Xiao-Ming Duan

List of Publications by Year
in descending order

104 papers	1,589 citations	331670 21 h-index	377865 34 g-index
105 all docs	105 docs citations	105 times ranked	901 citing authors

#	Article	IF	Citations
1	103ÂW in-band dual-end-pumped Ho:YAG laser. Optics Letters, 2012, 37, 3558.	3.3	87
2	Atomically Thin Hexagonal Boron Nitride and Its Heterostructures. Advanced Materials, 2021, 33, e2000769.	21.0	71
3	A 41-W ZnGeP_2 optical parametric oscillator pumped by a Q-switched Ho:YAG laser. Optics Letters, 2014, 39, 6589.	3.3	67
4	Active/passive Q-switching operation of 2â€‰â€‰Î¼m Tm,Ho:YAP laser with an acousto-optical Q-switch/MoS₂ saturable absorber mirror. Photonics Research, 2018, 6, 614.	7.0	61
5	High power, tunable mid-infrared BaGa_4Se_7 optical parametric oscillator pumped by a 21 Î¼m Ho:YAG laser. Optics Express, 2016, 24, 6083.	3.4	57
6	Singleâ€Phase Mixed Transition Metal Carbonate Encapsulated by Graphene: Facile Synthesis and Improved Lithium Storage Properties. Advanced Functional Materials, 2018, 28, 1705817.	14.9	56
7	Interplay between storage temperature, medium and leaching kinetics of hazardous wastes in Metakaolin-based geopolymer. Journal of Hazardous Materials, 2020, 384, 121377.	12.4	51
8	High repetition rate 102â€‰â€‰W middle infrared ZnGeP₂ master oscillator power amplifier system with thermal lens compensation. Optics Letters, 2019, 44, 715.	3.3	50
9	Continuous-wave and Q-switched operation of a resonantly pumped Ho:YAlO_3 laser. Optics Express, 2008, 16, 14668.	3.4	44
10	Safe trapping of cesium into doping-enhanced pollucite structure by geopolymer precursor technique. Journal of Hazardous Materials, 2019, 367, 577-588.	12.4	43
11	161â€‰â€‰W middle infrared ZnGeP₂ MOPA system pumped by 300â€‰â€‰W-class Ho:YAG MOPA system. Optics Letters, 2021, 46, 82.	3.3	41
12	High efficient actively Q-switched Ho:LuAG laser. Optics Express, 2009, 17, 21691.	3.4	40
13	High-power Cr^2+:ZnS saturable absorber passively Q-switched Ho:YAG ceramic laser and its application to pumping of a mid-IR OPO. Optics Letters, 2015, 40, 348.	3.3	38
14	Room temperature efficient actively Q-switched Ho:YAP laser. Optics Express, 2009, 17, 4427.	3.4	37
15	231â€‰â€‰W dual-end-pumped Ho:YAG MOPA system and its application to a mid-infrared ZGP OPO. Optics Letters, 2018, 43, 5989.	3.3	35
16	High-efficiency, tunable 8-9 Î¼m BaGa₄Se₇optical parametric oscillator pumped at 21 Î¼m. Optical Materials Express, 2018, 8, 3332.	3.0	33
17	Microstructural evolution and mechanical properties of in situ nano Ta4HfC5 reinforced SiBCN composite ceramics. Journal of Advanced Ceramics, 2020, 9, 739-748.	17.4	28
18	In Situ Processing of Graphene/Leucite Nanocomposite Through Graphene Oxide/Geopolymer. Journal of the American Ceramic Society, 2016, 99, 1164-1173.	3.8	27

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19	Highly Dense Amorphous Si₂BC₃N Monoliths with Excellent Mechanical Properties Prepared by High Pressure Sintering. Journal of the American Ceramic Society, 2015, 98, 3782-3787.	3.8	24
20	Immobilization behavior of Sr in geopolymer and its ceramic product. Journal of the American Ceramic Society, 2020, 103, 1372-1384.	3.8	24
