

# Chengzhuo Xiao

## List of Publications by Year in descending order

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papers

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430874

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docs citations

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times ranked

548  
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#	ARTICLE	IF	CITATIONS
1	Stimulated Brillouin scattering enhanced by the stimulated Raman process near the quarter-critical density. Plasma Physics and Controlled Fusion, 2022, 64, 035002.	2.1	1
2	Enhanced Proton Acceleration from Laser Interaction with a Tailored Nanowire Target. Applied Sciences (Switzerland), 2022, 12, 1153.	2.5	4
3	Enhancement of Magnetic Vortex Acceleration by Laser Interaction with Near-Critical Density Plasma inside a Hollow Conical Target. Laser and Particle Beams, 2022, 2022, .	1.0	2
4	Polarization conversion in the caviton driven by linearly polarized lasers. Physical Review E, 2022, 105, L023202.	2.1	0
5	Suprathermal electrons from the anti-Stokes Langmuir decay instability cascade. Physical Review E, 2022, 105, 045208.	2.1	5
6	Eigenvalue solution for the ion-collisional effects on the fast and slow ion acoustic waves in multi-ion species plasmas. Plasma Physics and Controlled Fusion, 2021, 63, 045014.	2.1	1
7	Influences of sinusoidal density modulation on stimulated Raman scattering in inhomogeneous plasmas. Plasma Physics and Controlled Fusion, 2021, 63, 055004.	2.1	6
8	Enhanced Proton Acceleration by Laser-Driven Collisionless Shock in the Near-Critical Density Target Embedding with Solid Nanolayers. Laser and Particle Beams, 2021, 2021, .	1.0	2
9	Investigation of stimulated Raman scattering in longitudinal magnetized plasma by theory and kinetic simulation. Plasma Science and Technology, 2021, 23, 115201.	1.5	0
10	Multi-dimensional Vlasov simulations on trapping-induced sidebands of Langmuir waves. Physics of Plasmas, 2021, 28, .	1.9	5
11	Reducing reflectivity of stimulated Raman scattering by discretely changing phase of incident light in inertial fusion plasmas. Physica Scripta, 2021, 96, 125634.	2.5	3
12	Growth and saturation of stimulated Raman scattering in two overlapping laser beams. Physical Review E, 2020, 102, 013205.	2.1	7
13	Enhancement of brightness of high-order harmonics with elliptical polarization from near-critical density plasmas irradiated by an ultraintense laser pulse. Physics of Plasmas, 2020, 27, 083101.	1.9	0
14	Suppression of auto-resonant stimulated Brillouin scattering in supersonic flowing plasmas by different forms of incident lasers*. Chinese Physics B, 2020, 29, 095202.	1.4	3
15	Stimulated Brillouin scattering of backward stimulated Raman scattering. Scientific Reports, 2020, 10, 3492.	3.3	16
16	Growth rate and gain of stimulated Brillouin scattering considering nonlinear Landau damping due to particle trapping. Plasma Physics and Controlled Fusion, 2020, 62, 045013.	2.1	4
17	Suppression of stimulated Brillouin scattering by two perpendicular linear polarization lasers. AIP Advances, 2020, 10, 025123.	1.3	2
18	Improvement of laser absorption and control of particle acceleration by subwavelength nanowire target. Physics of Plasmas, 2020, 27, .	1.9	6

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19	Enhanced parametric pulse amplification in a comparable-mass plasma affected by charge state. <i>Plasma Physics and Controlled Fusion</i> , 2020, 62, 105020.	2.1	5
20	Numerical simulation of beam deflection for smoothed laser beams. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020, 69, 075201.	0.5	0
21	Recent research progress of laser plasma interactions in Shenguang laser facilities. <i>Matter and Radiation at Extremes</i> , 2019, 4, .	3.9	28
22	Burst behavior due to the quasimode excited by stimulated Brillouin scattering in high-intensity laser-plasma interactions. <i>High Power Laser Science and Engineering</i> , 2019, 7, .	4.6	4
23	Enhancement of the surface emission at the fundamental frequency and the transmitted high-order harmonics by pre-structured targets. <i>High Power Laser Science and Engineering</i> , 2019, 7, .	4.6	6
24	Investigation on laser plasma instability of the outer ring beams on SGIII laser facility. <i>AIP Advances</i> , 2019, 9, .	1.3	6
25	Stimulated Raman scattering instability of a left-handed circularly polarized laser in strongly axially magnetized plasmas. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	2
26	Formation of relativistic electromagnetic solitons in over-dense plasmas. <i>Physics of Plasmas</i> , 2019, 26, 063107.	1.9	6
27	Auto-resonant stimulated Brillouin backscattering in supersonic flowing plasmas by fully kinetic Vlasov simulations. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 085017.	2.1	6
28	Improvement of ion acceleration in radiation pressure acceleration regime by using an external strong magnetic field. <i>Laser and Particle Beams</i> , 2019, 37, 217-222.	1.0	6
29	Stimulated Brillouin scattering behaviors in multi-ion species plasmas in high-temperature and high-density region. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	10
30	Improvement of proton acceleration via collisionless shock acceleration by laser-foil interaction with an external magnetic field. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	3
31	Faraday effect on stimulated Raman scattering in the linear region. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 045008.	2.1	10
32	$\langle i \rangle K_{\perp}^2 \langle /i \rangle$ emission by the electrons with bi-Maxwellian distribution in a Cu foil. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	2
33	On the stimulated Raman sidescattering in inhomogeneous plasmas: revisit of linear theory and three-dimensional particle-in-cell simulations. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 025020.	2.1	24
34	Controlling of the electromagnetic solitary waves generation in the wake of a two-color laser. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	1
35	The interplay between the kinetic nonlinear frequency shift and the flowing gradient in stimulated Brillouin scattering. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 025016.	2.1	4
36	Nonlinear transition from convective to absolute Raman instability with trapped electrons and inflationary growth of reflectivity. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	15

