Emmanuel Guillot

List of Publications by Year
in descending order

43	1,001	361045 20	433756 31
papers	citations	h-index	g-index

44	44	44	628
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A 300kW Solar Chemical Pilot Plant for the Carbothermic Production of Zinc. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 190-196.	1.1	109
2	Solar irradiation prediction with machine learning: Forecasting models selection method depending on weather variability. Energy, 2018, 165, 620-629.	4.5	109
3	Solar-pumped Nd:YAG laser with 31.5 W/m2 multimode and 7.9 W/m2 TEM00-mode collection efficiencies. Solar Energy Materials and Solar Cells, 2017, 159, 435-439.	3.0	67
4	On-sun operation of a 150 kW th pilot solar receiver using dense particle suspension as heat transfer fluid. Solar Energy, 2016, 137, 463-476.	2.9	58
5	Improvement in solar-pumped Nd:YAG laser beam brightness. Optics and Laser Technology, 2012, 44, 2115-2119.	2.2	50
6	A 40 W cw Nd:YAG solar laser pumped through a heliostat: a parabolic mirror system. Laser Physics, 2013, 23, 065801.	0.6	48
7	Solar Pyrolysis of Wood in a Lab-scale Solar Reactor: Influence of Temperature and Sweep Gas Flow Rate on Products Distribution. Energy Procedia, 2015, 69, 1849-1858.	1.8	36
8	Solar calcination at pilot scale in a continuous flow multistage horizontal fluidized bed. Solar Energy, 2020, 207, 367-378.	2.9	32
9	Comparison of 3 Heat Flux Gauges and a Water Calorimeter for Concentrated Solar Irradiance Measurement. Energy Procedia, 2014, 49, 2090-2099.	1.8	31
10	Highly efficient end-side-pumped Nd:YAG solar laser by a heliostatâ€"parabolic mirror system. Applied Optics, 2015, 54, 1970.	0.9	30
11	Side-pumped continuous-wave Cr:Nd:YAG ceramic solar laser. Applied Physics B: Lasers and Optics, 2013, 111, 305-311.	1.1	28
12	SOLFAST, a Ray-Tracing Monte-Carlo software for solar concentrating facilities. Journal of Physics: Conference Series, 2012, 369, 012029.	0.3	26
13	Ce:Nd:YAG side-pumped solar laser. Journal of Photonics for Energy, 2021, 11, .	0.8	25
14	Simultaneous solar laser emissions from three Nd:YAG rods within a single pump cavity. Solar Energy, 2020, 199, 192-197.	2.9	24
15	5.5ÂW continuous-wave TEM00-mode Nd:YAG solar laser by a light-guide/2V-shaped pump cavity. Applied Physics B: Lasers and Optics, 2015, 121, 473-482.	1.1	23
16	Solar-pumped TEM00 mode Nd:YAG laser by a heliostatâ€"Parabolic mirror system. Solar Energy Materials and Solar Cells, 2015, 134, 305-308.	3.0	23
17	Stable solar-pumped TEM00-mode 1064 nm laser emission by a monolithic fused silica twisted light guide. Solar Energy, 2017, 155, 1059-1071.	2.9	23
18	High-efficiency solar-pumped TEM 00 -mode Nd:YAG laser. Solar Energy Materials and Solar Cells, 2016, 145, 397-402.	3.0	22

#	ARTICLE	IF	CITATIONS
19	Ce:Nd:YAG continuous-wave solar-pumped laser. Optik, 2020, 207, 163795.	1.4	22
20	A Comparative Study of Machine Learning-Based Methods for Global Horizontal Irradiance Forecasting. Energies, 2021, 14, 3192.	1.6	22
21	Validation of a Monte Carlo Integral Formulation Applied to Solar Facility Simulations and Use of Sensitivities. Journal of Solar Energy Engineering, Transactions of the ASME, 2015, 137, .	1.1	20
22	Experimental Determination of the Extinction Coefficient for a Packed-Bed Particulate Medium. Experimental Heat Transfer, 2006, 19, 69-79.	2.3	18
23	Uniform and Non-Uniform Pumping Effect on Ce:Nd:YAG Side-Pumped Solar Laser Output Performance. Energies, 2022, 15, 3577.	1.6	17
24	40 W Continuous Wave Ce:Nd:YAG Solar Laser through a Fused Silica Light Guide. Energies, 2022, 15, 3998.	1.6	16
25	TEM00 mode Nd:YAG solar laser by side-pumping a grooved rod. Optics Communications, 2016, 366, 50-56.	1.0	15
26	TRANSMITTANCE ENHANCEMENT OF PACKED-BED PARTICULATE MEDIA. Experimental Heat Transfer, 2008, 21, 73-82.	2.3	14
27	Stable TEM 00 -mode Nd:YAG solar laser operation by a twisted fused silica light-guide. Optics and Laser Technology, 2017, 97, 1-11.	2.2	14
28	Some details about the third rejuvenation of the 1000 kWth solar furnace in Odeillo: Extreme performance heliostats. AIP Conference Proceedings, 2018, , .	0.3	13
29	A multiphysics model of large-scale compact PVâ€“CSP hybrid plants. Applied Energy, 2021, 288, 116644.	5.1	12
30	IMPACT: A novel device for in-situ thermo-mechanical investigation of materials under concentrated sunlight. Solar Energy Materials and Solar Cells, 2017, 172, 59-65.	3.0	9
31	Solar furnace temperature control with active cooling. Solar Energy, 2018, 159, 66-77.	2.9	7
32	A method for experimental thermo-mechanical aging of materials submitted to concentrated solar irradiation. Solar Energy Materials and Solar Cells, 2019, 192, 161-169.	3.0	7
33	An adaptive temperature control law for a solar furnace. , 2008, , .		6
34	Control of a Solar Furnace using MPC with Integral Action. IFAC-PapersOnLine, 2016, 49, 961-966.	0.5	6
35	ARGOS: Solar furnaces flat heliostats tracking error estimation with a direct camera-based vision system. AIP Conference Proceedings, 2018, , .	0.3	5
36	Control of a solar furnace using active cooling. , 2016, , .		3

#	Article	IF	Citations
37	Solar Carbothermic Production of Zinc From Zinc Oxide: Solzinc. , 2005, , .		3
38	Characterization of a pilot fluidized bed reactor for solar calcination processes. AIP Conference Proceedings, 2020, , .	0.3	3
39	The Influence of Solar Sintering on Copper Heat Exchanger Parts with Controlled 3D-Printed Morphology. Materials, 2022, 15, 3324.	1.3	2
40	On-sun first operation of a 150 kWth pilot solar receiver using dense particle suspension as heat transfer fluid. AIP Conference Proceedings, 2016, , .	0.3	1
41	Assessment of Double Modulation Pyrometry as a diagnostic tool for use in concentrated solar facilities. Solar Energy, 2018, 174, 660-668.	2.9	1
42	IMPACT: A new device for thermo-mechanical investigation on central receiver materials. AIP Conference Proceedings, 2018, , .	0.3	0
43	Sun backward gazing method for measuring optomechanical errors of solar concentrators: experimental results. Applied Optics, 2020, 59, 9861.	0.9	0