21	Solvents adjusted pure phase CoCO3 as anodes for high cycle stability. Journal of Advanced Ceramics, 2021, 10, 509-519.	17.4	22
22	Continuous-wave laser action around 2-Î¼m in Ho^3+:Lu_2SiO_5. Optics Express, 2009, 17, 12582.	3.4	20
23	Influence of sintering pressure on the crystallization and mechanical properties of BN-MAS composite ceramics. Journal of Materials Science, 2016, 51, 2292-2298.	3.7	20
24	Active Q-switching operation of slab Ho:SYSO laser wing-pumped by fiber coupled laser diodes. Optics Express, 2019, 27, 11455.	3.4	20
25	Effect of the BN content on the thermal shock resistance and properties of BN/SiO₂ composites fabricated from mechanically alloyed SiBON powders. RSC Advances, 2017, 7, 48994-49003.	3.6	18
26	High-beam-quality 2.1â€‰â€‰Âµm pumped mid-infrared type-II phase-matching BaGa₄Se₇ optical parametric oscillator with a ZnGeP₂ amplifier. Optics Letters, 2020, 45, 3805.	3.3	17
27	570â€…MHz harmonic mode-locking in an all polarization-maintaining Ho-doped fiber laser. Optics Express, 2020, 28, 33028.	3.4	17
28	Crystallization Behavior of Amorphous Si₂BC₃N Ceramic Monolith Subjected to High Pressure. Journal of the American Ceramic Society, 2015, 98, 3788-3796.	3.8	16
29	CdSe optical parametric oscillator operating at 12.07 Âµm with 170 mW output. Optics and Laser Technology, 2017, 92, 1-4.	4.6	16
30	3.5â€‰â€‰W long-wave infrared ZnGeP₂ optical parametric oscillator at 9.8â€‰â€‰Âµm. Optics Letters, 2020, 45, 2347.	3.3	16
31	Research on performance improvement technology of a BaGa₄Se₇ mid-infrared optical parametric oscillator. Optics Letters, 2020, 45, 6418.	3.3	16
32	114 W long-wave infrared source based on ZnGeP₂ optical parametric amplifier. Optics Express, 2018, 26, 30195.	3.4	15
33	Microstructures, mechanical properties and oxidation resistance of SiBCN ceramics with the addition of MgO, ZrO₂ and SiO₂ (MZS) as sintering additives. RSC Advances, 2015, 5, 52194-52205.	3.6	14
34	A passively Q-switched Ho:YVO4 Laser at 2.05 Î¼m with Graphene Saturable Absorber. Applied Sciences (Switzerland), 2016, 6, 128.	2.5	14
35	First-principles study of the anisotropic thermal expansion and thermal transport properties in h-BN. Science China Materials, 2021, 64, 953-963.	6.3	14
36	Stable passively Q-switched Ho:LuAG laser with graphene as a saturable absorber. Optical Engineering, 2014, 53, 126112.	1.0	13

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37	A passively Q-switching of diode-pumped 2.08-Âμm Ho:CaF2 laser. Infrared Physics and Technology, 2019, 103, 103071.	2.9	13
38	Efficient intracavity-pumped Ho:SSO laser with cascaded in-band pumping scheme. Infrared Physics and Technology, 2018, 94, 7-10.	2.9	12
39	Efficient Ho:YAP laser dual end-pumped by a laser diode at 1.91ÂÂμm in a wing-pumping scheme. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	12
40	A high-beam-quality passively Q-switched 2ÂÎ¼m solid-state laser with a WSe2 saturable absorber. Optics and Laser Technology, 2020, 125, 105960.	4.6	12
41	1â€‰â€‰W, 10.1â€‰â€‰Âμm, CdSe optical parametric oscillator with continuous-wave seed injection. Optics Letters, 2020, 45, 2119.	3.3	11
