

Bobby Antony

List of Publications by Year in descending order

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130
papers

1,802
citations

279798

23
h-index

361022

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131
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docs citations

131
times ranked

1001
citing authors

#	ARTICLE	IF	CITATIONS
1	DC Breakdown Characteristics of Câ ₃ Fâ ₆ N/COâ ₂ Mixtures With Particle-in-Cell Simulation. IEEE Transactions on Dielectrics and Electrical Insulation, 2022, 29, 1005-1010.	2.9	7
2	Investigation of Electron Scattering from Vinyl Ether and Its Isomers. Atoms, 2022, 10, 43.	1.6	1
3	Electron scattering from HNCO. European Physical Journal D, 2021, 75, 1.	1.3	3
4	Mean Free Paths and Cross Sections for Electron Scattering from Liquid Water. Journal of Physical Chemistry B, 2021, 125, 5479-5488.	2.6	14
5	On the Electron Impact Integral Cross-Sections for Butanol and Pentanol Isomers. Atoms, 2021, 9, 43.	1.6	3
6	Electron impact scattering from pentane molecules and effect of isomerism on cross section. Chemical Physics Impact, 2021, 3, 100032.	3.5	2
7	Electron scattering from molecules relevant to Titan's atmosphere. International Journal of Mass Spectrometry, 2021, 470, 116708.	1.5	5
8	Electron collision with N_2H and HCO. European Physical Journal D, 2021, 75, 1.	1.3	1
9	Electron and positron backscattering from condensed targets. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 205001.	1.5	2
10	Probing photon interaction with H_2O and D_2O . Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 045202.	1.5	4
11	Electron induced scattering cross section for pyrrole and its isomers. European Physical Journal D, 2020, 74, 1.	1.3	3
12	Electron Scattering Cross Sections for Anthracene and Pyrene. Journal of Physical Chemistry A, 2020, 124, 7088-7100.	2.5	7
13	A Decade with VAMDC: Results and Ambitions. Atoms, 2020, 8, 76.	1.6	53
14	Ionization cross sections for plasma relevant molecules. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 145101.	1.5	11
15	Positron Scattering from Pyridine and Pyrimidine. Journal of Physical Chemistry A, 2020, 124, 5147-5156.	2.5	10
16	Positron Scattering from Atoms and Molecules. Atoms, 2020, 8, 29.	1.6	6
17	Electron and positron scattering from pyridine. Journal of Physics: Conference Series, 2020, 1412, 222009.	0.4	0
18	Low-Energy Electron Scattering from Dimethyl Ether. Journal of Physical Chemistry A, 2020, 124, 3581-3589.	2.5	3

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19	Electron induced excitation of Furfural (C ₅ H ₄ O ₂). Journal of Physics: Conference Series, 2020, 1412, 142024.	0.4	0
20	Rydberg transitions and photoionisation cross section of NH ₃ . Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 54, 015204.	1.5	0
21	Electron scattering studies of BF and BF ₂ . Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 225203.	1.5	3
22	Electron impact ionisation cross-sections for complex molecules. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 145202.	1.5	3
23	Positron Scattering: Total Elastic and Grand Total Cross Sections for Molecules of Astrophysical Importance. ChemistrySelect, 2019, 4, 4575-4581.	1.5	6
24	Electron scattering from FO. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 095202.	1.5	1
25	Inelastic cross sections for pentane isomers by positron impact. Molecular Physics, 2019, 117, 2527-2534.	1.7	4
26	Total ionization cross section of cyclic organic molecules. Journal of Chemical Physics, 2019, 150, 064313.	3.0	18
27	Photoionization of CO Using R-matrix Theory. Astrophysical Journal, 2019, 887, 262.	4.5	7
28	Positron Collision Dynamics for C ₂ –C ₃ Hydrocarbons. Springer Proceedings in Physics, 2019, , 239-249.	0.2	0
29	Electron and positron interaction with pyrimidine: A theoretical investigation. Journal of Applied Physics, 2018, 123, .	2.5	8
30	Positron scattering calculations of elastic, total and momentum transfer cross section for alkaline earth atoms. International Journal of Mass Spectrometry, 2018, 428, 22-28.	1.5	5
31	Positron Scattering from Methyl Halides. Journal of Physical Chemistry A, 2018, 122, 2513-2522.	2.5	11
32	Positron scattering studies of different inelastic channels for group IIA elements. Chemical Physics Letters, 2018, 692, 242-248.	2.6	2
33	Electron-induced scattering dynamics of Boron, Aluminium and Gallium trihalides in the intermediate energy domain. Molecular Physics, 2018, 116, 1208-1217.	1.7	2
34	Study of elastic and inelastic cross sections by positron impact on inert gases. European Physical Journal D, 2018, 72, 1.	1.3	7
35	Positron total scattering cross-sections for alkali atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 015204.	1.5	20
36	Elastic scattering of electrons by silicon, germanium and tin tetrahalides. Journal of Electron Spectroscopy and Related Phenomena, 2018, 222, 51-56.	1.7	2

