

# C S Goyon

## List of Publications by Year in descending order

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Version: 2024-02-01

53  
papers

1,840  
citations

236925

25  
h-index

254184

43  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1561  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fusion Energy Output Greater than the Kinetic Energy of an Imploding Shell at the National Ignition Facility. <i>Physical Review Letters</i> , 2018, 120, 245003.	7.8	205
2	Fusion reactions initiated by laser-accelerated particle beams in a laser-produced plasma. <i>Nature Communications</i> , 2013, 4, 2506.	12.8	153
3	Laser-direct-drive program: Promise, challenge, and path forward. <i>Matter and Radiation at Extremes</i> , 2017, 2, 37-54.	3.9	117
4	Symmetry control of an indirectly driven high-density-carbon implosion at high convergence and high velocity. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	106
5	Origins and Scaling of Hot-Electron Preheat in Ignition-Scale Direct-Drive Inertial Confinement Fusion Experiments. <i>Physical Review Letters</i> , 2018, 120, 055001.	7.8	104
6	The high velocity, high adiabat, "Bigfoot" campaign and tests of indirect-drive implosion scaling. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	90
7	High-Performance Indirect-Drive Cryogenic Implosions at High Adiabatic on the National Ignition Facility. <i>Physical Review Letters</i> , 2018, 121, 135001.	7.8	86
8	Development of Improved Radiation Drive Environment for High Foot Implosions at the National Ignition Facility. <i>Physical Review Letters</i> , 2016, 117, 225002.	7.8	61
9	High Power Dynamic Polarization Control Using Plasma Photonics. <i>Physical Review Letters</i> , 2016, 116, 205001.	7.8	55
10	Toward a burning plasma state using diamond ablator inertially confined fusion (ICF) implosions on the National Ignition Facility (NIF). <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 014023.	2.1	53
11	Ultrafast probing of magnetic field growth inside a laser-driven solenoid. <i>Physical Review E</i> , 2017, 95, 033208.	2.1	49
12	Refractive Index Seen by a Probe Beam Interacting with a Laser-Plasma System. <i>Physical Review Letters</i> , 2017, 118, 015001.	7.8	48
13	Observation of Betatron X-Ray Radiation in a Self-Modulated Laser Wakefield Accelerator Driven with Picosecond Laser Pulses. <i>Physical Review Letters</i> , 2017, 118, 134801.	7.8	45
14	Unraveling the Solid-Liquid-Vapor Phase Transition Dynamics at the Atomic Level with Ultrafast X-Ray Absorption Near-Edge Spectroscopy. <i>Physical Review Letters</i> , 2011, 107, 245006.	7.8	44
15	Increasing stagnation pressure and thermonuclear performance of inertial confinement fusion capsules by the introduction of a high-Z dopant. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	42
16	Ultrafast Short-Range Disorder of Femtosecond-Laser-Heated Warm Dense Aluminum. <i>Physical Review Letters</i> , 2013, 111, 245004.	7.8	41
17	Stimulated Raman scattering mechanisms and scaling behavior in planar direct-drive experiments at the National Ignition Facility. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	38
18	Theory and measurements of convective Raman side scatter in inertial confinement fusion experiments. <i>Physical Review E</i> , 2019, 99, 033203.	2.1	34

