

M Krishnamurthy

List of Publications by Year in descending order

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Version: 2024-02-01

65
papers

1,259
citations

331670

21
h-index

377865

34
g-index

65
all docs

65
docs citations

65
times ranked

778
citing authors

#	ARTICLE	IF	CITATIONS
1	Asymmetric High-Energy Ion Emission from Argon Clusters in Intense Laser Fields. <i>Physical Review Letters</i> , 2001, 87, 085005.	7.8	136
2	A compact laser-driven plasma accelerator for megaelectronvolt-energy neutral atoms. <i>Nature Physics</i> , 2013, 9, 185-190.	16.7	84
3	Asymmetric emission of high-energy electrons in the two-dimensional hydrodynamic expansion of large xenon clusters irradiated by intense laser fields. <i>Physical Review A</i> , 2003, 67, .	2.5	80
4	Ion-induced molecular fragmentation: beyond the Coulomb explosion picture. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, L11-L20.	1.5	79
5	Spatial alignment of diatomic molecules in intense laser fields: I. Experimental results. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001, 34, 4919-4938.	1.5	59
6	Anisotropic charge-flipping acceleration of highly charged ions from clusters in strong optical fields. <i>Physical Review A</i> , 2004, 69, .	2.5	58
7	Effect of laser polarization on x-ray emission from Ar_n ($n=200-104$) clusters in intense laser fields. <i>Physical Review A</i> , 2001, 63, .	2.5	47
8	Electron rescattering and the dissociative ionization of alcohols in intense laser light. <i>Journal of Chemical Physics</i> , 2003, 119, 12224-12230.	3.0	39
9	Dopant-Induced Ignition of Helium Nanodroplets in Intense Few-Cycle Laser Pulses. <i>Physical Review Letters</i> , 2011, 107, 173402.	7.8	37
10	Enhancement of x-ray yields from heteronuclear cluster plasmas irradiated by intense laser light. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, L291-L299.	1.5	35
11	Hotter electron generation in doped clusters. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 041002.	1.5	34
12	Bright, low debris, ultrashort hard x-ray table top source using carbon nanotubes. <i>Physics of Plasmas</i> , 2011, 18, 014502.	1.9	34
13	Enhanced hard x-ray emission from microdroplet preplasma. <i>Applied Physics Letters</i> , 2006, 88, 181111.	3.3	33
14	Electron rescattering and the fragmentation dynamics of molecules in strong optical fields. <i>Physical Review A</i> , 2003, 68, .	2.5	32
15	Engineering clusters for table-top acceleration of ions. <i>Applied Physics Letters</i> , 2006, 88, 041107.	3.3	29
16	Strong light fields coax intramolecular reactions on femtosecond time scales. <i>Journal of Chemical Physics</i> , 2004, 121, 9765-9768.	3.0	28
17	A Thomson parabola ion imaging spectrometer designed to probe relativistic intensity ionization dynamics of nanoclusters. <i>Review of Scientific Instruments</i> , 2011, 82, 083303.	1.3	28
18	Spatial alignment of diatomic molecules in intense laser fields: II. Numerical modelling. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001, 34, 4939-4956.	1.5	26

#	ARTICLE	IF	CITATIONS
19	Fast ion beams from intense, femtosecond laser irradiated nanostructured surfaces. Applied Physics B: Lasers and Optics, 2007, 88, 167-173.	2.2	25
20	Fragmentation dynamics of CS_2^{q+} ($q=3\text{--}10$) molecular ions. Physical Review A, 2001, 64, .	2.5	24
21	Evolution of dopant-induced helium nanoplasmas. New Journal of Physics, 2012, 14, 075016.	2.9	24
22	Photoionization of clusters in intense few-cycle near infrared femtosecond pulses. Physical Chemistry Chemical Physics, 2014, 16, 8721-8730.	2.8	22
23	Two-photon pumped lasing from methanol micro-droplets doped by a weakly fluorescent dye. Chemical Physics Letters, 2003, 372, 263-268.	2.6	20
24	Coulombic and non-Coulombic fragmentation of highly charged benzene. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, 1699-1707.	1.5	20
25	Preferential enhancement of laser-driven carbon ion acceleration from optimized nanostructured surfaces. Scientific Reports, 2015, 5, 11930.	3.3	18
26	Decrypting the charge-resolved kinetic-energy spectrum in the Coulomb explosion of argon clusters. Physical Review A, 2012, 85, .	2.5	16
27	Surface-plasmon-enhanced MeV ions from femtosecond laser irradiated, periodically modulated surfaces. Physics of Plasmas, 2012, 19, 030703.	1.9	15
28	Generation of energetic negative ions from clusters using intense laser fields. New Journal of Physics, 2013, 15, 043036.	2.9	13
29	Electronic excitation of H_2 in slow collisions with molecular ions. Physical Review A, 1994, 50, 2383-2389.	2.5	12
30	Characterization of doping levels in heteronuclear, gas-phase, van der Waals clusters and their energy absorption from an intense optical field. Chemical Physics Letters, 2006, 430, 26-31.	2.6	12
31	Measurement of the spatio-temporal gas density profile of a supersonic jet. Journal of Applied Physics, 2013, 114, .	2.5	11
32	Compact acceleration of energetic neutral atoms using high intensity laser-solid interaction. Scientific Reports, 2017, 7, 3871.	3.3	11
33	Fragmentation of cesium-carbon cluster anions $\text{CsC}_n^{\sim-}$ ($n\sim 10$). Physical Review A, 2003, 67, .	2.5	10
34	Hard X-ray generation from microdroplets in intense laser fields. Applied Physics B: Lasers and Optics, 2005, 81, 469-477.	2.2	10
35	Anomalous Ion Charge Distribution from Cluster Nanoplasmas. Physical Review Letters, 2013, 111, 143401.	7.8	8
36	Recombination of Protons Accelerated by a High Intensity High Contrast Laser. Physical Review Letters, 2018, 121, 134801.	7.8	8

