadband Metallic Carbon Nanotube Saturable Absorber for Ultrashort Pulse Generation in the 1500–2100 nm Spectral Range. Applied Sciences (Switzerland), 2021, 11, 3121.	1.3	3
131	Ultrashort pulse laser at 1564.3 nm wavelength with E-beam deposited copper nanoparticles saturable absorber. Optics and Laser Technology, 2021, 136, 106791.	2.2	8
132	Ultrashort pulse generation with MXene Ti ₃ C ₂ T _x embedded in PVA and deposited onto D-shaped fiber. Optics and Laser Technology, 2021, 136, 106780.	2.2	13
133	Monolithic Integration of Strained UV–Visible Dual Color Photodetectors on 4 in. Multilayer MoS ₂ -on-Freestanding GaN Wafer by Direct van der Waals Growth. ACS Applied Electronic Materials, 2021, 3, 1988-1995.	2.0	5
134	Recent research and advances of material-based saturable absorber in mode-locked fiber laser. Optics and Laser Technology, 2021, 137, 106826.	2.2	24
135	Ultrafast Fiber Lasers with Low-Dimensional Saturable Absorbers: Status and Prospects. Sensors, 2021, 21, 3676.	2.1	19
136	All-normal dispersion supercontinuum vs frequency-shifted solitons pumped at 1560 nm as seed sources for thulium-doped fiber amplifiers. Optics Express, 2021, 29, 18122.	1.7	2
137	Photodynamic immunotherapy of cancers based on nanotechnology: recent advances and future challenges. Journal of Nanobiotechnology, 2021, 19, 160.	4.2	54
138	Strain-Dependent Band Structures and Electronic Properties in Sb/Bi Lateral Heterostructures Calculated by First Principles. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100148.	1.2	9
139	Optical nonlinearity and laser modulation performance of FeNi-LDH in the mid-infrared region. Optics Letters, 2021, 46, 2348.	1.7	4
140	2D Materials for Nonlinear Photonics and Electro-Optical Applications. Advanced Materials Interfaces, 2021, 8, 2100367.	1.9	30
141	C60 nanorods as a promising infrared nonlinear optical material for ultrafast photonics. Carbon, 2021, 178, 728-733.	5.4	9
142	TaSe ₂ -based mode-locked fiber laser with four switchable operating states. Optics and Laser Technology, 2021, 138, 106924.	2.2	11
143	Passively mode locked thulium and thulium/holmium doped fiber lasers using MXene Nb ₂ C coated microfiber. Scientific Reports, 2021, 11, 11652.	1.6	26
144	Narrow-bandgap materials for optoelectronics applications. Frontiers of Physics, 2022, 17, 1.	2.4	28

#	ARTICLE	IF	CITATIONS
145	Antimonene Prepared by Laser Irradiation Applied for Nonlinear Optical Limiting. Electronic Materials Letters, 2021, 17, 521-531.	1.0	4
146	Passively Q-switched modulation based on antimonene in erbium-doped fiber laser with a long term stability. Optical Materials, 2021, 118, 111256.	1.7	17
147	Mode-locked thulium/holmium-doped fiber laser with vanadium carbide deposited on tapered fiber. Optical Fiber Technology, 2021, 65, 102589.	1.4	8
148	A Review on Rhenium Disulfide: Synthesis Approaches, Optical Properties, and Applications in Pulsed Lasers. Nanomaterials, 2021, 11, 2367.	1.9	18
149	PbS Quantum Dots Saturable Absorber for Dual-Wavelength Solitons Generation. Nanomaterials, 2021, 11, 2561.	1.9	11
150	A 1.0-Åµm pulsed generation in ytterbium-doped fiber laser with Gadolinium oxide as a saturable absorber. Optics and Laser Technology, 2021, 141, 107149.	2.2	1
151	Graphene-chitin bio-composite polymer based mode locker at 2 micron region. Optik, 2021, 245, 167710.	1.4	4
152	Mode-locked thulium/holmium co-doped fiber laser using WTe ₂ -covered tapered fiber. Optik, 2021, 245, 167723.	1.4	6
153	Multifunctional all-fiber mode-locked laser based on graphene-integrated polarization-dependent microfiber resonator. Optics and Laser Technology, 2021, 143, 107381.	2.2	3
