Dechun Li

List of Publications by Year
in descending order

99 papers	1,195 citations	361413 20 h-index	526287 27 g-index
99 all docs	99 docs citations	99 times ranked	714 citing authors

#	Article	IF	Citations
1	High-quality 2-Î¼m Q-switched pulsed solid-state lasers using spin-coating-coreduction approach synthesized Bi₂Te₃ topological insulators. Photonics Research, 2018, 6, 314.	7.0	54
2	Broadband Nonlinear Optical Response of InSe Nanosheets for the Pulse Generation From 1 to 2 Î¼m. ACS Applied Materials & Interfaces, 2019, 11, 48281-48289.	8.0	51
3	Multilayer black phosphorus as saturable absorber for an Er:Lu_2O_3 laser at â^¼3â€‰â€‰Î¼m. Photonics Research, 2016, 4, 181.	7.0	47
4	Synthesis and nonlinear optical properties of semiconducting single-walled carbon nanotubes at 1 Î¼m. Nanoscale, 2019, 11, 7287-7292.	5.6	42
5	Pulse shape symmetry and pulse width reduction in diode-pumped doubly Q-switched Nd:YVO4/KTP green laser with AO and GaAs. Optics Express, 2005, 13, 1178.	3.4	41
6	Theoretical investigation on electronic and optical properties of the graphene-MoSe2-graphene sandwich heterostructure. Materials and Design, 2019, 183, 108129.	7.0	31
7	Optical nonlinearity of zeolitic imidazolate framework-67 in the near-infrared region. Materials Chemistry Frontiers, 2020, 4, 2081-2088.	5.9	31
8	Dual-Wavelength Passively Q-Switched Nd,Mg:LiTaO3 Laser With a Monolayer Graphene as Saturable Absorber. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 343-347.	2.9	28
9	Comprehensive study on the nonlinear optical properties of few-layered MoSe2 nanosheets at 1â€Î¼m. Journal of Alloys and Compounds, 2019, 806, 52-57.	5.5	28
10	Enhanced broadband nonlinear optical response of TiO₂/CuO nanosheets via oxygen vacancy engineering. Nanophotonics, 2021, 10, 1541-1551.	6.0	28
11	Optical modulation characteristics of zeolitic imidazolate framework-67 (ZIF-67) in the near infrared regime. Optics Letters, 2019, 44, 5892.	3.3	28
12	First principles study of the ternary complex model of EL2 defect in GaAs saturable absorber. Optics Express, 2012, 20, 6258.	3.4	25
13	Broadband optical nonlinearity of zeolitic imidazolate framework-8 (ZIF-8) for ultrafast photonics. Journal of Materials Chemistry C, 0, , .	5.5	25
14	Recent investigations on nonlinear absorption properties of carbon nanotubes. Nanophotonics, 2020, 9, 761-781.	6.0	25
15	Defect Engineering in CdS_{<i>x</i>}Se_{1â€"<i>x</i>} Nanobelts: An Insight into Carrier Relaxation Dynamics via Optical Pumpâ€"Terahertz Probe Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 26036-26042.	3.1	23
16	1.36 W Passively Q-Switched YVO₄/Nd:YVO₄Laser With a WS₂Saturable Absorber. IEEE Photonics Technology Letters, 2017, 29, 470-473.	2.5	23
17	Passively Q-switched near-infrared lasers with bismuthene quantum dots as the saturable absorber. Optics and Laser Technology, 2020, 128, 106219.	4.6	23
18	The electronic and optical properties of quaternary GaAs1-x-yN x Bi y alloy lattice-matched to GaAs: a first-principles study. Nanoscale Research Letters, 2014, 9, 580.	5.7	22

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19	Bismuthene quantum dots based optical modulator for MIR lasers at 2ÂÎ¼m. Optical Materials, 2020, 102, 109830.	3.6	22
