John Sabin

List of Publications by Year
in descending order

48 papers	974 citations	567281 15 h-index	434195 31 g-index
49 all docs	49 docs citations	49 times ranked	534 citing authors

#	Article	IF	Citations
1	Calculation of mean excitation energies of 3d-elements and their cations. Molecular Physics, 2021, 119, e1823508.	1.7	4
2	On the relationship between bond correction factors and elemental mean excitation energies. Nuclear Instruments & Methods in Physics Research B, 2020, 474, 6-9.	1.4	0
3	Bond correction factors and their applications to the calculation of molecular mean excitation energies. Nuclear Instruments & Methods in Physics Research B, 2020, 468, 28-36.	1.4	2
4	Calculation of mean excitation energies. Advances in Quantum Chemistry, 2019, 80, 225-245.	0.8	10
5	Test of the validity of Braggâ€™s rule for mean excitation energies of small molecules and ions. Nuclear Instruments & Methods in Physics Research B, 2019, 444, 112-116.	1.4	6
6	Z-dependence of mean excitation energies for second and third row atoms and their ions. Journal of Chemical Physics, 2018, 148, 174307.	3.0	13
7	Mean excitation energies for molecular ions. Nuclear Instruments & Methods in Physics Research B, 2017, 394, 73-80.	1.4	12
8	Continuum Contributions to Dipole Oscillator-Strength Sum Rules for Hydrogen in Finite Basis Sets. Advances in Quantum Chemistry, 2017, 75, 229-241.	0.8	8
9	Coupled cluster calculations of mean excitation energies of the noble gas atoms He, Ne and Ar and of the H2molecule. Molecular Physics, 2014, 112, 751-761.	1.7	12
10	Oscillatory behaviour of charge transfer probabilities in ion-atom collisions. Molecular Physics, 2012, 110, 561-563.	1.7	0
11	Mean Excitation Energies for Biomolecules. Advances in Quantum Chemistry, 2011, 62, 215-242.	0.8	18
12	Mean Excitation Energies and Energy Deposition Characteristics of Bio-organic Molecules. Journal of Physical Chemistry B, 2010, 114, 633-637.	2.6	16
13	Stopping power of molecules for fast ions. Molecular Physics, 2010, 108, 2891-2897.	1.7	8
14	Localized electronic excitation in a hydrogen bond. International Journal of Quantum Chemistry, 2009, 22, 289-296.	2.0	0
15	An analytical representation of shell corrections for stopping power. International Journal of Quantum Chemistry, 2009, 109, 2933-2936.	2.0	4
16	Fewâ€parameter exponentially correlated wavefunctions for the ground state of lithium. International Journal of Quantum Chemistry, 2009, 109, 3791-3797.	2.0	4
17	Electron distribution in a short a-type hydrogen bond. International Journal of Quantum Chemistry, 2009, 6, 301-304.	2.0	0
18	Simulations of Xe@C₆₀ collisions with graphitic films. International Journal of Quantum Chemistry, 2008, 108, 3010-3015.	2.0	1

