Jens J Oddershede

List of Publications by Year
in descending order

67 papers	3,581 citations	185998 28 h-index	138251 58 g-index
68 all docs	68 docs citations	68 times ranked	1174 citing authors

#	Article	IF	Citations
1	Transition moments and dynamic polarizabilities in a second order polarization propagator approach. Journal of Chemical Physics, 1980, 73, 6238-6246.	1.2	400
2	Polarization propagator methods in atomic and molecular calculations. Computer Physics Reports, 1984, 2, 33-92.	2.3	387
3	Polarization Propagator Calculations. Advances in Quantum Chemistry, 1978, 11, 275-352.	0.4	338
4	Correlated calculations of indirect nuclear spin-spin coupling constants using second-order polarization propagator approximations: SOPPA and SOPPA(CCSD). Theoretical Chemistry Accounts, 1998, 100, 275-284.	0.5	287
5	Full four-component relativistic calculations of NMR shielding and indirect spin-spin coupling tensors in hydrogen halides. , 1999, 20, 1262-1273.		179
6	A new implementation of the secondâ€•order polarization propagator approximation (SOPPA): The excitation spectra of benzene and naphthalene. Journal of Chemical Physics, 1996, 105, 5886-5900.	1.2	174
7	Propagator Methods. Advances in Chemical Physics, 2007, , 201-239.	0.3	141
8	Orbital and whole-atom proton stopping power and shell corrections for atoms with Z â©½ 36. Atomic Data and Nuclear Data Tables, 1984, 31, 275-297.	0.9	104
9	Relativistic theory for indirect nuclear spin-spin couplings within the polarization propagator approach. International Journal of Quantum Chemistry, 1993, 47, 425-435.	1.0	101
10	Relativistic four-component calculations of indirect nuclear spinâ€“spin couplings in MH4 (M=C,â€ŠSi,â€ŠGe,â€ŠSn,â€ŠPb) and Pb(CH3)3H. Journal of Chemical Physics, 2000, 112, 3493-3498.	1.2	96
11	A coupled cluster polarization propagator method applied to CH+. Journal of Chemical Physics, 1986, 85, 2112-2118.	1.2	91
12	Molecular relativistic calculations of the electric field gradients at the nuclei in the hydrogen halides. Journal of Chemical Physics, 1998, 109, 9677-9684.	1.2	77
13	Shell corrections to electronic stopping powers from orbital mean excitation energies. Physical Review A, 1982, 26, 3209-3219.	1.0	68
14	Nuclear magnetic shieldings and spin rotation constants of HF and N2. Journal of Chemical Physics, 1990, 92, 6036-6042.	1.2	63
15	Correlated and gauge origin independent calculations of magnetic properties. Molecular Physics, 1994, 81, 87-118.	0.8	59
16	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.	0.6	52
17	Correlated calculations for the nuclear magnetic shieldings of CO and HCN. Molecular Physics, 1991, 72, 559-573.	0.8	52
18	Calculation of molecular mean excitation energies via the polarization propagator formalism:H2andH2O. Physical Review A, 1986, 34, 1104-1111.	1.0	50

#	Article	IF	Citations
19	Calculation of spectra and spin-spin coupling constants using a coupled-cluster polarization propagator method. International Journal of Quantum Chemistry, 1987, 32, 475-485.	1.0	50
20	Paramagnetism of closed shell diatomic hydrides with six valence electrons. Journal of Chemical Physics, 1993, 98, 9748-9757.	1.2	50
21	Correlated calculations of the rotationalg-tensor and origin independent magnetizability surface of BH. Molecular Physics, 1992, 76, 445-465.	0.8	44
22	Bethe theory of stopping incorporating electronic excitations of partially stripped projectiles. Physical Review A, 1997, 55, 2864-2872.	1.0	44
23	Electronic spectra and response properties of BH and AlH. Journal of Chemical Physics, 1989, 90, 2338-2343.	1.2	42
24	Correlated polarization propagator calculations of static polarizabilities. International Journal of Quantum Chemistry, 1994, 50, 317-332.	1.0	40
25	Second-order polarization propagator calculations of dynamic dipole polarizabilities and C6 coefficients. International Journal of Quantum Chemistry, 1991, 39, 667-679.	1.0	39
26	Quadratic response theory of frequencyâ€dependent first hyperpolarizability. Calculations in the dipole length and mixedâ€velocity formalisms. Journal of Chemical Physics, 1991, 94, 7251-7258.	1.2	36
27	Bragg rule additivity of bond stopping cross sections. Nuclear Instruments & Methods in Physics Research B, 1989, 42, 7-10.	0.6	35
28	Polymer fractureâ€”A simple model for chain scission. Journal of Polymer Science, Polymer Physics Edition, 1984, 22, 881-897.	1.0	33
29	Correlated dipole oscillator sum rules. Journal of Chemical Physics, 1994, 100, 8969-8975.	1.2	30
30	Effect of correlation on the mean excitation energy of beryllium. Physical Review A, 1989, 39, 5565-5571.	1.0	28
31	Equivalence between perturbatively calculated transition moments. Journal of Chemical Physics, 1983, 78, 1898-1904.	1.2	26
32	Directional Dependence of the Mean Excitation Energy and Spectral Moments of the Dipole Oscillator Strength Distribution of Glycine and Its Zwitterion. Journal of Physical Chemistry A, 2006, 110, 8811-8817.	1.1	26
33	The Effect of Solvation on the Mean Excitation Energy of Glycine. Journal of Physical Chemistry Letters, 2010, 1, 242-245.	2.1	20
34	Polarization propagator calculation of spectroscopic properties of molecules. International Journal of Quantum Chemistry, 1991, 39, 371-386.	1.0	19
35	Theoretical interpretation of the resonance Raman spectrum of gaseous chlorine. Journal of Chemical Physics, 1983, 79, 2150-2156.	1.2	18
36	Angular dependence of geminal spin-spin coupling constants in a prototype CH2 group.J(H,H) versus interbond angle in methane. Magnetic Resonance in Chemistry, 1993, 31, 722-725.	1.1	18

