

Martin Divoky

List of Publications by Year in descending order

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Version: 2024-02-01

71
papers

704
citations

686830

13
h-index

552369

26
g-index

72
all docs

72
docs citations

72
times ranked

417
citing authors

#	ARTICLE	IF	CITATIONS
1	Kilowatt average power 100â€‰J-level diode pumped solid state laser. <i>Optica</i> , 2017, 4, 438.	4.8	152
2	100â€‰J-level nanosecond pulsed diode pumped solid state laser. <i>Optics Letters</i> , 2016, 41, 2089.	1.7	73
3	Status of the High Average Power Diode-Pumped Solid State Laser Development at HiLASE. <i>Applied Sciences (Switzerland)</i> , 2015, 5, 637-665.	1.3	65
4	Optimization of Wavefront Distortions and Thermal-Stress Induced Birefringence in a Cryogenically-Cooled Multislab Laser Amplifier. <i>IEEE Journal of Quantum Electronics</i> , 2013, 49, 960-966.	1.0	46
5	Modeling of amplified spontaneous emission, heat deposition, and energy extraction in cryogenically cooled multislab Yb ³⁺ :YAG laser amplifier for the HiLASE Project. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2012, 29, 1270.	0.9	45
6	Overview of the HiLASE project: high average power pulsed DPSSL systems for research and industry. <i>High Power Laser Science and Engineering</i> , 2014, 2, .	2.0	43
7	150 J DPSSL operating at 1.5 kW level. <i>Optics Letters</i> , 2021, 46, 5771.	1.7	32
8	1-J operation of monolithic composite ceramics with Yb:YAG thin layers: multi-TRAM at 10-Hz repetition rate and prospects for 100-Hz operation. <i>Optics Letters</i> , 2015, 40, 855.	1.7	24
9	Design of high-energy-class cryogenically cooled Yb ³⁺ :YAG multislab laser system with low wavefront distortion. <i>Optical Engineering</i> , 2013, 52, 064201.	0.5	20
10	Design and optimization of an adaptive optics system for a high-average-power multi-slab laser (HiLASE). <i>Applied Optics</i> , 2014, 53, 3255.	0.9	18
11	Outline of the ELI-Beamlines facility. <i>Proceedings of SPIE</i> , 2011, , .	0.8	17
12	Design of a kJ-class HiLASE laser as a driver for inertial fusion energy. <i>High Power Laser Science and Engineering</i> , 2014, 2, .	2.0	15
13	Generation of 500-mJ nanosecond pulses from a diode-pumped Yb:YAG TRAM laser amplifier. <i>Optical Materials Express</i> , 2014, 4, 2122.	1.6	15
14	Spectroscopic characterization of various Yb ³⁺ -doped laser materials at cryogenic temperatures for the development of high energy class diode pumped solid state lasers. <i>Proceedings of SPIE</i> , 2013, , .	0.8	13
15	DiPOLE100: A 100 J, 10 Hz DPSSL using cryogenic gas cooled Yb:YAG multi slab amplifier technology. , 2015, , .		13
16	Design of a petawatt optical parametric chirped pulse amplification upgrade of the kilojoule iodine laser PALS. <i>Laser and Particle Beams</i> , 2013, 31, 211-218.	0.4	11
17	Comparative LIDT measurements of optical components for high-energy HiLASE lasers. <i>High Power Laser Science and Engineering</i> , 2016, 4, .	2.0	11
18	Performance comparison of Yb:YAG ceramics and crystal gain material in a large-area, high-energy, high averageâ€‰power diode-pumped laser. <i>Optics Express</i> , 2020, 28, 3636.	1.7	11

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19	Effect of amplified spontaneous emission and parasitic oscillations on the performance of cryogenically-cooled slab amplifiers. <i>Laser and Particle Beams</i> , 2013, 31, 553-560.	0.4	8
20	Simple two-dimensional-imaging spectrograph with wedged narrow band filters. <i>Review of Scientific Instruments</i> , 2008, 79, 123114.	0.6	7
21	HiLASE cryogenically-cooled diode-pumped laser prototype for inertial fusion energy. <i>Proceedings of SPIE</i> , 2013, , .	0.8	7
22	Joule-Class 940-nm Diode Laser Bars for Millisecond Pulse Applications. <i>IEEE Photonics Technology Letters</i> , 2015, 27, 1663-1666.	1.3	7
23	Simulation of performance of wavefront correction using deformable mirror in high-average-power laser systems. , 2013, , .		6
24	Numerical Analysis of Thermal Effects in a Concept of a Cryogenically Cooled Yb: YAG Multislab 10 J/100-Hz Laser Amplifier. <i>IEEE Journal of Quantum Electronics</i> , 2019, 55, 1-8.	1.0	5
25	Femtosecond pulse parametric amplification at narrowband high power gas laser pumping. <i>Optics Letters</i> , 2012, 37, 2100.	1.7	4
26	A 100J-level nanosecond pulsed DPSSL for pumping high-efficiency, high-repetition rate PW-class lasers. <i>Proceedings of SPIE</i> , 2017, , .	0.8	3
27	Characterization of Bivoj/DIPOLE 100: HiLASE 100-J/10-Hz diode pumped solid state laser. , 2018, , .		3
28	Comparative design study of 100 J cryogenically cooled Yb:YAG multi-slab amplifiers operating at 10 Hz. , 2012, , .		2
29	Performance of a 100J cryogenically cooled multi-slab amplifier with respect to the pump beam parameters and geometry. <i>Proceedings of SPIE</i> , 2012, , .	0.8	2
30	Conceptual design of 100 J cryogenically-cooled multi-slab laser for fusion research. <i>EPJ Web of Conferences</i> , 2013, 59, 08004.	0.1	2
31	Status of HiLASE project: High average power pulsed DPSSL systems for research and industry. <i>EPJ Web of Conferences</i> , 2013, 59, 08003.	0.1	2
32	A Solid State 100 mJ Diode Pumped Temporally and Spatially Shaped Front End System for Seeding a 10 Hz 100 J Laser System. , 2015, , .		2
33	Commissioning of a kW-class nanosecond pulsed DPSSL operating at 105 J, 10 Hz. <i>Proceedings of SPIE</i> , 2017, , .	0.8	2
34	Design of a 10 J, 100 Hz diode-pumped solid state laser. , 2019, , .		2
35	Morphology of Meteorite Surfaces Ablated by High-Power Lasers: Review and Applications. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4869.	1.3	2
36	Broadband OPCPA pumped by ultra-narrowband gaseous iodine laser. , 2012, , .		1