#	ARTICLE	IF	CITATIONS
19	High-intensity laser-accelerated ion beam produced from cryogenic micro-jet target. Review of Scientific Instruments, 2016, 87, 11D827.	1.3	32
20	New scheme to produce aneutronic fusion reactions by laser-accelerated ions. Laser and Particle Beams, 2015, 33, 117-122.	1.0	29
21	Laser light triggers increased Raman amplification in the regime of nonlinear Landau damping. Nature Communications, 2014, 5, 4158.	12.8	28
22	Stimulated backscatter of laser light from BigFoot hohlraums on the National Ignition Facility. Physics of Plasmas, 2019, 26, .	1.9	28
23	CR-39 track detector calibration for H, He, and C ions from 0.1-0.5 MeV up to 5 MeV for laser-induced nuclear fusion product identification. Review of Scientific Instruments, 2015, 86, 083307.	1.3	27
24	Experimental results of radiation-driven, layered deuterium-tritium implosions with adiabat-shaped drives at the National Ignition Facility. Physics of Plasmas, 2016, 23, .	1.9	27
25	Energy transfer between lasers in low-gas-fill-density hohlraums. Physical Review E, 2018, 98, .	2.1	27
26	Hotspot parameter scaling with velocity and yield for high-adiabat layered implosions at the National Ignition Facility. Physical Review E, 2020, 102, 023210.	2.1	25
27	X-ray sources using a picosecond laser driven plasma accelerator. Physics of Plasmas, 2019, 26, .	1.9	22
28	Achieving 280 Gbar hot spot pressure in DT-layered CH capsule implosions at the National Ignition Facility. Physics of Plasmas, 2020, 27, .	1.9	20
29	Experimental investigation of the stimulated Brillouin scattering growth and saturation at 526 and 351 nm for direct drive and shock ignition. Physics of Plasmas, 2012, 19, 012705.	1.9	18
30	Experimental Approach to Interaction Physics Challenges of the Shock Ignition Scheme Using Short Pulse Lasers. Physical Review Letters, 2013, 111, 235006.	7.8	17
31	Crossed-beam energy transfer: polarization effects and evidence of saturation. Plasma Physics and Controlled Fusion, 2018, 60, 054017.	2.1	17
32	Betatron x-ray radiation in the self-modulated laser wakefield acceleration regime: prospects for a novel probe at large scale laser facilities. Nuclear Fusion, 2019, 59, 032003.	3.5	17
33	Interaction physics for the shock ignition scheme of inertial confinement fusion targets. Plasma Physics and Controlled Fusion, 2011, 53, 124034.	2.1	16
34	Implosion shape control of high-velocity, large case-to-capsule ratio beryllium ablaters at the National Ignition Facility. Physics of Plasmas, 2018, 25, 072708.	1.9	16
35	Reduction of stimulated Brillouin backscattering with plasma beam smoothing. Physics of Plasmas, 2015, 22, .	1.9	11
36	Laser intensity scaling of the magnetic field from a laser-driven coil target. Journal of Applied Physics, 2020, 127, .	2.5	11

#	ARTICLE	IF	CITATIONS
37	Strong suppression of heat conduction in a laboratory replica of galaxy-cluster turbulent plasmas. Science Advances, 2022, 8, eabj6799.	10.3	11
38	Maximizing neutron yields by scaling hollow diameter of a dense plasma focus anode. Journal of Applied Physics, 2018, 124, 233301.	2.5	10
39	Betatron x-ray radiation from laser-plasma accelerators driven by femtosecond and picosecond laser systems. Physics of Plasmas, 2018, 25, 056706.	1.9	10
40	The National Direct-Drive Inertial Confinement Fusion Program. Nuclear Fusion, 2019, 59, 032007.	3.5	10
41	Study on a compact and adaptable Thomson Spectrometer for laser-initiated $^{11}\text{B}(p, \alpha)^8\text{Be}$ reactions and low-medium energy particle detection. Journal of Instrumentation, 2016, 11, C05010-C05010.	1.2	7
42	Dynamics of laser-generated magnetic fields using long laser pulses. Physical Review E, 2021, 103, 033201.	2.1	7
43	Laser transport and backscatter in low-density SiO <sub>2</sub> and Ta <sub>2</sub> O <sub>5</sub> foams. Physics of Plasmas, 2021, 28, .	1.9	6
44	First Experiments and Radiographs on the MegaJoule Neutron Imaging Radiography (MJOLNIR) Dense Plasma Focus. IEEE Transactions on Plasma Science, 2021, 49, 3299-3306.	1.3	6
45	An analytical study of non-resonant transient cross-beam power transfer relevant to recent progress in plasma photonics. Physics of Plasmas, 2019, 26, .	1.9	4
46	Slow and Fast Light in Plasma Using Optical Wave Mixing. Physical Review Letters, 2021, 126, 205001.	7.8	4
47	Laser-plasma interaction physics for shock ignition. EPJ Web of Conferences, 2013, 59, 05006.	0.3	3
48	Laser plasma interaction physics on the LIL facility. EPJ Web of Conferences, 2013, 59, 05003.	0.3	2
49	Effects of hydrodynamics on Stimulated Brillouin Scattering in multiple plasma interaction. EPJ Web of Conferences, 2013, 59, 05004.	0.3	0
50	Time resolved detection of two-plasmon decay using three-halves harmonic emission on the National Ignition Facility. Review of Scientific Instruments, 2018, 89, 083504.	1.3	0
51	Dynamique ultra-rapide de la transition de phase solide-liquide-vapeur par spectroscopie XANES résolue en temps. , 2013, , .		0
52	X-ray Sources from Self-modulated Laser Wakefield Acceleration: Applications in High Energy Density Sciences. , 2020, , .		0
53	Measuring characteristic differences between high- and low-performing discharges on the MegaJoule Neutron Imaging Radiography (MJOLNIR) DPF. Physics of Plasmas, 2022, 29, 062708.	1.9	0