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37	Response function analysis of magnetic optical rotation. International Journal of Quantum Chemistry, 1997, 64, 599-605.	1.0	18
38	Mean Excitation Energies and Energy Deposition Characteristics of Bio-organic Molecules. Journal of Physical Chemistry B, 2010, 114, 633-637.	1.2	16
39	Mean Excitation Energies and Their Directional Characteristics for Energy Deposition by Swift Ions on the DNA and RNA Nucleobases. Journal of Physical Chemistry C, 2010, 114, 20335-20341.	1.5	14
40	On the Determination of the Mean Excitation Energy of Water. Advances in Quantum Chemistry, 2013, 65, 63-77.	0.4	14
41	The Mean Excitation Energy of Atomic Ions. Advances in Quantum Chemistry, 2015, , 29-40.	0.4	14
42	Two-photon transition moments as determined from the quadratic response function. International Journal of Quantum Chemistry, 1990, 38, 487-499.	1.0	13
43	19F nuclear magnetic shielding tensor of CH3F. Molecular Physics, 1995, 86, 235-249.	0.8	13
44	Relativistic corrections to molecular dynamic dipole polarizabilities. Journal of Chemical Physics, 1995, 103, 2983-2990.	1.2	13
45	Z-dependence of mean excitation energies for second and third row atoms and their ions. Journal of Chemical Physics, 2018, 148, 174307.	1.2	13
46	Spin-orbit corrections to the indirect nuclear spin-spin coupling constants in XH4 (X = C, Si, Ge, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.9	12
47	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.	0.8	12
48	Mean excitation energies for molecular ions. Nuclear Instruments & Methods in Physics Research B, 2017, 394, 73-80.	0.6	12
49	The use of modified virtual orbitals in perturbative polarization propagator calculations. Journal of Chemical Physics, 1983, 79, 2295-2301.	1.2	10
50	Effects of the order of the energy asymptotes on the calculations of nuclear magnetic shieldings and static polarizabilities. Journal of Chemical Physics, 1994, 101, 10775-10782.	1.2	10
51	Calculation of mean excitation energies. Advances in Quantum Chemistry, 2019, 80, 225-245.	0.4	10
52	Stopping power of molecules for fast ions. Molecular Physics, 2010, 108, 2891-2897.	0.8	8
53	Continuum Contributions to Dipole Oscillator-Strength Sum Rules for Hydrogen in Finite Basis Sets. Advances in Quantum Chemistry, 2017, 75, 229-241.	0.4	8
54	Mean excitation energies and moments of the dipole oscillator strength distribution of closed-shell aluminum ions. Nuclear Instruments & Methods in Physics Research B, 1990, 48, 34-38.	0.6	7

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55	Molecular Stopping Powers from the Target Oscillator Strength Distribution. Advances in Quantum Chemistry, 2004, 46, 121-151.	0.4	7
56	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.	0.6	6
57	Why does the maximum in the stopping cross section for protons occur at approximately 100 keV most of the time?. AIP Conference Proceedings, 2003, , .	0.3	5
58	Amino Acid Mean Excitation Energies and Directional Dependencies from Core and Bond Calculations. , 2008, , .		5
59	Mean excitation energies of singly charged atomic anions with Z â‰¥ 18. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 095004.	0.6	5
60	An analytical representation of shell corrections for stopping power. International Journal of Quantum Chemistry, 2009, 109, 2933-2936.	1.0	4
61	Calculation of mean excitation energies of 3d-elements and their cations. Molecular Physics, 2021, 119, e1823508.	0.8	4
62	Bound and continuum state contributions to dipole oscillator strength sum rules: Total and orbital mean excitation energies for cations of C, F, Si, and Cl. Advances in Quantum Chemistry, 2019, 80, 127-146.	0.4	3
63	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.	0.6	2
64	Propagator Calculations of Electronic Spectra of Photochromic Spirooxazines. Molecular Crystals and Liquid Crystals, 2000, 345, 89-94.	0.3	1
65	From Stopping Power to Radiation Dose Equivalent: Views of the Interaction of Swift Ions with Matter. , 2008, , .		0
66	On the orbital implementation of the kinetic theory of stopping. International Journal of Quantum Chemistry, 1989, 36, 557-563.	1.0	0
67	On the relationship between bond correction factors and elemental mean excitation energies. Nuclear Instruments & Methods in Physics Research B, 2020, 474, 6-9.	0.6	0