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19	Amino Acid Mean Excitation Energies and Directional Dependencies from Core and Bond Calculations. , 2008, , .		5
20	From Stopping Power to Radiation Dose Equivalent: Views of the Interaction of Swift Ions with Matter. , 2008, , .		0
21	Simulated structure and energetics of endohedral complexes of noble gas atoms in buckminsterfullerene. International Journal of Quantum Chemistry, 2007, 107, 3061-3066.	2.0	23
22	Dynamics of proton-acetylene collisions at 30 eV. Journal of Chemical Physics, 2002, 117, 1103-1108.	3.0	20
23	Trajectory and molecular binding effects in stopping cross section for hydrogen beams on H2. Journal of Chemical Physics, 2002, 116, 2783-2793.	3.0	26
24	Shape-dependent molecular polarizabilities. International Journal of Quantum Chemistry, 2002, 86, 35-39.	2.0	11
25	Molecular shape, capacitance, and chemical hardness. International Journal of Quantum Chemistry, 2000, 77, 358-366.	2.0	50
26	Molecular shape, capacitance, and chemical hardness. International Journal of Quantum Chemistry, 2000, 77, 358.	2.0	2
27	Geometrical basis for molecular stopping anisotropy. Physical Review A, 1998, 58, 4616-4621.	2.5	10
28	Generalized oscillator strengths for calculation of molecular stopping properties, some preliminary results: Co. , 1997, , .		2
29	Prediction of crystalline properties from ultrathin layered systems: Energy deposition. International Journal of Quantum Chemistry, 1995, 56, 153-159.	2.0	6
30	Polarization propagator calculation of spectroscopic properties of molecules. International Journal of Quantum Chemistry, 1991, 39, 371-386.	2.0	19
31	The quadrupole polarizability and spectral moments of the quadrupole oscillator strength distribution of N2. Molecular Physics, 1991, 72, 1267-1284.	1.7	4
32	On the orbital implementation of the kinetic theory of stopping. International Journal of Quantum Chemistry, 1989, 36, 557-563.	2.0	0
33	Theoretical stopping cross sections of Cî—¸H, Cî—¸C and C=C bonds for swift protons. Nuclear Instruments & Methods in Physics Research B, 1987, 27, 280-286.	1.4	52
34	Calculation of molecular mean excitation energies via the polarization propagator formalism:H2andH2O. Physical Review A, 1986, 34, 1104-1111.	2.5	50
35	The influence of polarization functions on the directional. Molecular Physics, 1979, 37, 463-472.	1.7	8
36	Excited electronic states of a hydrogen bond: Bifluoride ion. International Journal of Quantum Chemistry, 1979, 16, 273-275.	2.0	5

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37	Polarization Propagator Calculations. Advances in Quantum Chemistry, 1978, 11, 275-352.	0.8	338
38	On the applicability of LCAO-XÎ± methods to molecules containing transition metal atoms: The nickel atom and nickel hydride. International Journal of Quantum Chemistry, 1977, 12, 81-87.	2.0	42
39	Intermolecular potential studies of hydrogen-molecule interactions with rare-gas atoms. International Journal of Quantum Chemistry, 1976, 10, 213-221.	2.0	9
40	Ab Initio calculation of some electronically excited states of a hydrogen-bonded system: A preliminary report. International Journal of Quantum Chemistry, 1975, 9, 259-262.	2.0	1
41	A CNDO estimate of the relative affinities of taurine and isethionic acid for alkali metal ions. International Journal of Quantum Chemistry, 1974, 8, 43-48.	2.0	1
42	Ab Initiocalculation of the vibrational and electronic properties of carbon dioxide. Journal of Chemical Physics, 1973, 59, 3003-3007.	3.0	30
43	SCF calculation of the effective parameters for the hubbard model of TCNQ charge-transfer salts. Molecular Physics, 1973, 26, 1177-1184.	1.7	23
44	A semi-empirical investigation of the electronic structure and stability of the oxycumulenes. International Journal of Quantum Chemistry, 1973, 7, 261-267.	2.0	9
45	CNDO Study of the Properties of Ionic Defect Structure in a Model Oneâ€Dimensional Hydrogenâ€Bonded Chain. Journal of Chemical Physics, 1972, 56, 45-51.	3.0	7
46	Theoretical Investigation of the Electronic Structure and Properties of N3â˜, N3, and N3+. Journal of Chemical Physics, 1971, 55, 1821-1829.	3.0	77
47	Hydrogen Bonds Involving Sulfur. II. The Hydrogen Sulfideâ€“Hydrosulfide Complex. Journal of Chemical Physics, 1971, 54, 4675-4680.	3.0	25
48	A comment concerning Sï£¿Hï£¿S type hydrogen bonds. International Journal of Quantum Chemistry, 1971, 5, 133-136.	2.0	1