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37	Active wavefront control in Hilase multislabs high-average-power laser system. , 2014, , .		1
38	Characterization of diode-laser stacks for high-energy-class solid state lasers. Proceedings of SPIE, 2014, , .	0.8	1
39	Wavefront control in high average-power multi-slab laser system. , 2015, , .		1
40	HiLASE: development of fully diode pumped disk lasers with high average power. , 2015, , .		1
41	New possibilities for efficient laser surface treatment by diode-pumped kW-class lasers. Journal of Engineering, 2015, 2015, 158-160.	0.6	1
42	HiLASE: a scalable option for Laser Inertial Fusion Energy. Journal of Physics: Conference Series, 2016, 688, 012060.	0.3	1
43	A 100 J-level nanosecond DPSSL for high energy density experiments. Proceedings of SPIE, 2017, , .	0.8	1
44	Experimental Study of Nanosecond Laser-Generated Plasma Channels. Applied Sciences (Switzerland), 2020, 10, 4082.	1.3	1
45	A 100J-level nanosecond pulsed DPSSL. , 2016, , .		1
46	Laser beam distribution system for the HiLASE Center. , 2017, , .		1
47	100J-level nanosecond pulsed Yb:YAG cryo-cooled DPSSL amplifier. , 2018, , .		1
48	Extreme laser pulse-energy measurements by means of photon momentum. Optics Express, 2022, 30, 7383-7393.	1.7	1
49	Solid-state-gas-laser SOFIA as a pump for the optical parametric chirped pulse amplification. , 2005, , .		0
50	Pulse stretcher for chirped-pulse amplification with high-power and spectral transmissions. , 2005, , .		0
51	Pulse Stretcher Diagnostics by Camera and Color Filters. , 2010, , .		0
52	Numerical evaluation of heat deposition in cryogenically cooled multi-slab amplifier. Proceedings of SPIE, 2011, , .	0.8	0
53	100-J level amplifier concepts for HiLASE and ELI-Beamlines. , 2012, , .		0
54	Cryogenic cooling for high power laser amplifiers. EPJ Web of Conferences, 2013, 59, 08005.	0.1	0

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55	Design of kJ-class HiLASE laser as a driver for inertial fusion energy “ CORRIGENDUM. High Power Laser Science and Engineering, 2014, 2, .	2.0	0
56	Design and optimization of an adaptive optics system for a high-average-power multi-slab laser (HiLASE): erratum. Applied Optics, 2014, 53, 7877.	2.1	0
57	Frequency Doubling at 7J of a High Energy, High Repetition Rate DPSSL System. , 2014, , .		0
58	Mismatch characteristics of optical parametric chirped pulse amplification. Laser Physics Letters, 2014, 11, 025401.	0.6	0
59	Development of 1 J, 100 Hz Yb:YAG laser amplifier system for OPCPA pumping. , 2015, , .		0
60	Experimental benchmarking of the code for Yb:YAG multi-slab gas-cooled laser system operating at cryogenic temperatures. , 2015, , .		0
61	Joule-class 940 nm diode laser bars for millisecond pulse applications. , 2015, , .		0
62	Assessment of high-power kW-class single-diode bars for use in highly efficient pulsed solid state laser systems. , 2015, , .		0
63	Tunable diode laser absorption spectroscopy on 2.05 μm for the CO ₂ concentration measurement. Proceedings of SPIE, 2015, , .	0.8	0
64	High-Contrast, Closed-Loop Control of Laser Beam Profiles. , 2015, , .		0
65	The first kilowatt average power 100J-level DPSSL. , 2017, , .		0
66	kW-class picosecond and nanosecond lasers at Hilase for hi-tech industrial applications. , 2017, , .		0
67	The first multi-joule DPSSL with 1 kW average power. , 2017, , .		0
68	Status and Development of High Average Power Lasers at HiLASE. , 2018, , .		0
69	Thermo-optical Study of 10 J/ 100 Hz Cryogenically Cooled Yb:YAG Diode Pumped Laser System. , 2019, , .		0
70	Monocrystalline materials for high-power ultrafast lasers. , 2019, , .		0
71	CURRENT ADVANCES IN HIGH AVERAGE POWER DIODE-PUMPED LASERS. MM Science Journal, 2019, 2019, 3626-3631.	0.2	0