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37	Interface and transport properties of gamma irradiated Au/n-GaP Schottky diode. Materials Science in Semiconductor Processing, 2018, 74, 1-6.	4.0	13
38	Electron induced scattering from germane. European Physical Journal D, 2018, 72, 1.	1.3	1
39	Theoretical study of positron scattering from pentane isomers. Chemical Physics Letters, 2018, 713, 282-288.	2.6	4
40	Plasma-relevant electron scattering cross sections of propene. Plasma Sources Science and Technology, 2018, 27, 105014.	3.1	5
41	Electron and positron scattering cross sections for propene. Journal of Applied Physics, 2018, 124, 034901.	2.5	6
42	Positron induced scattering cross sections for hydrocarbons relevant to plasma. Physics of Plasmas, 2018, 25, .	1.9	12
43	Theoretical study of positron scattering by group 14 tetra hydrides: A quantum mechanical approach. International Journal of Quantum Chemistry, 2018, 118, e25679.	2.0	3
44	Electron impact total ionization cross section for C4 and C5 isomeric alcohols. International Journal of Mass Spectrometry, 2018, 431, 37-42.	1.5	8
45	Electron-silane scattering cross section for plasma assisted processes. Physics of Plasmas, 2017, 24, 033501.	1.9	8
46	Electron impact scattering and calculated ionization cross sections for SF _x (x = 1-5) radicals. International Journal of Mass Spectrometry, 2017, 417, 8-15.	1.5	7
47	Positron scattering from simple molecules. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 135202.	1.5	18
48	Cross sections for electron collision with difluoroacetylene. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 085202.	1.5	7
49	Transport properties of Gallium Phosphide based Schottky contact with thin insulating layer. Materials Science in Semiconductor Processing, 2017, 61, 145-149.	4.0	4
50	The role of electronic energy loss in SHI irradiated Ni/oxide/n-GaP Schottky diode. Microelectronics Reliability, 2017, 69, 40-46.	1.7	6
51	Absolute cross sections for silver clusters (Ag _n , n=1-4) by electron impact. Journal of Physics: Conference Series, 2017, 875, 062023.	0.4	0
52	Study of BenW (n=12) clusters: An electron collision perspective. Physics of Plasmas, 2017, 24, 083514.	1.9	5
53	Positronium formation and ionization of atoms and diatomic molecules by positron impact. Europhysics Letters, 2017, 119, 50006.	2.0	10
54	Study of inelastic channels by positron impact on simple molecules. Journal of Applied Physics, 2017, 121, .	2.5	19

