

E Krishnakumar

List of Publications by Year in descending order

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106
papers

2,343
citations

236925

25
h-index

243625

44
g-index

108
all docs

108
docs citations

108
times ranked

1472
citing authors

#	ARTICLE	IF	CITATIONS
1	Ionisation cross sections of rare-gas atoms by electron impact. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, 1055-1082.	1.5	275
2	The virtual atomic and molecular data centre (VAMDC) consortium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 074003.	1.5	120
3	Functional Group Dependent Site Specific Fragmentation of Molecules by Low Energy Electrons. Physical Review Letters, 2005, 95, 143202.	7.8	110
4	Cross-sections for electron impact ionization of O ₂ . International Journal of Mass Spectrometry and Ion Processes, 1992, 113, 1-12.	1.8	104
5	Velocity slice imaging for dissociative electron attachment. Review of Scientific Instruments, 2005, 76, 053107.	1.3	88
6	A compact laser-driven plasma accelerator for megaelectronvolt-energy neutral atoms. Nature Physics, 2013, 9, 185-190.	16.7	84
7	Cross sections for the production of N ⁺ , N ²⁺ and N ₂ ⁺ by electron impact on N ₂ . Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 1893-1903.	1.5	79
8	Ionization Cross Sections of Silane and Disilane by Electron Impact. Contributions To Plasma Physics, 1995, 35, 395-404.	1.1	53
9	A Decade with VAMDC: Results and Ambitions. Atoms, 2020, 8, 76.	1.6	53
10	Absolute cross sections for dissociative electron attachment to NH ₃ and CH ₄ . International Journal of Mass Spectrometry, 2008, 277, 96-102.	1.5	52
11	Dissociation of highly charged CO ^{q+} (q ≥ 2) ions via non-Coulombic potential energy curves. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, L141-L146.	1.5	46
12	Absolute cross sections for dissociative electron attachment to H ₂ O and D ₂ O. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 4625-4636.	1.5	45
13	Dissociative electron attachment to H ₂ O ₂ : a very effective source for OH and OH [•] generation. Chemical Physics Letters, 2003, 373, 454-459.	2.6	44
14	Dissociative Electron Attachment Cross Sections for H_2 and D_2 . Physical Review Letters, 2011, 106, 243201.	7.8	44
15	Dissociative attachment of electrons to CS ₂ . Journal of Physics B: Atomic, Molecular and Optical Physics, 1992, 25, 1645-1660.	1.5	41
16	Functional group dependent dissociative electron attachment to simple organic molecules. Journal of Chemical Physics, 2008, 128, 154309.	3.0	41
17	Electron correlation effects in the dissociative ionization of H ₂ . Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, L251-L258.	1.5	39
18	Dissociative-attachment cross sections for excited and ground electronic states of SO ₂ . Physical Review A, 1997, 56, 1945-1953.	2.5	37