42	A ring ZnGeP2 optical parametric oscillator pumped by a Ho:LuAG laser. Applied Physics B: Lasers and Optics, 2014, 117, 127-130.	2.2	10
43	Passive Q-switched operation of an a-cut Tm,Ho:YAP laser with a few-layer WS₂ saturable absorber. Laser Physics Letters, 2018, 15, 085806.	1.4	10
44	From bulk to porous structures: Tailoring monoclinic SrAl₂Si₂O₈ ceramic by geopolymer precursor technique. Journal of the American Ceramic Society, 2020, 103, 4957-4968.	3.8	10
45	Effects of Li Substitution on the Microstructure and Thermal Expansion Behavior of Pollucite Derived from Geopolymer. Journal of the American Ceramic Society, 2016, 99, 3784-3791.	3.8	9
46	Corrosion behavior and microstructural evolution of <scp>BN</scp>â€“ZrO₂â€“SiC composites in molten steel. International Journal of Applied Ceramic Technology, 2017, 14, 665-674.	2.1	9
47	High-power actively Q-switched Ho-doped gadolinium tantalate laser. Optics Express, 2021, 29, 12471.	3.4	9
48	High-beam-quality operation of a 2â€‰â€‰Î¼m passively Q-switched solid-state laser based on a boron nitride saturable absorber. Applied Optics, 2019, 58, 2546.	1.8	9
49	Resonantly pumped high efficiency Ho:GdTaO₄ laser. Optics Express, 2019, 27, 18273.	3.4	9
50	High efficiency single-longitudinal-mode resonantly-pumped Ho:GdTaO₄ laser at 2068nm. Optics Express, 2019, 27, 34204.	3.4	9
51	11 Âμm, high beam quality idler-resonant CdSe optical parametric oscillator with continuous-wave injection-seeded at 2.58 Âμm. Optics Express, 2020, 28, 17056.	3.4	9
52	A 52-mJ Ho:YAG Master Oscillator and Power Amplifier with Kilohertz Pulse Repetition Frequency. Chinese Physics Letters, 2014, 31, 094201.	3.3	8
53	Synthesis of Novel Cobalt-Containing Polysilazane Nanofibers with Fluorescence by Electrospinning. Polymers, 2016, 8, 350.	4.5	8
54	Effects of Na⁺ substitution Cs⁺ on the microstructure and thermal expansion behavior of ceramic derived from geopolymer. Journal of the American Ceramic Society, 2017, 100, 4412-4424.	3.8	8

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55	Carbon content-dependent microstructures, surface characteristics and thermal stability of mechanical alloying derived SiBCN powders. Ceramics International, 2018, 44, 3614-3624.	4.8	8
56	Study on long-wave infrared ZnGeP2 subsequent optical parametric amplifiers with different types of phase matching of ZnGeP2 crystals. Applied Physics B: Lasers and Optics, 2019, 125, 1.	2.2	8
57	Wavelength-locked continuous-wave and Q-switched Ho:CaF₂ laser at 21005 nm. Optics Express, 2018, 26, 26916.	3.4	8
58	Growth, spectra and continuous-wave 2.1 Î¼m laser operation of a Ho³⁺-doped bismuth silicate crystal. CrystEngComm, 2022, 24, 1590-1597.	2.6	8
59	High power slab Tm:YAP laser dual-end-pumped by fiber coupled laser diodes. Optical and Quantum Electronics, 2015, 47, 1055-1061.	3.3	7
60	Microstructure and erosion resistance of in-situ SiAlON reinforced BN-SiO2 composite ceramics. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 315-320.	1.0	7
61	Efficient middle-infrared ZGP-OPO pumped by a Q-switched Ho:LuAG laser with the orthogonally polarized pump recycling scheme. Applied Optics, 2018, 57, 8102.	1.8	7