20	Nonlinear optical absorption features in few-layered hybrid Ti₃C₂(OH)₂/Ti₃C₂F₂ MXene for optical pulse generation in the NIR region. Optics Express, 2020, 28, 31499.	3.4	22
21	First principles study of Bismuth alloying effects in GaAs saturable absorber. Optics Express, 2012, 20, 11574.	3.4	20
22	Nonlinear Optical Features of Zeolitic Imidazolate Framework-67 Nanocrystals for Mid-Infrared Pulse Generation. Crystal Growth and Design, 2020, 20, 6683-6690.	3.0	19
23	Nonlinear optical responses of Î±-Fe2O3 nanosheets and application as a saturable absorber in the wide near-infrared region. Optics and Laser Technology, 2021, 136, 106812.	4.6	19
24	Large-scale monolayer molybdenum disulfide (MoS₂) for mid-infrared photonics. Nanophotonics, 2020, 9, 4703-4710.	6.0	18
25	Passively Q-switched Tm:CaLu_{0.1}Gd_{0.9}AlO₄ laser at 2â€…Âµm with hematite nanosheets as the saturable absorber. Optics Express, 2020, 28, 16893.	3.4	17
26	Surface functionalization of Ta4C3 MXene for broadband ultrafast photonics in the near-infrared region. Applied Materials Today, 2022, 26, 101341.	4.3	17
27	Experimental and theoretical study of passively Q-switched Yb:YAG laser with GaAs saturable absorber near 1050nm. Optics and Laser Technology, 2014, 56, 398-403.	4.6	16
28	Actively Q-switched and Mode-Locked Diode-Pumped ${hbox {Nd:GdVO}}_{4}{hbox {--KTP}}$ Laser. IEEE Journal of Quantum Electronics, 2008, 44, 288-293.	1.9	15
29	Doubly Q-switched Tm:YAP laser with g-C3N4 saturable absorber and AOM. Optical Materials, 2019, 96, 109306.	3.6	15
30	Enhanced Q-switching performance of magnetite nanoparticle via compositional engineering with Ti3C2 MXene in the near infrared region. Journal of Materials Science and Technology, 2021, 81, 51-57.	10.7	15
31	Passively Q-switched Tm:YAP laser with a zeolitic imidalate framework-67 saturable absorber operating at 3H4â†'3H5 transition. Optics and Laser Technology, 2022, 147, 107679.	4.6	15
32	Nonlinear optical properties of colloidal CdSe/ZnS quantum dots in PMMA. Nanotechnology, 2020, 31, 195703.	2.6	14
33	Ferroferric-Oxide Nanoparticle Based Optical Modulator for $2~mu$ m Spectral Region. IEEE Photonics Technology Letters, 2018, 30, 777-780.	2.5	13
34	Synthesis and optical nonlinearity investigation of novel Fe₃O₄@Ti₃C₂ MXene hybrid nanomaterials from 1 to 2 Î¼m. Journal of Materials Chemistry C, 2021, 9, 1772-1777.	5.5	13
35	Laser-diode-pumped doubly Q-switched Nd:GdVO4/KTA intracavity optical parametric oscillator. Laser Physics, 2009, 19, 927-932.	1.2	12
36	Doubly passively Q-switched Tm:YAP laser with MoS2 and WS2 saturable absorbers at 2 Î¼m. Optik, 2019, 198, 163205.	2.9	12

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37	Optical properties of MoSe₂ nanosheets: characterization, simulation and application for Q-switching. Optical Materials Express, 2019, 9, 3494.	3.0	12
38	Enhanced optical nonlinearity and ultrafast carrier dynamics of TiO2/CuO nanocomposites. Composites Part B: Engineering, 2022, 237, 109860.	12.0	12
39	Large-scale few-layered MoS₂ as a saturable absorber for Q-switching operation at 2.3â€…Âµm. Optics Letters, 2022, 47, 3271.	3.3	12
40	Band structure tuning of g-C₃N₄ via sulfur doping for broadband near-infrared ultrafast photonic applications. Nanophotonics, 2021, 11, 139-151.	6.0	11