#	ARTICLE	IF	CITATIONS
19	Cross sections for the dissociative electron attachment to ozone. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999, 32, 3795-3804.	1.5	37
20	Dissociative electron attachment to formic acid. <i>Chemical Physics Letters</i> , 2005, 405, 172-176.	2.6	37
21	Dissociative attachment of electrons to N ₂ O. <i>Physical Review A</i> , 1990, 41, 2445-2452.	2.5	35
22	Cross sections for the production of cations by electron impact on methanol. <i>Journal of Geophysical Research</i> , 1996, 101, 26155-26160.	3.3	34
23	Absolute cross sections for dissociative electron attachment to NF ₃ . <i>International Journal of Mass Spectrometry</i> , 2001, 205, 111-117.	1.5	31
24	Energy distributions of recoil ions produced in 100 MeV collisions of Si ⁸⁺ with CO ₂ and CS ₂ molecules. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1992, 25, 2997-3008.	1.5	30
25	Dissociative electron attachment to acetaldehyde, CH ₃ CHO. A laboratory study using the velocity map imaging technique. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 998-1005.	2.8	28
26	Communication: Electron ionization of DNA bases. <i>Journal of Chemical Physics</i> , 2016, 144, 161102.	3.0	26
27	Dissociative-electron-attachment cross sections: A comparative study of NO ₂ and O ₃ . <i>Physical Review A</i> , 2003, 68, .	2.5	25
28	Resonances in dissociative electron attachment to water. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009, 42, 225203.	1.5	25
29	Excited state dissociative attachment and couplings of electronic states of. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1996, 29, L657-L665.	1.5	22
30	Dissociative attachment of electrons with Si ₂ H ₆ . <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1991, 103, 107-115.	1.8	21
31	Formation of CO ₂ from formic acid through catalytic electron channel. <i>Journal of Chemical Physics</i> , 2018, 149, 064308.	3.0	21
32	Dissociative electron attachment resonances in ammonia: A velocity slice imaging based study. <i>Journal of Chemical Physics</i> , 2012, 136, 164308.	3.0	19
33	Electron ionization of NF ₃ . <i>International Journal of Mass Spectrometry</i> , 2012, 319-320, 48-54.	1.5	19
34	A pulsed crossed beam apparatus for measurement of electron impact partial ionisation cross-sections: results on CO ₂ + e ⁻ → CO ₂ ⁺ + 2e ⁻ . <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1990, 97, 283-294.	1.8	18
35	Negative ion resonances in carbon monoxide. <i>European Physical Journal D</i> , 2016, 70, 1.	1.3	18
36	Symmetry breaking by quantum coherence in single electron attachment. <i>Nature Physics</i> , 2018, 14, 149-153.	16.7	18

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37	Radiative lifetimes of B and C 1Sigma(+) states of CO. Astrophysical Journal, 1986, 307, 795.	4.5	18
38	Dissociative attachment studies by negative-ion time-of-flight mass spectrometry. Rapid Communications in Mass Spectrometry, 1995, 9, 336-343.	1.5	16
39	Unusual temperature dependence in dissociative electron attachment to 1,4-chlorobromobenzene. Chemical Physics Letters, 2001, 342, 536-544.	2.6	16
40	On the presence of the 4f ¹ u resonance in dissociative electron attachment to O2. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, L277-L283.	1.5	16
41	Dissociative electron attachment to polyatomic molecules: Ion kinetic energy measurements. International Journal of Mass Spectrometry, 2010, 289, 39-46.	1.5	16
42	Quantum Superposition of Target and Product States in Reactive Electron Scattering from CF4 Revealed through Velocity Slice Imaging. Physical Review Letters, 2013, 111, 063201.	7.8	16
43	Dissociative electron attachment and dipolar dissociation in ethylene. International Journal of Mass Spectrometry, 2014, 365-366, 356-364.	1.5	16
44	Cross sections for the dissociative attachment of electrons to NO. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, L607-L609.	1.5	15
45	Low energy electron attachment to C60. European Physical Journal D, 2005, 35, 261-266.	1.3	15
46	Dissociative electron attachment to methane probed using velocity slice imaging. Chemical Physics Letters, 2011, 511, 22-27.	2.6	15
47	Kinetic energies of recoil ions produced in 100-MeV collisions of Si ⁸⁺ with CO ₂ molecules. Physical Review A, 1991, 44, R4098-R4101.	2.5	14
48	Velocity map imaging for low-energy electron-molecule collisions. Radiation Physics and Chemistry, 2006, 75, 2151-2158.	2.8	14
49	Probing the influence of channel coupling on the photoelectron angular distribution for the photodetachment from Cu ⁺ . Physical Review A, 2009, 79, .	2.5	14
50	Double and single ionization of helium by high velocity fully stripped ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, 4155-4162.	1.5	12
51	Dissociative electron attachment to electronically excited CS ₂ . Physical Review A, 2001, 64, .	2.5	12
52	The dynamics of the formation of S ₂ ⁺ from CS ₂ by electron impact. Chemical Physics Letters, 1994, 230, 283-289.	2.6	11
53	Probing final-state interactions in the photodetachment from OH^+ . Physical Review A, 2007, 76, .	2.5	11
54	Electron controlled chemistry. Journal of Physics: Conference Series, 2009, 185, 012022.	0.4	11