62	Passively Q-switched operation of a Tm:YAlO₃ laser with a BN saturable absorber mirror. Laser Physics Letters, 2019, 16, 025801.	1.4	7
63	Thermal lens effect and laser characteristics of Ho:YAG ceramic laser with a concave-convex cavity. Optik, 2020, 221, 165307.	2.9	7
64	Effects of Zr and chopped C fiber on microstructure and mechanical properties of SiBCN ceramics. Science China Technological Sciences, 2020, 63, 1520-1530.	4.0	7
65	Efficient Ho:(Sc₀₅Y₀₅)₂SiO₅ laser at 21 Âµm in-band pumped by Tm fiber laser. Optics Express, 2019, 27, 4522.	3.4	7
66	Continuously tunable high-power single-longitudinal-mode Ho:YLF laser around the P12 CO₂ absorption line. Optics Letters, 2020, 45, 6691.	3.3	7
67	Hardness and toughness improvement of SiCâ€based ceramics with the addition of (Hf_{0.2}Mo_{0.2}Ta_{0.2}Nb_{0.2}Ti_{0.2})B₂. Journal of the American Ceramic Society, 2022, 105, 1629-1634.	3.8	7
68	High power Ho:YAG laser pumped by two orthogonally polarized Tm:YLF lasers. Optical and Quantum Electronics, 2015, 47, 211-216.	3.3	6
69	Geopolymer-Encapsulated Cesium Lead Bromide Perovskite Nanocrystals for Potential Display Applications. ACS Applied Nano Materials, 2020, 3, 11695-11700.	5.0	6
70	Passively Q-switched Tm:YAP laser with a lead zirconate titanate saturable absorber. Applied Optics, 2021, 60, 8097.	1.8	6
71	Thermal-birefringence-induced depolarization in a 450 W Ho:YAG MOPA system. Optics Express, 2022, 30, 21501.	3.4	6
72	2130.7 nm, Single-Frequency Q-Switched Operation of Tm,Ho:YAlO$_{3}$ Laser Injection-Seeded by a Microchip Tm,Ho:YAlO$_{3}$ Laser. Applied Physics Express, 2012, 5, 082702.	2.4	5

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73	High-Power in-Band Pumped a-Cut Ho:Yap Laser. Journal of Russian Laser Research, 2014, 35, 239-243.	0.6	5
74	A 2 Î¼m Single-Longitudinal-Mode Ho:GdVO4 CW Laser. Journal of Russian Laser Research, 2021, 42, 355.	0.6	5
75	202 W dual-end-pumped Tm:YLF laser with a VBG as an output coupler. High Power Laser Science and Engineering, 2021, 9, .	4.6	5
76	Tm³⁺: Bi₄Si₃O₁₂crystal as a promising laser material near 2 Î¼m: growth, spectroscopic properties and laser performance. Optics Express, 2021, 29, 29138.	3.4	5
77	Watt-level long-wave infrared CdSe pulsed-nanosecond optical parametric oscillator. Optics and Laser Technology, 2022, 145, 107491.	4.6	5
78	Measurement of optical homogeneity of ZnGeP₂ crystal using a 2.02 Âµm single-longitudinal-mode Tm:LuAG ring laser. Applied Optics, 2020, 59, 5864.	1.8	5
79	1104â€‰â€‰mJ, 1â€‰â€‰kHz repetition rate, Ho:YAG master oscillator power amplifier. Applied Optics, 2019, 58, 879.	1.8	5
80	Single-longitudinal-mode Ho:YVO4 MOPA system with a passively Q-switched unidirectional ring oscillator. Optics Express, 2019, 27, 34618.	3.4	5
81	Preparation and mechanical performance of SiC w /geopolymer composites through direct ink writing. Journal of the American Ceramic Society, 0, , .	3.8	5
82	Influence of sintering temperature on the crystallization and mechanical properties of BNâ€MAS composites. Journal of the American Ceramic Society, 2022, 105, 3590-3600.	3.8	5
83	An efficient, compact Ho:YLF MOPA system pumped by a linearly polarized Tm:YAP laser. Optics and Laser Technology, 2022, 150, 107977.	4.6	5
