

Vinod Kumarappan

List of Publications by Year in descending order

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40
papers

1,451
citations

304743

22
h-index

345221

36
g-index

41
all docs

41
docs citations

41
times ranked

1076
citing authors

#	ARTICLE	IF	CITATIONS
1	Asymmetric High-Energy Ion Emission from Argon Clusters in Intense Laser Fields. Physical Review Letters, 2001, 87, 085005.	7.8	136
2	Manipulating the Torsion of Molecules by Strong Laser Pulses. Physical Review Letters, 2009, 102, 073007.	7.8	102
3	Multiphoton Electron Angular Distributions from Laser-Aligned CS_2 Molecules. Physical Review Letters, 2008, 100, 093006.	7.8	92
4	Measurement of the average size and density of clusters in a gas jet. Applied Physics Letters, 2003, 83, 3210-3212.	3.3	83
5	Two-dimensional effects in the hydrodynamic expansion of xenon clusters under intense laser irradiation. Physical Review A, 2002, 66, .	2.5	82
6	Asymmetric emission of high-energy electrons in the two-dimensional hydrodynamic expansion of large xenon clusters irradiated by intense laser fields. Physical Review A, 2003, 67, .	2.5	80
7	Holding and Spinning Molecules in Space. Physical Review Letters, 2007, 99, 143602.	7.8	77
8	Role of rotational temperature in adiabatic molecular alignment. Journal of Chemical Physics, 2006, 125, 194309.	3.0	72
9	Anisotropic charge-flipping acceleration of highly charged ions from clusters in strong optical fields. Physical Review A, 2004, 69, .	2.5	58
10	A combined experimental and theoretical study on realizing and using laser controlled torsion of molecules. Journal of Chemical Physics, 2009, 130, 234310.	3.0	55
11	Guiding of Intense Laser Pulses in Plasma Waveguides Produced from Efficient, Femtosecond End-Pumped Heating of Clustered Gases. Physical Review Letters, 2005, 94, 205004.	7.8	48
12	Effect of laser polarization on x-ray emission from Ar_n ($n=200-104$) clusters in intense laser fields. Physical Review A, 2001, 63, .	2.5	47
13	Multipulse Three-Dimensional Alignment of Asymmetric Top Molecules. Physical Review Letters, 2014, 112, 173602.	7.8	47
14	Aligning molecules with long or short laser pulses. Physica Scripta, 2007, 76, C63-C68.	2.5	41
15	Control of rotational wave-packet dynamics in asymmetric top molecules. Physical Review A, 2007, 75, .	2.5	40
16	Controlling the rotation of asymmetric top molecules by the combination of a long and a short laser pulse. Physical Review A, 2009, 79, .	2.5	38
17	Explosions of water clusters in intense laser fields. Physical Review A, 2003, 67, .	2.5	36
18	Measuring the angle-dependent photoionization cross section of nitrogen using high-harmonic generation. Physical Review A, 2013, 88, .	2.5	35

#	ARTICLE	IF	CITATIONS
19	Identification of absolute geometries of cis and trans molecular isomers by Coulomb Explosion Imaging. <i>Scientific Reports</i> , 2016, 6, 38202.	3.3	32
20	Reconstruction of three-dimensional molecular structure from diffraction of laser-aligned molecules. <i>Structural Dynamics</i> , 2014, 1, 044101.	2.3	28
21	Plasma waveguides efficiently generated by Bessel beams in elongated cluster gas jets. <i>Physical Review E</i> , 2005, 72, 036411.	2.1	25
22	Spectral redshifts in the intense laser-cluster interaction. <i>Physical Review A</i> , 2005, 71, .	2.5	24
23	Dissociative ionization of gas-phase chloromethanes by intense fields of picosecond and attosecond duration. <i>Physical Review A</i> , 1998, 58, 3849-3855.	2.5	19
24	Clustered gases as a medium for efficient plasma waveguide generation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2006, 364, 647-661.	3.4	19
25	Metric for three-dimensional alignment of molecules. <i>Physical Review A</i> , 2012, 85, .	2.5	18
26	Strong-field control of H ₃ ⁺ production from methanol dications: Selecting between local and extended formation mechanisms. <i>Journal of Chemical Physics</i> , 2020, 152, 054302.	3.0	17
27	Angle-dependent strong-field ionization and fragmentation of carbon dioxide measured using rotational wave packets. <i>Physical Review A</i> , 2020, 102, .	2.5	16
28	Gases of exploding laser-heated cluster nanoplasmas as a nonlinear optical medium. <i>Physics of Plasmas</i> , 2004, 11, 2882-2889.	1.9	15
29	Strong-field-induced wave packet dynamics in carbon dioxide molecule. <i>Faraday Discussions</i> , 2016, 194, 463-478.	3.2	15
30	N^2 HOMO-1 orbital cross section revealed through high-order-harmonic generation. <i>Physical Review A</i> , 2017, 95, .	2.5	15
31	Measurement of field-free alignment of jet-cooled molecules by nonresonant femtosecond degenerate four-wave mixing. <i>Physical Review A</i> , 2012, 85, .	2.5	14
32	Alignment-assisted field-free orientation of rotationally cold CO molecules. <i>Physical Review A</i> , 2014, 90, .	2.5	10
33	Perturbation of water by intense light-induced fields of picosecond duration and ion-induced fields of attosecond duration. <i>Physical Review A</i> , 1999, 59, 3105-3108.	2.5	6
34	Strong-field ionization of the triplet ground state of O ₂ . <i>Physical Review A</i> , 2021, 104, .	2.5	4
35	Alignment dependence of photoelectron angular distributions in the few-photon ionization of molecules by ultraviolet pulses. <i>Physical Review A</i> , 2022, 105, .	2.5	3
36	Photoion imaging spectrometry in intense laser fields. <i>International Journal of Mass Spectrometry</i> , 2002, 215, 163-173.	1.5	2

#	ARTICLE	IF	CITATIONS
37	<title>High-resolution x-ray spectromicroscopy observations of 1 MeV ions under far from relativistic laser beam channeling in N ₂ O clusters</title>., 2006, , .		0
38	Control of alignment dynamics of asymmetric top molecules. , 2007, , .		0
39	3D Alignment by Holding and Spinning Molecules. , 2007, , .		0
40	Asymmetric explosion of laser-irradiated hydrogen clusters. , 2007, , .		0