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55	Dissociative electron attachment to CF ₃ Cl. European Physical Journal D, 2012, 66, 1.	1.3	11
56	Dissociative electron attachment to N ₂ O using velocity slice imaging. Physical Chemistry Chemical Physics, 2014, 16, 3955.	2.8	11
57	Negative ion formation from CH ₃ I by electron impact. International Journal of Mass Spectrometry and Ion Processes, 1995, 145, 89-96.	1.8	10
58	Spectral dependence of the asymmetry parameter in the photodetachment from As ⁻ . Physical Review A, 2007, 75, .	2.5	10
59	Comment on "Imaging the Molecular Dynamics of Dissociative Electron Attachment to Water". Physical Review Letters, 2011, 106, 049301; author reply 049302.	7.8	10
60	Dissociative electron attachment studies on acetone. Journal of Chemical Physics, 2014, 141, 164320.	3.0	10
61	State Selectivity and Dynamics in Dissociative Electron Attachment to CF ₃ I Revealed through Velocity Slice Imaging. Angewandte Chemie - International Edition, 2014, 53, 12051-12054.	13.8	10
62	Dissociation dynamics of transient anion formed via electron attachment to sulfur dioxide. Journal of Chemical Physics, 2017, 147, 054304.	3.0	10
63	Recoil ion mass spectrometry: systematic studies of slow, multiply-charged recoil ion production in collisions of fast fluorine ions with Ar and Kr atoms. International Journal of Mass Spectrometry and Ion Processes, 1990, 99, 237-247.	1.8	9
64	Dissociative ionization of H ₂ by fast fully stripped ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, L777-L784.	1.5	9
65	Dissociative attachment of electrons to vibrationally excited SO ₂ . Physical Review A, 2004, 70, .	2.5	9
66	Probing the resonant states of Cl ₂ using velocity slice imaging. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 015201.	1.5	9
67	Dynamics of the dissociative electron attachment in H ₂ O and D ₂ O: The A ₁ resonance and axial recoil approximation#. Journal of Chemical Sciences, 2012, 124, 271-279.	1.5	8
68	Probing electronic states of TaC and observation of a stable excited state of TaC^+ anion-photoelectron spectroscopy. Physical Review A, 2015, 92, .	1.5	8
69	Probing site selective fragmentation of molecules containing hydroxyl group using Velocity Slice Imaging. Journal of Physics: Conference Series, 2007, 80, 012016.	0.4	7
70	Absolute partial and total electron ionization cross sections of uracil. International Journal of Mass Spectrometry, 2015, 392, 145-153.	1.5	7
71	Electron induced reactions in condensed mixtures of methane and ammonia. Physical Chemistry Chemical Physics, 2017, 19, 25723-25733.	2.8	7
72	Production of electronically excited NO via DEA to NO ₂ . European Physical Journal D, 2017, 71, 1.	1.3	7