41	Passively Q-switched 2.85 <i>Âµ</i>m Er:Lu₂O₃ laser with WSe₂. Laser Physics Letters, 2018, 15, 085802.	1.4	10
42	Highly stable passively Q-switched erbium-doped fiber laser with zeolitic imidazolate framework-67 saturable absorber. Infrared Physics and Technology, 2022, 125, 104274.	2.9	10
43	Optimization of peak power of doubly Q-switched lasers with both an acousto-optic modulator and a Cr^4+-doped saturable absorber. Applied Optics, 2006, 45, 5767.	2.1	9
44	Doubly Passively Self-Q-Switched ${hbox {Cr}}^{4+}{hbox {:Nd}}^{3+}{hbox {:YAG}}$ Laser With a GaAs Output Coupler in a Short Cavity. IEEE Journal of Quantum Electronics, 2007, 43, 109-115.	1.9	9
45	Theoretical and experimental investigations on Nb₂CT _x MXene Q-switched Tm:YAP laser at 2 Î¼m for the nonlinear optical response. Nanotechnology, 2021, 32, 375709.	2.6	9
46	Broadband and enhanced nonlinear optical modulation characteristics of CuBTC for pulsed lasers. Optical Materials Express, 2021, 11, 3546.	3.0	9
47	Layered Metallic Vanadium Disulfide for Doubly Q-Switched Tm:YAP Laser with EOM: Experimental and Theoretical Investigations. Nanomaterials, 2021, 11, 2605.	4.1	9
48	Synthesis of core-shell polyhedron ZIF-8@ZIF-67 as saturable absorber for passive Q-switching operation in Tm:YAP laser at 3H4â†'3H5 transition. Optical Materials, 2022, 131, 112724.	3.6	9
49	Passive Q-switching of a laser-diode-pumped intracavity-frequency-doubling Nd:Nd3+:NaY(WO4)2/KTP laser with Cr4+:YAG saturable absorber. Optical and Quantum Electronics, 2004, 36, 1227-1236.	3.3	8
50	Optimization of Passively Q-switched Lasers by Taking into Account Intracavity Laser Spatial Distribution. Optical and Quantum Electronics, 2005, 37, 927-942.	3.3	8
51	Optimization of GaAs semiconductor saturable absorber Q-switched lasers. Optik, 2010, 121, 478-485.	2.9	8
52	Diameter-selected single-walled carbon nanotubes for the passive Q-switching operation at 2Âμm. Optical Materials, 2020, 100, 109627.	3.6	8
53	Self-Q-switched Ïƒ-polarized Tm,Ho:CaLu0.1Gd0.9AlO4 laser at 2.1Âμm. Journal of Luminescence, 2020, 227, 117560.	3.1	8
54	Dual-loss-modulated Q-switched Tm:Ca(Gd,Lu)AlO4 laser using AOM and a MoS2 nanosheet. Optical Materials Express, 2020, 10, 752.	3.0	8

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55	Few-layered Î±-Fe₂O₃ nanoflake saturable absorber for stable MIR pulse generation. Optical Materials Express, 2020, 10, 2313.	3.0	8
56	Optimization of doubly Q-switched lasers with both an acousto-optic modulator and a GaAs saturable absorber. Applied Optics, 2007, 46, 6127.	2.1	7
57	An intensive dispersion and synchronous assembly of single-walled carbon nanotubes in a surfactantâ€“oilâ€“water association system. Physical Chemistry Chemical Physics, 2016, 18, 10947-10953.	2.8	7
58	Separation of Single-Walled Carbon Nanotubes Using the Amino Acid Surfactant <i>N</i>-Cocoyl Sarcosinate. ACS Applied Nano Materials, 2019, 2, 5440-5449.	5.0	7
59	Pulsed Tm:Ca(Gd,Lu)AlO4 laser doubly Q-switched by acousto-optic modulator and CVD-grown tungsten disulfide (WS2). Infrared Physics and Technology, 2020, 109, 103381.	2.9	7
60	Sulfur-doped graphitic carbon nitride for Tm:YAlO₃ laser operation at 2.3â€‰â€‰Âµm. Optics Letters, 2021, 46, 2043.	3.3	7
61	Self-mode locking in a diode-pumped self-Q-switched green laser. Journal of Applied Physics, 2007, 101, 013105.	2.5	6