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37	A gated Thomson parabola spectrometer for improved ion and neutral atom measurements in intense laser produced plasmas. Review of Scientific Instruments, 2017, 88, 083305.	1.3	7
38	Collisionless phenomena in heteronuclear clusters. Applied Physics Letters, 2008, 92, 191108.	3.3	6
39	Enhanced ionization of carbon disulfide-doped heteronuclear clusters in intense laser fields and characterization of the doping level. Physical Review A, 2009, 80, .	2.5	6
40	Enhanced x-ray emission from nano-particle doped bacteria. Optics Express, 2015, 23, 17909.	3.4	6
41	Polarization-state dependence of the ionization dynamics of a chiral molecule in intense laser light. Physical Review A, 2000, 61, .	2.5	5
42	On the acceleration of ions from exploding clusters. Laser Physics, 2006, 16, 581-587.	1.2	5
43	Hot electrons produced from long scale-length laser-produced droplet plasmas. Laser Physics, 2007, 17, 408-414.	1.2	5
44	Application of the time-dependent wavepacket method to mass spectrometric studies of molecular excitation and dissociation. Rapid Communications in Mass Spectrometry, 1995, 9, 358-362.	1.5	4
45	Non-Maxwellian electron-energy distribution from cluster nanoplasmas. Physical Review A, 2013, 87, .	2.5	4
46	Probing strong field ionization of solids with a Thomson parabola spectrometer. Pramana - Journal of Physics, 2014, 82, 111-120.	1.8	4
47	Novel target design for enhanced laser driven proton acceleration. AIP Advances, 2017, 7, 095018.	1.3	4
48	Micro-optics for ultra-intense lasers. AIP Advances, 2021, 11, 035214.	1.3	4
49	Laser absorption in microdroplet plasmas. Europhysics Letters, 2007, 80, 25002.	2.0	3
50	Electronic excitation as a mode of heat dissipation in laser-driven cluster plasmas. Physics of Plasmas, 2013, 20, .	1.9	3
51	Measurement of asymmetric electron cloud in cluster nano-plasma. Physics of Plasmas, 2019, 26, 070703.	1.9	3
52	Misjudging negative ions for electrons in intense laser plasma diagnostics. AIP Advances, 2019, 9, 025115.	1.3	3
53	Anisotropic negative-ion emission from cluster nanoplasmas. Physical Review A, 2015, 91, .	2.5	2
54	Spectrally resolved ion imaging from laser produced plasmas using CR-39 detectors. AIP Advances, 2021, 11, .	1.3	2

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55	Experimental study on electronic excited states of $\langle \text{mml:math altimg="si5.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tbl="http://www.elsevier.com/xml/commen/table/dtd" \rangle$	2.6	1
56	Surface roughness-aided hard X-ray emission from carbon nanotubes. Pramana - Journal of Physics, 2010, 75, 1197-1202.	1.8	1
57	A source to deliver mesoscopic particles for laser plasma studies. Review of Scientific Instruments, 2017, 88, 023301.	1.3	1
58	On the importance of field driven single particle processes in short pulse absorption of clusters. Scientific Reports, 2019, 9, 15135.	3.3	1
59	A non-uniform charging scheme to decipher charge state propensities measured in nano-cluster ionization. European Physical Journal: Special Topics, 2021, 230, 3997-4009.	2.6	1
60	Ionisation of Nanoclusters at Relativistic Laser Intensities. Springer Proceedings in Physics, 2019, , 180-190.	0.2	1
61	Probing potential energy curves of C_{20}^{2+} by translational energy spectrometry. Physical Review A, 2004, 69, .	2.5	0
62	Hotter electrons from size limited targets in intense laser fields. , 2007, , .		0
63	Dynamics of cluster ionization and neutral atom acceleration. , 2015, , .		0
64	Enhanced x-ray emission from bacteria. , 2012, , .		0
65	A quasi-directional emission of MeV neutrals from a dense cluster nano plasma. , 2014, , .		0