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55	Effect of Au ⁸⁺ irradiation on Ni/n-GaP Schottky diode: Its influence on interface state density and relaxation time. <i>Physica B: Condensed Matter</i> , 2017, 504, 133-138.	2.7	5
56	The virtual atomic and molecular data centre (VAMDC) consortium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 074003.	1.5	120
57	Interface state density and dielectric properties of Au/n-GaP Schottky diode. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2016, 34, .	1.2	10
58	Electron induced inelastic and ionization cross section for plasma modeling. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	14
59	Calculation of total and ionization cross sections for electron scattering by primary benzene compounds. <i>Journal of Chemical Physics</i> , 2016, 145, 034309.	3.0	35
60	Elastic and total scattering cross section for halogen substituted fluoromethane molecules. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2016, 210, 30-35.	1.7	4
61	Electron impact ionisation cross section for organoplatinum compounds. <i>Molecular Physics</i> , 2016, 114, 3104-3111.	1.7	6
62	Electron scattering from C ₂ -C ₈ symmetric ether molecules. <i>International Journal of Mass Spectrometry</i> , 2016, 409, 1-8.	1.5	11
63	Cross-section studies of cyanoacetylene by electron impact. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 225202.	1.5	8
64	Theoretical Formalism To Estimate the Positron Scattering Cross Section. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5685-5692.	2.5	24
65	Temperature dependent dielectric studies of Ni/n-GaP Schottky diodes by capacitance and conductance measurements. <i>Materials Science in Semiconductor Processing</i> , 2016, 42, 378-382.	4.0	48
66	Frequency dependent negative capacitance effect and dielectric properties of swift heavy ion irradiated Ni/oxide/n-GaAs Schottky diode. <i>Physica B: Condensed Matter</i> , 2016, 489, 23-27.	2.7	11
67	Electron impact ionisation cross sections derived from total inelastic cross section for CF ₃ X and CF ₂ X ₂ (X = H, Cl, Br and I) molecules. <i>Molecular Physics</i> , 2016, 114, 1778-1786.	1.7	5
68	Barrier modification of Au/n-GaAs Schottky structure by organic interlayer. <i>Indian Journal of Physics</i> , 2016, 90, 307-312.	1.8	5
69	Electron-scattering studies of carbonyl fluoride. <i>Physical Review A</i> , 2015, 92, .	2.5	15
70	Theoretical and experimental analysis of barrier distribution in nearly ideal Schottky diodes. <i>AIP Conference Proceedings</i> , 2015, .	0.4	0
71	Electron induced ionisation of C ₃ to C ₆ ethanoates. <i>RSC Advances</i> , 2015, 5, 20090-20097.	3.6	14
72	Electron induced ionization cross sections for astrophysical modelling. <i>International Journal of Mass Spectrometry</i> , 2015, 386, 24-31.	1.5	6

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73	Elastic and total cross sections for simple biomolecules in the intermediate energy range. AIP Advances, 2015, 5, .	1.3	6
74	Swift heavy ion induced capacitance and dielectric properties of Ni/n-GaAs Schottky diode. Current Applied Physics, 2015, 15, 1500-1505.	2.4	10
75	Cross section data for ionization of important cyanides. Journal of Electron Spectroscopy and Related Phenomena, 2015, 205, 74-82.	1.7	3
76	Electron scattering studies of DMS, DMDS and DMSO homologous series. Molecular Physics, 2015, 113, 3883-3890.	1.7	12
77	Electron impact ionization cross sections of atoms. Canadian Journal of Physics, 2015, 93, 617-625.	1.1	13
78	Electron scattering from germanium tetrafluoride. RSC Advances, 2014, 4, 63817-63823.	3.6	10
79	Enhancement in electrical properties of Au/n-GaAs Schottky diodes exposed to 60Co gamma rays. Materials Science in Semiconductor Processing, 2014, 21, 116-121.	4.0	24
80	Electron impact ionization of cycloalkanes, aldehydes, and ketones. Journal of Chemical Physics, 2014, 141, 054303.	3.0	41
81	Electron impact ionization cross sections for chloroethanes. International Journal of Mass Spectrometry, 2014, 373, 34-38.	1.5	10
82	Total scattering cross sections for ethylene by electron impact for incident electron energies from 1 to 2000 eV. International Journal of Quantum Chemistry, 2014, 114, 271-277.	2.0	3
83	Electron induced chemistry of disilane. RSC Advances, 2014, 4, 9197-9204.	3.6	21
84	Calculation of electron impact total ionization cross sections for tungsten, uranium and their oxide radicals. International Journal of Mass Spectrometry, 2014, 372, 8-12.	1.5	22
85	Electron-impact scattering by arsine. Physical Review A, 2014, 90, .	2.5	11
86	Electron impact scattering by SF ₆ molecule over an extensive energy range. RSC Advances, 2014, 4, 30953-30962.	3.6	15
87	Electron impact total ionisation cross sections for simple bio-molecules: a theoretical approach. Molecular Physics, 2014, 112, 1201-1209.	1.7	20
88	Total ionisation cross sections for chlorofluoromethanes and CCl _x radicals by electron impact. Molecular Physics, 2014, 112, 1816-1823.	1.7	5
89	On the electron impact ionization of silicon and metal containing organic molecules. International Journal of Mass Spectrometry, 2014, 361, 28-33.	1.5	4
90	0.1â€“2000eV electron impact cross sections for dichlorine monoxide. Journal of Electron Spectroscopy and Related Phenomena, 2014, 193, 86-91.	1.7	2