154	Applications of two-dimensional layered nanomaterials in photoelectrochemical sensors: A comprehensive review. Coordination Chemistry Reviews, 2021, 447, 214156.	9.5	136
155	Thulium-holmium doped fiber laser mode-locking with hafnium disulfide (HfS ₂) coated on D-shaped fiber. Optik, 2021, 246, 167785.	1.4	1
156	The performance of Ti ₂ C MXene and Ti ₂ AlC MAX Phase as saturable absorbers for passively mode-locked fiber laser. Optical Fiber Technology, 2021, 67, 102683.	1.4	22
157	Self-powered and broadband flexible photodetectors based on vapor deposition grown antimony film. Applied Surface Science, 2022, 571, 151335.	3.1	6
158	Harmonically mode-locked Er-doped fiber laser at 1.3 ÅHz using a V ₂ AlC MAX phase nanoparticle-based saturable absorber. Optics and Laser Technology, 2022, 145, 107525.	2.2	13
159	In ₂ S ₃ -based saturable absorber for passively harmonic mode-locking in 2 Å¼m region. Optics and Laser Technology, 2022, 145, 107476.	2.2	7
160	Signal processing based on two-dimensional materials. , 2021, , 207-233.		0
161	Broadband optical nonlinearity of zeolitic imidazolate framework-8 (ZIF-8) for ultrafast photonics. Journal of Materials Chemistry C, 0, , .	2.7	25
162	Black phosphorus: device and application. , 2021, , 139-163.		1

#	ARTICLE	IF	CITATIONS
163	Ta ₂ NiSe ₅ nanosheets as a novel broadband saturable absorber for solid-state pulse laser generation. Science China Materials, 2021, 64, 1468-1476.	3.5	9
165	Tellurium@Selenium core-shell hetero-junction: Facile synthesis, nonlinear optics, and ultrafast photonics applications towards mid-infrared regime. Applied Materials Today, 2020, 20, 100657.	2.3	9
166	Graphene-dispersed polymer waveguide for efficient formation of mode-locked lasers at extremely low graphene concentration. Carbon, 2020, 166, 123-130.	5.4	10
167	Passively Mode-Locked Operations Induced by Semiconducting Polymer Nanoparticles and a Side-Polished Fiber. ACS Applied Materials & Interfaces, 2020, 12, 57461-57467.	4.0	25
168	Current status and prospects of memristors based on novel 2D materials. Materials Horizons, 2020, 7, 1495-1518.	6.4	101
169	2D van der Waals heterostructures: processing, optical properties and applications in ultrafast photonics. Materials Horizons, 2020, 7, 2903-2921.	6.4	44
170	Recent progress on optical rogue waves in fiber lasers: status, challenges, and perspectives. Advanced Photonics, 2020, 2, 1.	6.2	71
171	Q-Switched YDFL generation by a MAX phase saturable absorber. Applied Optics, 2020, 59, 5408.	0.9	19
172	2.8 μm passively Q-switched Er:ZBLAN fiber laser with an Sb saturable absorber mirror. Applied Optics, 2020, 59, 9165.	0.9	12
173	Soliton mode-locked pulse generation with a bulk structured MXene Ti ₃ AlC ₂ deposited onto a D-shaped fiber. Applied Optics, 2020, 59, 8759.	0.9	13
174	Generation of a square-shaped pulse in mode-locked fiber lasers with a microfiber-based few-layer Nb ₂ C saturable absorber. Applied Optics, 2020, 59, 11240.	0.9	15
175	Passively Q-switched erbium-doped fiber laser based on antimonene as saturable absorber. Applied Optics, 2019, 58, 7845.	0.9	18
176	Graphene/WS ₂ heterostructure saturable absorbers for ultrashort pulse generation in L-band passively mode-locked fiber lasers. Optics Express, 2020, 28, 11514.	1.7	36
177	Passively Q-switched and mode-locked erbium-doped fiber lasers based on tellurene nanosheets as saturable absorber. Optics Express, 2020, 28, 14729.	1.7	44