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73	Photoelectron spectroscopy of carbon dioxide. Journal of Chemical Physics, 1983, 78, 46-49.	3.0	6
74	Multiparameter segmented scan multichannel scaling system. Review of Scientific Instruments, 2004, 75, 2711-2717.	1.3	6
75	Controlling molecular fragmentation using low energy electrons. Journal of Physics: Conference Series, 2007, 88, 012073.	0.4	6
76	Dissociative electron attachment to H ₂ S probed by ion momentum imaging. Physical Chemistry Chemical Physics, 2011, 13, 13621.	2.8	6
77	Autoionization of O ₂ by photoelectron spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 1981, 22, 109-118.	1.7	5
78	Recoil ion mass spectrometry. Part 2. Formation of slow, multiply charged recoil ions in collisions of fast negative ions with Ar and Kr atoms. International Journal of Mass Spectrometry and Ion Processes, 1993, 128, 195-201.	1.8	5
79	Capillary array as an effusive molecular beam source for high resolution recoil ion momentum spectrometry. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1994, 31, 1-3.	1.0	5
80	Velocity slice imaging study on dissociative electron attachment to CF ₄ . European Physical Journal D, 2014, 68, 1.	1.3	5
81	Structure and dynamics of the negative-ion resonance in H_2^+ and D_2^+ . Physical Review A, 2021, 103, 013401.	1.5	5
82	Absolute cross sections for dissociative electron attachment to water, methane and ammonia. Journal of Physics: Conference Series, 2007, 80, 012018.	0.4	4
83	Photodetachment studies with the linear time of flight photoelectron spectrometer. Journal of Physics: Conference Series, 2007, 80, 012026.	0.4	4
84	Low Energy Electron Induced C-H Activation Reactions in Methane Containing Ices. Journal of Physical Chemistry C, 2017, 121, 22862-22871.	3.1	4
85	Total electron-scattering cross-section for molecular hydrogen at low energies by photoelectron spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 1981, 24, 1-9.	1.7	3
86	Two-electron processes in the ionization of H ₂ and D ₂ by fast protons. Physical Review A, 1996, 54, 2925-2929.	2.5	3
87	Projectile charge and velocity scaling for double ionization of helium. Physical Review A, 1997, 55, 3937-3940.	2.5	3
88	A theoretical and experimental investigation of the formation of S ₂ ⁻ from CS ₂ by electron impact. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1997, 41, 261-266.	1.0	3
89	Dissociative attachment of electrons to excited molecules. Pramana - Journal of Physics, 1998, 50, 591-606.	1.8	3
90	Velocity Map Imaging of H ₂ ⁺ Ions from Dissociative Electron Attachment to H ₂ O. Journal of Physics: Conference Series, 2007, 80, 012017.	0.4	3

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91	Investigation of dissociative electron attachment to water using ion momentum imaging. Journal of Physics: Conference Series, 2008, 115, 012006.	0.4	3
92	O ⁺ from amorphous and crystalline CO ₂ ices. Physical Chemistry Chemical Physics, 2014, 16, 8582-8588.	2.8	3
93	Velocity imaging of H ⁺ from formic acid: probing functional group dependence in dissociative electron attachment. European Physical Journal D, 2020, 74, 1.	1.3	3
94	Dissociative electron attachment to formamide. Journal of Physics: Conference Series, 2012, 388, 052085.	0.4	2
95	Advances in positron and electron scattering*. European Physical Journal D, 2016, 70, 1.	1.3	2
96	Electron attachment and quantum coherence in molecular hydrogen. Journal of Physics: Conference Series, 2020, 1412, 052006.	0.4	2
97	Electron-Molecule Resonances: Current Developments. Springer Proceedings in Physics, 2019, , 20-47.	0.2	2
98	Dissociative ionisation of D2 by fast fully stripped lithium ions. Nuclear Instruments & Methods in Physics Research B, 1996, 108, 243-246.	1.4	1
99	Ultrafast dynamics of autoionizing states in O2 probed by laser-field-assisted XUV photoionization. Physical Review A, 2013, 88, .	2.5	1
100	Low Energy Electron Induced Reactions in Condensed Methanol. Journal of Physics: Conference Series, 2015, 635, 062002.	0.4	1
101	DEA dynamics of chlorine dioxide probed by velocity slice imaging. Physical Chemistry Chemical Physics, 2019, 21, 14023-14032.	2.8	1
102	Probing functional group dependence in dissociative electron attachment using negative ion momentum imaging. Journal of Physics: Conference Series, 2020, 1412, 132046.	0.4	1
103	Dissociative ionization cross sections of D2, N2 and O2 by fast positive-ion impact. Nuclear Instruments & Methods in Physics Research B, 1997, 124, 422-426.	1.4	0
104	Dynamics of dissociative electron attachment in ammonia, methane and hydrogen sulphide. Journal of Physics: Conference Series, 2009, 194, 052038.	0.4	0
105	Electron Attachment to Molecules of Practical Applications. , 2002, , 217-222.		0
106	Origin of resonant character in the electron impact two-body neutral fragmentation of methane. ChemPhysChem, 2022, , .	2.1	0