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91	Total cross sections for electron scattering with halocarbon molecules. Journal of Electron Spectroscopy and Related Phenomena, 2014, 193, 48-53.	1.7	8
92	Total cross sections for O2 and S2 by electron impact. Radiation Physics and Chemistry, 2014, 97, 6-11.	2.8	7
93	Electron impact ionization cross sections for chlorinated and brominated methane and C _n H _{2n+1} Cl (where n=2, 3, 4) molecules. International Journal of Mass Spectrometry, 2014, 360, 39-44.	1.5	27
94	Total and elastic cross sections for methyl halides by electron impact. Journal of Electron Spectroscopy and Related Phenomena, 2013, 189, 17-22.	1.7	8
95	Electron impact ionization cross-section of C ₂ , C ₃ , Si ₂ , Si ₃ , SiC, SiC ₂ and Si ₂ C. Molecular Physics, 2013, 111, 269-275.	1.7	32
96	Electron scattering studies of nitrogen dioxide. Journal of Electron Spectroscopy and Related Phenomena, 2013, 191, 71-78.	1.7	6
97	Phase transition induced double-Gaussian barrier height distribution in Schottky diode. Physica B: Condensed Matter, 2013, 431, 6-10.	2.7	13
98	Total cross section for chlorofluoromethanes and CCl _x radicals by electron impact. Journal of Electron Spectroscopy and Related Phenomena, 2013, 186, 25-29.	1.7	15
99	Comparison of electron impact total and differential cross sections for allene (C ₃ H ₂). Journal of Electron Spectroscopy and Related Phenomena, 2013, 187, 1-10.	2.5	27
100	Calculations of electron collision and ionisation of rare gas dimers. Molecular Physics, 2013, 111, 3047-3053.	1.7	10
101	Electron impact total and ionization cross sections for Sr, Y, Ru, Pd, and Ag atoms. Canadian Journal of Physics, 2013, 91, 744-750.	1.1	14
102	Cross sections for electron collisions with NF ₃ . Physical Review A, 2013, 88, .	2.5	15
103	Reverse leakage mechanisms of liquid metal contacts onto VI group semiconductor (Ga/p-WSe ₂). EPJ Applied Physics, 2013, 62, 20104.	0.7	4
104	Calculation of electron impact total ionization cross sections for the atoms Ga, Ge, As, Se, Br and Kr. Journal of Physics: Conference Series, 2012, 388, 042041.	0.4	0
105	Electron impact total cross section for acetylene over an extensive range of impact energies (1). Journal of Electron Spectroscopy and Related Phenomena, 2012, 186, 1-10.	3.0	27
106	Effect of tunneling current on the reverse I-V characteristics of In, Al-pWSe ₂ Schottky diodes. EPJ Applied Physics, 2012, 60, 10104.	0.7	3
107	Electron impact total ionization cross sections for simple bio-molecules (H ₂ CO, HCOOH and H ₂ O). Journal of Electron Spectroscopy and Related Phenomena, 2012, 186, 1-10.	0.4	3
108	Calculations of total ionization cross sections for halogen compounds on electron impact from threshold to 2 keV. Indian Journal of Physics, 2011, 85, 1761-1766.	1.8	4