178	Ultra-narrowband light absorption enhancement of monolayer graphene from waveguide mode. Optics Express, 2020, 28, 24908.	1.7	16
179	Watt-level ultrafast bulk laser with a graphdiyne saturable absorber mirror. Optics Letters, 2020, 45, 5554.	1.7	12
180	MoS ₂ /graphene heterostructure incorporated passively mode-locked fiber laser: from anomalous to normal average dispersion. Optical Materials Express, 2020, 10, 46.	1.6	16
181	2 μm passively Q-switched all-solid-state laser based on a Ta ₂ NiSe ₅ saturable absorber. Optical Materials Express, 2020, 10, 3090.	1.6	9

#	ARTICLE	IF	CITATIONS
182	Ferroferric-oxide nanoparticle based Q-switcher for a 1 μ m region. Optical Materials Express, 2019, 9, 731.	1.6	32
183	Hafnium diselenide as a Q-switcher for fiber laser application. Optical Materials Express, 2019, 9, 4597.	1.6	18
184	Experimental demonstration of Bi ₂ Te ₃ saturable absorption with whispering gallery modes in an InGaAsP microdisk laser. OSA Continuum, 2020, 3, 58.	1.8	1
185	PbS quantum dots as a saturable absorber for ultrafast laser. Photonics Research, 2018, 6, 1028.	3.4	56
186	Resonance-assisted lightâ€“controlâ€“light characteristics of SnS ₂ on a microfiber knot resonator with fast response. Photonics Research, 2018, 6, 1137.	3.4	19
187	Revealing of the ultrafast third-order nonlinear optical response and enabled photonic application in two-dimensional tin sulfide. Photonics Research, 2019, 7, 494.	3.4	159
188	Ultrafast fiber lasers mode-locked by two-dimensional materials: review and prospect. Photonics Research, 2020, 8, 78.	3.4	242
189	Double-layer graphene on photonic crystal waveguide electro-absorption modulator with 12 GHz bandwidth. Nanophotonics, 2020, 9, 2377-2385.	2.9	32
190	164 fs mode-locked erbium-doped fiber laser based on tungsten ditelluride. Nanophotonics, 2020, 9, 2763-2769.	2.9	10
191	Dynamic polarization attractors of dissipative solitons from carbon nanotube mode-locked Er-doped laser. Nanophotonics, 2020, 9, 2437-2443.	2.9	8
192	Advances in photonics of recently developed Xenes. Nanophotonics, 2020, 9, 1621-1649.	2.9	11
193	Nonlinear optical properties of anisotropic two-dimensional layered materials for ultrafast photonics. Nanophotonics, 2020, 9, 1651-1673.	2.9	26
194	Visible-wavelength pulsed lasers with low-dimensional saturable absorbers. Nanophotonics, 2020, 9, 2273-2294.	2.9	20
195	Novel layered 2D materials for ultrafast photonics. Nanophotonics, 2020, 9, 1743-1786.	2.9	27
196	Palladium selenide as a broadband saturable absorber for ultra-fast photonics. Nanophotonics, 2020, 9, 2557-2567.	2.9	91
197	Palladium diselenide as a direct absorption saturable absorber for ultrafast mode-locked operations: from all anomalous dispersion to all normal dispersion. Nanophotonics, 2020, 9, 4295-4306.	2.9	100
198	Carbon nanotube mode-locked fiber lasers: recent progress and perspectives. Nanophotonics, 2020, 10, 749-775.	2.9	30
199	Unexpected Broadband Optical Limiting Properties of Antimonene Quantum Dots. Journal of Advanced Optics and Photonics, 2018, 1, 203-215.	0.1	1

#	ARTICLE	IF	CITATIONS
200	Ultrafast pulse lasers based on two-dimensional nanomaterials. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 188101.	0.2	12
201	Large-energy mode-locked Er-doped fiber laser based Cr ₂ Si ₂ Te ₆ as a modulator. Infrared Physics and Technology, 2021, 119, 103941.	1.3	7
202	All-Optical Tuning of Light in WSe ₂ -Coated Microfiber. Nanoscale Research Letters, 2019, 14, 353.	3.1	2
203	The SnSSe SA with high modulation depth for passively Q-switched fiber laser. Nanophotonics, 2020, 9, 2549-2555.	2.9	15
