Alison M Saunders

List of Publications by Year
in descending order

27 papers	440 citations	933264 10 h-index	713332 21 g-index
27 all docs	27 docs citations	27 times ranked	677 citing authors

#	Article	IF	Citations
1	Formation of diamonds in laser-compressed hydrocarbons at planetary interior conditions. Nature Astronomy, 2017, 1, 606-611.	4.2	152
2	Observation of Betatron X-Ray Radiation in a Self-Modulated Laser Wakefield Accelerator Driven with Picosecond Laser Pulses. Physical Review Letters, 2017, 118, 134801.	2.9	45
3	Demonstration of X-ray Thomson scattering as diagnostics for miscibility in warm dense matter. Nature Communications, 2020, 11, 2620.	5.8	27
4	High-pressure chemistry of hydrocarbons relevant to planetary interiors and inertial confinement fusion. Physics of Plasmas, 2018, 25, .	0.7	24
5	X-ray sources using a picosecond laser driven plasma accelerator. Physics of Plasmas, 2019, 26, .	0.7	22
6	Evidence for Crystalline Structure in Dynamically-Compressed Polyethylene up to 200 GPa. Scientific Reports, 2019, 9, 4196.	1.6	22
7	Platform for spectrally resolved x-ray scattering from imploding capsules at the National Ignition Facility. Journal of Physics: Conference Series, 2016, 717, 012067.	0.3	16
8	Liquid Structure of Shock-Compressed Hydrocarbons at Megabar Pressures. Physical Review Letters, 2018, 121, 245501.	2.9	16
9	Experiments with a Malkusâ€“Lorenz water wheel: Chaos and Synchronization. American Journal of Physics, 2012, 80, 192-202.	0.3	13
10	Betatron x-ray radiation from laser-plasma accelerators driven by femtosecond and picosecond laser systems. Physics of Plasmas, 2018, 25, 056706.	0.7	10
11	Measurement of diamond nucleation rates from hydrocarbons at conditions comparable to the interiors of icy giant planets. Physical Review B, 2020, 101, .	1.1	10
12	Measuring the structure and equation of state of polyethylene terephthalate at megabar pressures. Scientific Reports, 2021, 11, 12883.	1.6	10
13	Characterizing plasma conditions in radiatively heated solid-density samples with x-ray Thomson scattering. Physical Review E, 2018, 98, .	0.8	9
14	Experimental Observations of Laser-Driven Tin Ejecta Microjet Interactions. Physical Review Letters, 2021, 127, 155002.	2.9	9
15	Hydrodynamic computations of high-power laser drives generating metal ejecta jets from surface grooves. Journal of Applied Physics, 2020, 128, .	1.1	8
16	Demonstration of a laser-driven, narrow spectral bandwidth x-ray source for collective x-ray scattering experiments. Physics of Plasmas, 2021, 28, .	0.7	8
17	Development of high power laser platforms to study metal ejecta interactions. AIP Conference Proceedings, 2020, , .	0.3	7
18	X-ray Thomson scattering measurements from hohlraum-driven spheres on the OMEGA laser. Review of Scientific Instruments, 2016, 87, 11E724.	0.6	6

#	Article	IF	Citations
19	Improving a high-efficiency, gated spectrometer for x-ray Thomson scattering experiments at the National Ignition Facility. Review of Scientific Instruments, 2016, 87, 11E515.	0.6	6
20	Using time-resolved penumbral imaging to measure low hot spot x-ray emission signals from capsule implosions at the National Ignition Facility. Review of Scientific Instruments, 2018, 89, 10G111.	0.6	5
21	Multi-parameter identification from scalar time series generated by a Malkus-Lorenz water wheel. Chaos, 2012, 22, 013127.	1.0	4
22	Developing a long-duration Zn K-Î± source for x-ray scattering experiments. Review of Scientific Instruments, 2018, 89, 10F109.	0.6	4
23	Radiographic areal density measurements on the OMEGA EP laser system. Review of Scientific Instruments, 2021, 92, 053901.	0.6	4
24	Influence of argon impurities on the elastic scattering of x-rays from imploding beryllium capsules. High Energy Density Physics, 2018, 26, 86-92.	0.4	3
25	Enhanced fluorescence from x-ray line coincidence pumping of K-pumped Cl and Mg-pumped Ge plasmas. , 2019, , .		0
26	Enhanced Fluorescence from X-Ray Line Coincidence Pumping. Springer Proceedings in Physics, 2020, , 29-35.	0.1	0
27	Hydrodynamic and atomistic studies in support of high power laser experiments for metal ejecta recollection and interactions. AIP Conference Proceedings, 2020, , .	0.3	0