84	113â€‰â€‰W Ho:YLF oscillator with good beam quality efficiently pumped by a Tm:YAP laser. Applied Optics, 2022, 61, 5755.	1.8	5
85	A 2.22-W Passively Q-Switched Tm³⁺-Doped Laser With a TiC₂ Saturable Absorber. IEEE Photonics Journal, 2019, 11, 1-7.	2.0	4
86	Comparison of mid-infrared ZnGeP₂ rectangle ring optical parametric oscillators of three types of resonant regimes. Applied Optics, 2019, 58, 4163.	1.8	4
87	1ÂkHz, 1.5ÂMW peak power pulse generation from an acousto-optically Q-switched Ho:GdVO4 oscillator. Optics and Laser Technology, 2022, 152, 108114.	4.6	4
88	A Mid-Irfrared Rectangle Ring OPO Pumped by an Actively/Passively Q-Switched 2.09 Î¼m Polycrystalline Laser. Journal of Russian Laser Research, 2022, 43, 224-228.	0.6	4
89	Resonantly pumped high power acousto-optical Q-switched Ho:YAG ceramic laser. Optik, 2016, 127, 1595-1598.	2.9	3
90	Carbonâ€contentâ€dependent phase composition, microstructural evolution, and mechanical properties of Si<scp>BCN</scp> monoliths. Journal of the American Ceramic Society, 2018, 101, 2137-2154.	3.8	3

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91	High power passively Q-switched Tmc+:(LuxGd1-x)3Ga5O12 laser based on boron nitride. Optics and Laser Technology, 2020, 123, 105795.	4.6	3
92	Microstructure and Hydrophobic Properties of Nano-Cu-Coated Wood-Based Composites by Ultrasonic Pretreatment. Applied Sciences (Switzerland), 2020, 10, 5448.	2.5	3
93	Broadband second-harmonic and sum-frequency generation with a long-wave infrared laser in AgGaGe₅Se₁₂. Applied Optics, 2020, 59, 5247.	1.8	3
94	High power narrow-linewidth Tm:YLF slab laser with volume Bragg grating and Fabry-Perot etalon. Optical Review, 2014, 21, 775-777.	2.0	2
95	Investigation of a gain-switched Cr2+: ZnSe laser pumped by an acousto-optic Q-switched Ho : YAG laser. Quantum Electronics, 2016, 46, 772-776.	1.0	2
96	High-Power Continuous-Wave and Acousto-Optical Q-Switched Ho:(Sc0.5Y0.5)2SiO5 Laser Pumped by Laser Diode. Chinese Physics Letters, 2019, 36, 064201.	3.3	2
97	Tunable twisted-mode Ho:YAG laser at continuous-wave and pulsed operation. Optics Express, 2020, 28, 31775.	3.4	2
98	High-repetition-rate laser ultrasonic generation in carbon-fiber-reinforced plastics excited by a 32â€“34â€‰â€‰Î¼m ZGP master oscillator power amplifier system. Applied Optics, 2019, 58, 7655.	1.8	2
99	11.6 W middle infrared ZnGeP2 optical parametric amplifier system with a 1 kHz repetition rate. Laser Physics, 2020, 30, 095001.	1.2	2
100	High-Power Dual-End-Pumped Monolithic Tm:YAP Microlaser. Journal of Russian Laser Research, 2019, 40, 382-385.	0.6	1
101	Tunable single-longitudinal-mode resonantly-pumped Ho:YAP unidirectional ring laser. Optical and Quantum Electronics, 2021, 53, 1.	3.3	1
102	Resonantly pumped high efficiency Ho:GdTaO4 laser: erratum. Optics Express, 2019, 27, 31362.	3.4	1
103	Acousto-optic mode-locked Tm:LuAG laser with nearly diffraction-limited beam. Optical and Quantum Electronics, 2019, 51, 1.	3.3	0
104	Editorial for the Special Issue on â€œAdvances in Middle Infrared Laser Crystals and Its Applicationsâ€• Crystals, 2022, 12, 643.	2.2	0