204	Dissipative soliton operation of a diode-pumped Yb:KGW solid-state laser in the all-positive-dispersion regime. Optical Engineering, 2020, 59, 1.	0.5	1
205	Optical pulse modulators based on layered vanadium diselenide nanosheets. Nanotechnology, 2021, 33, .	1.3	0
206	All-optical devices based on two-dimensional materials. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 184216.	0.2	6
207	Passively Q-Switched Erbium-Doped Fiber Laser with TiSe ₂ as Saturable Absorber. Optics and Photonics Journal, 2020, 10, 251-263.	0.3	1
208	2D van der Waals materials for ultrafast pulsed fiber lasers: review and prospect. Nanotechnology, 2022, 33, 082003.	1.3	11
209	Tunable dual-wavelength saturable absorber based on dual defective photonic crystal by MoS ₂ monolayer. Photonics and Nanostructures - Fundamentals and Applications, 2021, , 100976.	1.0	1
210	Recent progress and strategies in photodetectors based on 2D inorganic/organic heterostructures. 2D Materials, 2021, 8, 012001.	2.0	21
211	Few-layer GaSe nanosheet-based broadband saturable absorber for passively Q-switched solid-state bulk lasers. Applied Optics, 2020, 59, 8834.	0.9	3
212	Poly(3,4-ethylenedioxythiophene): Poly(styrenesulfonate) spin-coated onto polyvinyl alcohol film as saturable absorber for generating Q-switched laser at 1.5 Åµm region. Optical Fiber Technology, 2022, 68, 102763.	1.4	3
213	Chemistry, Functionalization, and Applications of Recent Monoelemental Two-Dimensional Materials and Their Heterostructures. Chemical Reviews, 2022, 122, 1127-1207.	23.0	103
214	L-band femtosecond fiber laser with Cu ₂ Te-PVA thin film. Laser Physics Letters, 2022, 19, 015101.	0.6	0
215	Tungsten Carbide Nanoparticles as Saturable Absorber for Q-Switched Erbium-Doped Fiber Laser. IEEE Photonics Technology Letters, 2022, 34, 113-116.	1.3	11
216	Passively Q-switched operation based on Sb ₂ Se ₃ and self-power near infrared photodetector. Journal of Luminescence, 2022, 244, 118704.	1.5	4
217	All-optical modulator based on a microfiber coil resonator functionalized with MXene. Optical Fiber Technology, 2022, 68, 102776.	1.4	5

#	ARTICLE	IF	CITATIONS
218	Recent advance of emerging low-dimensional materials for vector soliton generation in fiber lasers. <i>Materials Today Physics</i> , 2022, 23, 100622.	2.9	32
219	Tantalum disulfide nanosheets for the generation of polarization domain wall solitons and polarization locked vector solitons. <i>Optics and Laser Technology</i> , 2022, 149, 107895.	2.2	11
220	Generation of bound solitons in a mode-locked Tm-doped fiber laser based on a graded-index multimode fiber saturable absorber. <i>Optics and Laser Technology</i> , 2022, 149, 107865.	2.2	4
221	Multifunctional and durable graphene-based composite sponge doped with antimonene nanosheets. <i>Journal of Materials Research and Technology</i> , 2022, 17, 2466-2479.	2.6	10
222	Ultrafast photonics applications of emerging 2D-Xenes beyond graphene. <i>Nanophotonics</i> , 2022, 11, 1261-1284.	2.9	65
223	Mono-elemental saturable absorber in near-infrared mode-locked fiber laser: A review. <i>Infrared Physics and Technology</i> , 2022, 122, 104103.	1.3	8
224	Germanene nanosheets for mode-locked pulse generation in fiber lasers. <i>Infrared Physics and Technology</i> , 2022, 123, 104128.	1.3	14
225	Stretched-pulse fiber laser mode-locked by PbS quantum dots. <i>Optics and Laser Technology</i> , 2022, 151, 107991.	2.2	6
226	Bright Soliton and Bright-Dark Soliton Pair in an Er-Doped Fiber Laser Mode-Locked Based on In ₂ Se ₃ Saturable Absorber. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	0