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109	Electron-impact rotationally elastic total cross sections for H ₂ CO and HCOOH over a wide range of incident energy (0.01–2000 eV). <i>Physical Review A</i> , 2011, 84, .	2.5	32
110	Electron impact total ionization cross sections for atoms with $Z = 49$ –54. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011, 44, 105204.	1.5	32
111	Computation of Electron Impact Cross Sections from Molecules of Astrophysical Importance. <i>Journal of Modern Physics</i> , 2011, 02, 1088-1092.	0.6	1
112	Theoretical Investigation of Electron Impact Total Ionization Cross Sections for N(CH ₃) ₃ , NH(CH ₃) ₂ , NH ₂ CH ₃ , P(CH ₃) ₃ , PH(CH ₃) ₂ , and PH ₂ CH ₃ Molecules. <i>Journal of the Korean Physical Society</i> , 2011, 59, 2873-2876.	0.7	0
113	Electron impact total ionization cross sections for halogens and their hydrides. <i>International Journal of Mass Spectrometry</i> , 2010, 292, 7-13.	1.5	37
114	N ₂ , O ₂ - and air-broadened half-widths and line shifts for transitions in the $\hat{1}/23$ band of methane in the 2726- to 3200-cm ⁻¹ spectral region. <i>Journal of Molecular Spectroscopy</i> , 2008, 251, 268-281.	1.2	28
115	Screening-corrected electron impact total and ionization cross sections for boron trifluoride (BF ₃) and boron trichloride (BCl ₃). <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 245202.	1.5	20
116	Calculations of elastic, ionization and total cross sections for inert gases upon electron impact: threshold to 2 keV. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 3259-3271.	1.5	44
117	Self-broadening of water vapor transitions via the complex Robert–Bonamy theory. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2007, 105, 148-163.	2.3	33
118	Self-broadened half-widths and self-induced line shifts for water vapor transitions in the 3.2–17.76 $\hat{1}/4m$ spectral region via complex Robert–Bonamy theory. <i>Journal of Molecular Spectroscopy</i> , 2007, 243, 113-123.	1.2	12
119	Modified complex Robert–Bonamy formalism calculations for strong to weak interacting systems. <i>Molecular Physics</i> , 2006, 104, 2791-2799.	1.7	15
120	The Roles of the S ₁ and S ₂ Scattering Matrix Terms on Half-Widths and Their Temperature Dependence for the Water Vapor-Nitrogen System. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
121	Electron impact total and ionization cross-sections for some hydrocarbon molecules and radicals. <i>European Physical Journal D</i> , 2006, 37, 67-74.	1.3	58
122	Half-Widths and Line Shifts of Water Vapor for Atmospheric Applications: Measurement and Theory. , 2006, , 203-220.		0
123	Total and ionization cross sections of electron scattering by fluorocarbons. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, 189-205.	1.5	41
124	R-matrix calculation of low-energy electron collisions with LiH. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004, 37, 1689-1697.	1.5	11
125	Calculated total cross sections of electron-impact ionization and excitations in tetrahedral (XY ₄) and SF ₆ molecules. <i>Physical Review A</i> , 2004, 69, .	2.5	107
126	Electron impact ionization studies with aeronomic molecules. <i>International Journal of Mass Spectrometry</i> , 2004, 233, 207-214.	1.5	23

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127	Theoretical total ionization cross-sections of CH \times , CF \times , SiH \times , SiF \times ($\times=1-4$) and CCl \times targets by electron impact. European Physical Journal D, 2003, 23, 81-90.	1.3	42
128	Electron impact ionization of H ₂ O molecule in crystalline ice. Nuclear Instruments & Methods in Physics Research B, 2003, 212, 63-66.	1.4	17
129	Electron scattering and ionization of ozone, O ₂ and O ₄ molecules. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 4211-4221.	1.5	55
130	Total (including ionization) cross sections of electron impact on ground state and metastable Ne atoms. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 289, 323-328.	2.1	28