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37	Coupling between a laser and a prestructured target with an arbitrary structure period. <i>Physical Review E</i> , 2018, 98, .	2.1	3
38	Anti-Langmuir decay instability in Langmuir decay instability cascade. <i>Physics of Plasmas</i> , 2018, 25, 092112.	1.9	9
39	Transition from convective to absolute Raman instability via the longitudinal relativistic effect by using Vlasov-Maxwell simulations. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	13
40	Enhancement of proton acceleration by a right-handed circularly polarized laser interaction with a cone target exposed to a longitudinal magnetic field. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	4
41	Effect of density modulation on backward stimulated Raman Scattering in a laser-irradiated plasma. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	10
42	First experimental comparisons of laser-plasma interactions between spherical and cylindrical hohlraums at SGIII laser facility. <i>Matter and Radiation at Extremes</i> , 2017, 2, 77-86.	3.9	18
43	Decreasing Brillouin and Raman scattering by alternating-polarization light. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	18
44	Experimental demonstration of low laser-plasma instabilities in gas-filled spherical hohlraums at laser injection angle designed for ignition target. <i>Physical Review E</i> , 2017, 95, 031202.	2.1	28
45	Design of octahedral spherical hohlraum for CH Rev5 ignition capsule. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	9
46	Controlling stimulated Raman scattering by two-color light in inertial confinement fusion. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	8
47	Harmonic effects on ion-bulk waves and simulation of stimulated ion-bulk-wave scattering in CH plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2017, 59, 085007.	2.1	4
48	Transition of backward stimulated Raman scattering from absolute to convective instability via density modulation. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	9
49	Potential terahertz radiation by mode conversion from two-color laser to surface plasma waves. <i>AIP Advances</i> , 2017, 7, .	1.3	1
50	Anti-Stokes scattering and Stokes scattering of stimulated Brillouin scattering cascade in high-intensity laser-plasma interaction. <i>Plasma Physics and Controlled Fusion</i> , 2017, 59, 075007.	2.1	6
51	Optimization of the combined proton acceleration regime with a target composition scheme. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	1
52	Study of crossed-beam energy transfer process with large crossing angle in three-dimension. <i>Laser and Particle Beams</i> , 2016, 34, 270-275.	1.0	8
53	Stably propagating trains of attosecond electron bunches generated along the target back. <i>Physics of Plasmas</i> , 2016, 23, 093101.	1.9	0
54	Excitation of nonlinear ion acoustic waves in CH plasmas. <i>Physics of Plasmas</i> , 2016, 23, 082106.	1.9	20