227	Picosecond Soliton Pulse Generation with a Zinc Phthalocyanine Thin-Film Saturable Absorber Via Mode Locking in an Erbium-Doped Fiber Laser Cavity. <i>Journal of Russian Laser Research</i> , 2022, 43, 193.	0.3	1
228	Titanium Carbide MXene as a Mode Locker in Erbium-Doped Fiber Laser Cavity. <i>Journal of Russian Laser Research</i> , 0, , .	0.3	1
229	Mode-locked ytterbium-doped fiber laser with zinc phthalocyanine thin film saturable absorber. <i>Frontiers of Optoelectronics</i> , 2022, 15, .	1.9	3
230	Solution-processed antimonene integrated arc-shaped fiber for mode-locked pulse laser generation at 1.9-µm spectral region. <i>Optical Materials</i> , 2022, 131, 112635.	1.7	1
231	Integration paths for Xenes. , 2022, , 405-438.		1
232	Passively Q-Switched Erbium-Doped Fiber Laser Based on PSF-ZnO-TiO ₂ Nanoparticles as Saturable Absorber. <i>Springer Proceedings in Physics</i> , 2022, , 3-16.	0.1	2
233	Carbon nanofiber saturable absorbers for ultrafast pulsed laser at 1.56-µm. <i>Journal of Optics (India)</i> , 0, , .	0.8	0
234	Review on 2D Arsenene and Antimonene: Emerging Materials for Energy, Electronic and Biological Applications. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	14
235	Passively high-power Q-switching in Er- and Er/Yb doped fiber with CdTe. <i>Optics and Laser Technology</i> , 2022, 156, 108510.	2.2	2

#	ARTICLE	IF	CITATIONS
236	Preparation of tellurium nanowires and its application in ultrafast photonics. Journal of Luminescence, 2022, 252, 119335.	1.5	6
237	2D Xenes: Optical and Optoelectronic Properties and Applications in Photonic Devices. Advanced Functional Materials, 2022, 32, .	7.8	12
238	Demonstration of conventional soliton, bound-state soliton, and noise-like pulse based on chromium sulfide as saturable absorber. Nanophotonics, 2022, 11, 4937-4945.	2.9	7
239	Large energy mode-locked phenomenon based on ZrS ₂ in Er-doped fiber laser. Optics and Laser Technology, 2023, 157, 108725.	2.2	9
240	First principles screening of transition metal single-atom catalysts for nitrogen reduction reaction. Applied Surface Science, 2023, 612, 155916.	3.1	12
241	Low dimensional nanomaterials for treating acute kidney injury. Journal of Nanobiotechnology, 2022, 20, .	4.2	5
242	Antimonene: a tuneable post-graphene material for advanced applications in optoelectronics, catalysis, energy and biomedicine. Chemical Society Reviews, 2023, 52, 1288-1330.	18.7	18
243	Optimization process of spin-coated black phosphorus/polydimethylsiloxane composite on microfiber as saturable absorber for ultrafast photonics. Infrared Physics and Technology, 2023, 130, 104578.	1.3	0
244	Generation of high-power Q-switched pulses based on arc-shaped fiber and tapered fiber with Sb ₂ Te ₃ in erbium/ytterbium doped fiber laser. Infrared Physics and Technology, 2023, 129, 104581.	1.3	0
245	Environmentally sustainable implementations of two-dimensional nanomaterials. Frontiers in Chemistry, 0, 11, .	1.8	4
246	â€œÇç›ææ—™çš„éžçæ€šâ€¦%â€œæ€šè“. Scientia Sinica: Physica, Mechanica Et Astronomica, 2023, , .	0.2	0
247	Q-switched and vector soliton pulses from an Er-doped fiber laser with high stability based on a Î³-graphyne saturable absorber. Nanoscale, 2023, 15, 7566-7576.	2.8	4
248	Investigation on the saturable absorption characteristics of GeNS and its application to harmonic mode-locked modulation. Microwave and Optical Technology Letters, 2024, 66, .	0.9	1
252	Preparation and pulsed fiber laser applications of emerging nanostructured materials. Journal of Materials Chemistry C, 2023, 11, 7538-7569.	2.7	1