Jean-christophe Chanteloup

List of Publications by Year
in descending order

98 papers	1,866 citations	304368 22 h-index	264894 42 g-index
98 all docs	98 docs citations	98 times ranked	1579 citing authors

#	Article	IF	Citations
1	Petawatt and exawatt class lasers worldwide. High Power Laser Science and Engineering, 2019, 7, .	2.0	574
2	Multiple-wave lateral shearing interferometry for wave-front sensing. Applied Optics, 2005, 44, 1559.	2.1	107
3	Wave-front correction of femtosecond terawatt lasers by deformable mirrors. Optics Letters, 1998, 23, 1043.	1.7	104
4	Coherent beam combining of 61 femtosecond fiber amplifiers. Optics Express, 2020, 28, 20152.	1.7	95
5	14 J / 2 Hz Yb^3+:YAG diode pumped solid state laser chain. Optics Express, 2013, 21, 855.	1.7	70
6	Pulse-front control of 15-TW pulses with a tilted compressor, and application to the subpicosecond traveling-wave pumping of a soft-x-ray laser. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 151.	0.9	61
7	Influence of ASE on the gain distribution in large size, high gain Yb^3+:YAG slabs. Optics Express, 2009, 17, 3792.	1.7	60
8	Horizon 2020 EuPRAXIA design study. Journal of Physics: Conference Series, 2017, 874, 012029.	0.3	60
9	Single-shot wave-front measurements of high-intensity ultrashort laser pulses with a three-wave interferometer. Optics Letters, 1998, 23, 621.	1.7	52
10	Nearly diffraction-limited laser focal spot obtained by use of an optically addressed light valve in an adaptive-optics loop. Optics Letters, 1998, 23, 475.	1.7	41
11	Transient pumping of a Ni-like Ag x-ray laser with a subpicosecond pump pulse in a traveling-wave irradiation geometry. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 1093.	0.9	40
12	Active-mirror-laser-amplifier thermal management with tunable helium pressure at cryogenic temperatures. Optics Express, 2011, 19, 12766.	1.7	35
13	Ensuring compactness, reliability, and scalability for the next generation of high-field lasers. IEEE Journal of Selected Topics in Quantum Electronics, 1998, 4, 376-384.	1.9	31
14	Orbital angular momentum beams generation from 61 channels coherent beam combining femtosecond digital laser. Optics Letters, 2021, 46, 25.	1.7	29
15	Growth of large 90 mm diameter Yb:YAG single crystals with Bagdasarov method. Optical Materials Express, 2012, 2, 1219.	1.6	28
16	Highly scalable femtosecond coherent beam combining demonstrated with 19 fibers. Optics Letters, 2017, 42, 1887.	1.7	28
17	Multi kJ level Laser Concepts for HiPER Facility. Journal of Physics: Conference Series, 2010, 244, 012010.	0.3	27
18	Current Status on High Average Power and Energy Diode Pumped Solid State Lasers. IEEE Photonics Journal, 2011, 3, 245-248.	1.0	27

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19	Beam-focus shaping by use of programmable phase-only filters:â€ƒapplication to an ultralong focal line. Optics Letters, 2002, 27, 213.	1.7	26
20	Generation of a single hot spot by use of a deformable mirror and study of its propagation in an underdense plasma. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 1632.	0.9	26
21	Upconversion luminescence in Yb3+-doped yttrium aluminum garnets. Physica B: Condensed Matter, 2005, 357, 365-369.	1.3	25
22	Yb^3+:YAG crystal growth with controlled doping distribution. Optical Materials Express, 2012, 2, 20.	1.6	23
23	Overview of the Lucia laser program: toward 100-Joules, nanosecond-pulse, kW averaged power based on ytterbium diode-pumped solid state laser. , 2005, , .		22
24	Comparison of fluorescence spectra of Yb:Y3Al5O12 and Yb:YAlO3 single crystals. Optical Materials, 2007, 29, 1662-1666.	1.7	22
25	Deformation of partially pumped active mirrors for high averageâ€“power diodeâ€“pumped solidâ€“state lasers. Optics Express, 2011, 19, 8413.	1.7	20
26	Coherent beam combining of seven fiber chirped-pulse amplifiers using an interferometric phase measurement. Optics Express, 2018, 26, 31542.	1.7	19
27	Lifetime measurements of excited molecular states using a Ti:sapphire laser. Molecular Physics, 1993, 79, 721-725.	0.8	18
28	Yb3+:YAG growth with controlled doping distribution using modified horizontal direct crystallization. Journal of Crystal Growth, 2011, 329, 39-43.	0.7	17
29	Compact high resolution four wave lateral shearing interferometer. , 2004, 5252, 282.		15
30	Large size crystalline vs co-sintered ceramic Yb^3+:YAG disk performance in diode pumped amplifiers. Optics Express, 2015, 23, 570.	1.7	12
31	Diode-Pumped Solid-State Lasers for Inertial Fusion Energy. Journal of Fusion Energy, 1998, 17, 213-217.	0.5	10
32	Improvement of the LULI high-energy CPA laser system focusability and repetition rate using an adaptive optical system. , 2003, 5137, 188.		10
33	Mercury and beyond: diode-pumped solid state lasers for inertial fusion energy. , 2000, , .		9
34	<title>The LUCIA project: a high average power ytterbium diode pumped solid state laser chain</title>. , 2004, , .		8
35	Current status of the LUCIA laser system. Journal of Physics: Conference Series, 2010, 244, 032015.	0.3	8
36	XCAN â€” A coherent amplification network of femtosecond fiber chirped-pulse amplifiers. European Physical Journal: Special Topics, 2015, 224, 2609-2613.	1.2	8