62	Passively Q-switched Nd:GGG laser with a SWCNT as saturable absorber. Optical and Quantum Electronics, 2015, 47, 697-703.	3.3	6
63	Heterostructure ReS2/GaAs Saturable Absorber Passively Q-Switched Nd:YVO4 Laser. Nanoscale Research Letters, 2019, 14, 112.	5.7	6
64	MXene Ti3C2Tx (TÂ=ÂF, O, or OH) saturable absorber for a 2Âμm doubly Q-switched laser with AOM. Optics and Laser Technology, 2021, 134, 106642.	4.6	6
65	Core-shell CdSe/ZnS quantum dots polymer composite as the saturable absorber at 1.3 Î¼m: Influence of the doping concentration. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 400, 127307.	2.1	6
66	Optical modulation of magnesium 2,5-dihydroxyterephthalate saturable absorber for passively Q-switched 2 Î¼m solid-state laser. Applied Physics Express, 2020, 13, 115003.	2.4	6
67	Third-order nonlinear properties and reverse absorption behavior in layered Ti₃C₂ MXene in the near infrared region. Optical Materials Express, 2021, 11, 4051.	3.0	6
68	Third-order optical nonlinearity in Ti2C MXene for Q-switching operation at 1â€“2ÂÎ¼m. Optical Materials, 2022, 124, 112054.	3.6	6
69	Graphitic Carbon Nitride Q-Switched Tm:CNNGG Laser at 2 Micrometer Wavelength Region. IEEE Photonics Technology Letters, 2020, 32, 162-165.	2.5	5
70	Passively Q-switched Er:Lu₂O₃ laser at 2.8â€‰â€‰Âµm with TiC saturable absorber. Applied Optics, 2020, 59, 8066.	1.8	5
71	Analysis of output characteristics of the actively Q-switched intracavity optical parametric oscillator considering Gaussian distribution of intracavity photon densities. Journal of Modern Optics, 2008, 55, 1267-1277.	1.3	4
72	Simultaneous Stokes and Anti-Stokes Lines Operation Within a Yb:YAG Laser at 1050 nm. IEEE Photonics Technology Letters, 2014, 26, 2369-2371.	2.5	4

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73	Optical properties enhancement of buckled Bismuthene in mid-infrared region: a theoretical first-principle study. Molecular Simulation, 2020, 46, 1004-1010.	2.0	4
74	Liquid-phase exfoliated semiconducting single-walled carbon nanotubes as a saturable absorber for passively Q-switched laser. Journal of Nanophotonics, 2018, 12, 1.	1.0	4
75	Generation of low repetition rate sub-nanosecond pulses in doubly QML Nd:Lu0.5Y0.5VO4 and Nd:YVO4 lasers with EO and transmission SSA. Optics and Laser Technology, 2015, 69, 39-43.	4.6	3
76	Low Repetition Rate Subnanosecond Pulse Characteristics of Nd:Lu<inline-formula><tex-math>$_{f 0.5}$ </tex-math></inline-formula>Y<inline-formula><tex-math>$_{f 0.5}$</tex-math></inline-formula>VO<inline-formula> <tex-math>$_{f 4}$</tex-math></inline-formula>/KTP Green Laser With EO and MWCNT. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 79-84.	2.9	3
77	Modulation frequency characteristics in a doubly Q-switched Nd:Gd0.63Y0.37VO4 laser with an acousto-optic modulator and a V3+:YAG saturable absorber. Optical and Quantum Electronics, 2016, 48, 1.	3.3	3
78	Powerful ultrafast hybrid PM Yb:fiberâ€“Nd:GdVO4 master oscillator power amplifier. Optics Communications, 2020, 460, 125109.	2.1	3
79	Phase stability of monolayer Si1â^'xGex alloys with a Dirac cone. Nanoscale, 2021, 13, 8607-8613.	5.6	3
80	Phase diagram and superlattice structures of monolayer phosphorus carbide (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 477 Td	2.4	3