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55	Fluid nonlinear frequency shift of nonlinear ion acoustic waves in multi-ion species plasmas in the small wave number region. <i>Physical Review E</i> , 2016, 94, 023205.	2.1	15
56	Competition between stimulated Raman scattering and two-plasmon decay in inhomogeneous plasma. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	26
57	The light diffraction effect on stimulated Raman scattering. <i>Physics of Plasmas</i> , 2016, 23, 022705.	1.9	4
58	Progress in octahedral spherical hohlraum study. <i>Matter and Radiation at Extremes</i> , 2016, 1, 8-27.	3.9	106
59	Study of strong enhancement of synchrotron radiation via surface plasma waves excitation by particle-in-cell simulations. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	10
60	The development of laser-plasma interaction program LAP3D on thousands of processors. <i>AIP Advances</i> , 2015, 5, .	1.3	4
61	A spherical shell target scheme for laser-driven neutron sources. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	6
62	Nonlinear evolution of stimulated Raman scattering near the quarter-critical density. <i>Physics of Plasmas</i> , 2015, 22, 052121.	1.9	20
63	Analysis of stimulated Raman backscatter and stimulated Brillouin backscatter in experiments performed on SG-III prototype facility with a spectral analysis code. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	27
64	Research on ponderomotive driven Vlasov-Poisson system in electron acoustic wave parametric region. <i>Physics of Plasmas</i> , 2014, 21, 032107.	1.9	7
65	Generation of monoenergetic proton beams by a combined scheme with an overdense hydrocarbon target and an underdense plasma gas irradiated by ultra-intense laser pulse. <i>Laser and Particle Beams</i> , 2014, 32, 583-589.	1.0	11
66	Suppression of transverse ablative Rayleigh-Taylor-like instability in the hole-boring radiation pressure acceleration by using elliptically polarized laser pulses. <i>Physical Review E</i> , 2014, 90, 023101.	2.1	30
67	Dynamics of ultra-intense circularly polarized solitons under inhomogeneous plasmas. <i>Physics of Plasmas</i> , 2013, 20, 063106.	1.9	1
68	Competition between the stimulated Raman and Brillouin scattering under the strong damping condition. <i>Laser and Particle Beams</i> , 2013, 31, 203-209.	1.0	32
69	Suppressing longitudinal double-layer oscillations by using elliptically polarized laser pulses in the hole-boring radiation pressure acceleration regime. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	17
70	Breather-like penetration of ultrashort linearly polarized laser into over-dense plasmas. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	12
71	Upper limit power for self-guided propagation of intense lasers in plasma. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	9
72	Towards Sub-TeV electron beams driven by ultra-short, ultra-intense laser pulses. <i>Journal of Plasma Physics</i> , 2012, 78, 461-468.	2.1	4

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73	Study of stimulated Raman and Brillouin scattering in a finite interaction region under the convective instability condition. Science Bulletin, 2012, 57, 2747-2751.	1.7	9
74	Stimulated backward Brillouin scattering in two ion-species plasmas. Physics of Plasmas, 2011, 18, 032705.	1.9	10
75	Excitation of coherent terahertz radiation by stimulated Raman scatterings. Physics of Plasmas, 2010, 17, 024502.	1.9	7
76	Numerical Simulation on Laser Fusion in China. , 2009, , .		0
77	Enhancement of backward Raman scattering by electron-ion collisions. Physics of Plasmas, 2009, 16, 112703.	1.9	43
78	The transition from plasma gratings to cavitons in laser-plasma interactions. Physics of Plasmas, 2009, 16, 093108.	1.9	29
79	Comparison of the analytical and simulation results of the equilibrium beam profile. Physics of Plasmas, 2007, 14, .	1.9	1
80	Short-pulse laser absorption via J $\tilde{A}$ -B heating in ultrahigh intensity laser plasma interaction. Physics of Plasmas, 2006, 13, 113105.	1.9	23
81	Simulation of electron beam instabilities in collisionless plasmas. Journal of Plasma Physics, 2006, 72, 249.	2.1	5
82	Self-organization of plasma due to electron beam instability. Physics of Plasmas, 2006, 13, 053103.	1.9	4
83	Vacuum heating in the interaction of ultrashort, relativistically strong laser pulses with solid targets. Physics of Plasmas, 2006, 13, 063108.	1.9	16
84	Quasistatic magnetic and electric fields generated in intense laser plasma interaction. Physics of Plasmas, 2005, 12, 053104.	1.9	40
85	Electron acceleration in combined intense laser fields and self-consistent quasistatic fields in plasma. Physics of Plasmas, 2005, 12, 083102.	1.9	25
86	Electron acceleration by the short pulse laser in inhomogeneous underdense plasmas. Journal of Plasma Physics, 2004, 70, 625-634.	2.1	2
87	A theoretical model for a spontaneous magnetic field in intense laser plasma interaction. Physics of Plasmas, 2003, 10, 4166-4168.	1.9	11
88	Slow-time-scale magnetic fields driven by fast-time-scale waves in an underdense relativistic Vlasov plasma. Physics of Plasmas, 2001, 8, 321-328.	1.9	19
89	Spatiotemporal Chaos in The Regime of the Conserved Zakharov Equations. Physical Review Letters, 1995, 74, 78-81.	7.8	20
90	QUASIPERIODIC AND CHAOTIC BEHAVIOR ON ZAKHAROV EQUATIONS. Modern Physics Letters B, 1994, 08, 833-840.	1.9	0

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91	Effects of Landau Damping and Collision on Stimulated Raman Scattering with Various Phase-Space Distributions. Chinese Physics B, 0, , .	1.4	0