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37	Low temperature diode pumped active mirror Yb^3+:YAG disk laser amplifier studies. Optics Express, 2016, 24, 12651.	1.7	8
38	Studying ignition schemes on European laser facilities. Nuclear Fusion, 2011, 51, 094025.	1.6	7
39	EuPRAXIA â€“ a compact, cost-efficient particle and radiation source. AIP Conference Proceedings, 2019, , .	0.3	7
40	Ultrafast Fiber Technologies for Compact Laser Wake Field in Medical Application. Photonics, 2022, 9, 423.	0.9	7
41	Defining the optimal gradient doped :YAG disk for room and low temperature diode pumped solid-state laser operations. High Power Laser Science and Engineering, 2014, 2, .	2.0	6
42	<title>Temporal and far-field characterization of the transient Ni-like Ag x-ray laser under traveling-wave irradiation</title>. , 2001, , .		5
43	Infrared (1.2â€“1.6Î¼m) luminescence in Cr4+:Yb3Al5O12 single crystal with 940nm diode pumping. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 2444-2447.	2.0	5
44	Progress in the LUCIA project. , 2005, , .		4
45	Wavelength tunable, 264 J laser diode array for 10 Hz/1ms Yb:YAG pumping. Journal of Physics: Conference Series, 2008, 112, 032056.	0.3	4
46	Overview of the LULI diode-pumped laser chain proposal for HIPER kJ beamlines. Proceedings of SPIE, 2011, , .	0.8	4
47	Transient collisional excitation x-ray laser experiments on the P102 laser at CEA-LV. , 1999, 3776, 24.		3
48	High focusability performance obtained on the LULI 100TW laser facility by use of a dielectric coated deformable mirror. , 2004, , .		3
49	Original High Power oscillator Yb:YAG pumped by lasers diodes. , 2007, , .		3
50	Impact of variable doped gain medium on HiPER multiple kJ / ~10Hz diode pumped beam lines design. , 2009, , .		3
51	Beyond 10 J/ 2 Hz LUCIA current status with cryogenic amplifier. Proceedings of SPIE, 2011, , .	0.8	3
52	Experimental Cross Evaluation of Large Size Ceramic and Crystalline Yb3+:YAG Laser Gain Media Performance at High Average Power. Plasma and Fusion Research, 2013, 8, 3405049-3405049.	0.3	3
53	Measuring Yb^3+ spatial distribution in horizontally grown YAG crystals. Optical Materials Express, 2014, 4, 352.	1.6	3
54	Detection and correction of the spatial phase of ultrashort laser pulses using an optically addressed light valve. , 0, , .		2