81	Nonlinear optical response of ternary chalcogenide nanoflakes for the pulse generation near 2ÂÎ¼m. Optical Materials, 2021, 114, 111001.	3.6	3
82	First-principle study of the native defects in GaAs saturable absorbers. Molecular Simulation, 2010, 36, 1141-1147.	2.0	2
83	First principle study of the elastic properties of InGaAs with different doping concentrations of indium. Molecular Simulation, 2012, 38, 84-89.	2.0	2
84	Dual-loss modulated Nd:GGG laser with Cr4+:YAG and GaAs. Optics and Laser Technology, 2014, 64, 324-327.	4.6	2
85	Theoretical and experimental studies on coexistent OPO and SRS from a KTiOPO4 pumped by an AO Q-switched Nd:LGGG laser. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	2
86	High-peak-power subnanosecond doubly Q-switched YVO4/Nd:YVO4 laser. Optical and Quantum Electronics, 2016, 48, 1.	3.3	2
87	8.2 <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e89" altimg="si2.svg"><mml:mi mathvariant="normal">Î¼</mml:mi></mml:math>J 5 ps Yb:KGWâ€“Yb:YAG MOPA system at 1 MHz repetition rate. Optics Communications, 2019, 450, 176-179.	2.1	2
88	Laser-diode-pumped passively Q-switched Nd:YVO4green laser with periodically poled KTP and GaAs saturable absorber. Journal of Modern Optics, 2007, 54, 107-117.	1.3	1
89	Diode-Pumped Passively Mode-Locked Ndâ€‰:â€‰LuVO$_{4}$ Laser With a Semiconductor Saturable Absorber Mirror. IEEE Photonics Technology Letters, 2009, 21, 836-838.	2.5	1
90	Passively Q-switched laser performance of the mixed crystals Nd:Lu0.15 Y0.85 VO4, Nd:Lu0.5 Y0.5 VO4 and Nd:Lu0.33Y0.37Gd0.3VO4 with GaAs saturable absorber. Optical and Quantum Electronics, 2013, 45, 233-243.	3.3	1

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91	Comparison of passively Q-switched laser performance of two composite Nd:YVO $$_{4}$$ 4 /Nd:YVO $$_{4}$$ 4 /Nd:YVO $$_{4}$$ 4 crystals with Cr $$^{4+}$$ 4 + :YAG saturable absorber. Optical and Quantum Electronics, 2015, 47, 1219-1225.	3.3	1
92	Experimental and Theoretical Investigation on Subnanosecond Pulse Characteristics From Doubly QML Nd:Lu_{0.5}Y_{0.5}VO₄ Green Laser. IEEE Journal of Quantum Electronics, 2015, 51, 1-8.	1.9	1
93	Idler-resonant intracavity KTA-based OPO pumped by a dual-loss modulated-Q-switched-laser with AOM and Cr4+:YAG. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	1
94	Vacancy-Induced Magnetism in Fluorographene: The Effect of Midgap State. Molecules, 2021, 26, 6666.	3.8	1
95	Optimization of the Efficiency of GaAs Saturable Absorber Q-switched Lasers. , 2010, , .		0
96	LASER-DIODE END-PUMPED DOUBLY PASSIVELY Q-SWITCHED INTRACAVITY-FREQUENCY-DOUBLING Nd:YVO₄/KTP GREEN LASER WITH Cr⁴⁺:YAG AND GaAs SATURABLE ABSORBERS. International Journal of Modern Physics B, 2011, 25, 293-300.	2.0	0
97	Simultaneous intracavity optical parametric oscillation and stimulated Raman scattering pumped by a doubly passively Q-switched Nd:GGG laser. Applied Physics B: Lasers and Optics, 2014, 117, 869-873.	2.2	0
98	The signal-to-noise ratio analysis of coronal plane microwave correlation imaging based on azimuth one-dimensional array. Journal of Electromagnetic Waves and Applications, 2020, 34, 129-139.	1.6	0
99	First-Principles Study of Bi-Doping Effects in Hg0.75Cd0.25Te. Molecules, 2021, 26, 4847.	3.8	0