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55	Activation of the Mercury Laser: A diode-pumped solid-state laser driver for inertial fusion. , 2001, , MA7.		2
56	<title>Phase correction in a laser chain using an optically addressed LC SLM</title>. , 2001, 4457, 159.		2
57	High power Yb:YAG diode pumped LUCIA front-end oscillator (250 mJ, 50 ns, 2 Hz).. Journal of Physics: Conference Series, 2008, 112, 032053.	0.3	2
58	Low Pressure Helium Cooled Active Mirror Amplifiers for HiPER KiloJoule Beamlines. Plasma and Fusion Research, 2013, 8, 3404043-3404043.	0.3	2
59	<title>Optically addressed liquid crystal light valves for adaptive control of amplitude and phase of laser beam</title>. , 1998, , .		1
60	The LUCIA project: towards 100 joules nanosecond pulses, kW averaged power, based on ytterbium diode pumped solid state laser. , 0, , .		1
61	The LUCIA* project: towards 100 Joules nanosecond pulses, kW averaged power, based on ytterbium diode pumped solid state laser. , 0, , .		1
62	Diode pumped Yb:YAG V-shape unstable super Gaussian laser resonators for 10 Hz - 100 joules class laser. , 2005, , .		1
63	A key issue for next generation diode pumped solid state laser drivers for IFE: amplified spontaneous emission in large size, high gain Yb:YAG slabs. Journal of Physics: Conference Series, 2008, 112, 032057.	0.3	1
64	Amplified spontaneous emission in large size, high gain Yb³⁺:YAG amplifiers: Numerical modeling and experimental test bench for foreseen kJ-range diode pumped solid state laser facilities. , 2008, , .		1
65	From 10 to 30 joules with the Lucia laser system: update on current performance and future cryogenic amplifier. , 2012, , .		1
66	Coherent Beam Combining of 37 Femtosecond Fiber Amplifiers. , 2019, , .		1
67	PISTIL interferometry diagnosis on a 61 channels coherent beam combining digital laser. , 2021, , .		1
68	Making and Spectra Property of the Composite Yb:Y3Al5O12/Y3Al5O12Crystal. Guangxue Xuebao/Acta Optica Sinica, 2008, 28, 316-320.	0.2	1
69	Coherent beam combining of 19 fibers in femtosecond regime. , 2016, , .		1
70	Nearly-diffraction-limited laser focal spot obtained using an optically addressed light valve in an adaptive optics loop. , 1998, , .		0
71	Single-shot B-integral wave-front correction of femtosecond laser pulses. , 1998, , .		0
72	Ultrahigh intensity laser: Present and future. , 1998, , .		0

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73	Traveling-wave scheme for the transient pumping of X-ray laser with a sub-ps TW pulse. , 0, , .		0
74	Wavefront control of solid state lasers using an optically addressed light valve in an adaptive optics loop and applications to ultraintense pulses. , 1999, 3492, 702.		0
75	Mercury and beyond: diode-pumped solid-state lasers for inertial fusion energy. Comptes Rendus Physique, 2000, 1, 745-749.	0.1	0
76	Wavefront correction and monospeckle generation on high power laser chains using a dielectric coated deformable mirror. , 0, , .		0
77	Wavefront correction for near diffraction-limited focal spot on a 6Ã—100 J/1-ns laser facility. , 2003, 5137, 181.		0
78	Current status on the LUCIA laser: Towards 100 Joules nanosecond pulses, 10Hz, kW averaged power, based on ytterbium diode pumped solid state laser. , 2006, , .		0
79	Bonding quality of Yb:Y3Al5O12/Y3Al5O12 composite crystals. Science in China Series D: Earth Sciences, 2008, 51, 1457-1463.	0.9	0
80	Gain & thermal distorsion investigation on the Yb:YAG diode pumped Lucia oscillator. , 2008, , .		0
81	From 10 to 30 joules with the Lucia laser system: update on current performance and cryogenic amplifier development. , 2013, , .		0
82	XCAN project : coherent beam combining of large number fibers in femtosecond regime (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		0
83	Towards Coherent Combination of 61 Fiber Amplifiers. , 2017, , .		0
84	Highly scalable femtosecond coherent beam combining. , 2017, , .		0
85	Coherent beam combining of seven femtosecond chirped-pulse fiber amplifiers using an interferometric phase measurement technique. , 2018, , .		0
86	CompositeYb:Y₃Al₅O₁₂/Y₃Al<SU Crystal Prepared by Thermal Bonding. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2008, 23, 125-129.	0.6	0
87	Growth of Large 90 mm Diameter Yb:YAG Single Crystals with Bagdasarov Method. , 2012, , .		0
88	Beyond the current 10J energy level for the Lucia laser system with a cryogenically cooled second amplifier head. , 2012, , .		0
89	HiPER, The European Approach to Inertial Fusion Energy, Laser Driver Studies. , 2013, , .		0
90	Active mirror amplifiers for HiPER kiloJoule beamlines. EPJ Web of Conferences, 2013, 59, 08002.	0.1	0

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91	Low temperature active mirror Yb:YAG laser amplifier gain studies. , 2014, , .		0
92	<title>Wavefront detection and correction for ultra-intense laser systems</title>. , 1997, , .		0
93	High gain low temperature active mirror Yb:YAG laser amplifier qualification. , 2015, , .		0
94	Highly Scalable Coherent Beam Combining of Femtosecond Fiber Chirped-Pulse Amplifiers. , 2018, , .		0
95	Towards coherent combination of 61 fiber amplifiers. , 2018, , .		0
96	Programmable Orbital Angular Momentum beam generated from a 61 channels Coherent Beam Combining femtosecond laser. , 2020, , .		0
97	All-fiber counter-propagation pumped amplifier tailored for Coherent Beam Combining technique. , 2020, , .		0
98	Coherent beam combining of 60 femtosecond fiber amplifiers. , 2020, , .		0