

Stephan P A Sauer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9484998/publications.pdf>

Version: 2024-02-01

208
papers

8,820
citations

53794

45
h-index

53230

85
g-index

220
all docs

220
docs citations

220
times ranked

5270
citing authors

#	ARTICLE	IF	CITATIONS
1	A tale of two vectors: A Lanczos algorithm for calculating RPA mean excitation energies. <i>Journal of Chemical Physics</i> , 2022, 156, 014102.	3.0	1
2	Extending NMR Quantum Computation Systems by Employing Compounds with Several Heavy Metals as Qubits. <i>Magnetochemistry</i> , 2022, 8, 47.	2.4	5
3	Calculation of mean excitation energies of 3d-elements and their cations. <i>Molecular Physics</i> , 2021, 119, e1823508.	1.7	4
4	Estimating the accuracy of calculated electron paramagnetic resonance hyperfine couplings for a lytic polysaccharide monooxygenase. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 555-567.	4.1	11
5	Free Molecule Studies by Perturbed $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> \langle \text{mml:mrow} \langle \text{mml:mi} \hat{I}^3 \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \hat{a} \rangle \langle \text{mml:mtext} \rangle \langle \text{mml:mi} \hat{I}^3 \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ Angular Correlation: A New Path to Accurate Nuclear Quadrupole Moments. <i>Physical Review Letters</i> , 2021, 126, 103001.	7.8	15
6	A Density Functional Theory Study of Optical Rotation in Some Aziridine and Oxirane Derivatives. <i>ChemPhysChem</i> , 2021, 22, 764-774.	2.1	2
7	Azo-hydrazone molecular switches: Synthesis and NMR conformational investigation. <i>Magnetic Resonance in Chemistry</i> , 2021, 59, 1116-1125.	1.9	5
8	A QM/MM study of the conformation stability and electronic structure of the photochromic switches derivatives of DHA/VHF in acetonitrile solution. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 251, 119434.	3.9	10
9	Benchmarking Correlated Methods for Static and Dynamic Polarizabilities: The T145 Data Set Evaluated with RPA, RPA(D), HRPDA, HRPDA(D), SOPPA, SOPPA(CC2), SOPPA(CCSD), CC2, and CCSD. <i>Journal of Physical Chemistry A</i> , 2021, 125, 3785-3792.	2.5	5
10	The best density functional theory functional for the prediction of ^1H and ^{13}C chemical shifts of protonated alkylypyrroles. <i>Journal of Computational Chemistry</i> , 2021, 42, 1248-1262.	3.3	5
11	Importance of Relativistic Effects for Carbon as an NMR Reporter Nucleus in Carbide-Bridged [RuCpT] Complexes. <i>Organometallics</i> , 2021, 40, 1443-1453.	2.3	4
12	The aug-cc-pVTZ basis set for the p-block fourth-row elements Ga, Ge, As, Se, and Br. <i>Magnetic Resonance in Chemistry</i> , 2021, 59, 1134-1145.	1.9	6
13	Prediction of the standard potentials for one-electron oxidation of N^{I} , N^{II} , N^{III} , N^{IV} tetrasubstituted p-phenylenediamines by calculation. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 20340-20351.	2.8	3
14	Benchmarking anisotropic polarizabilities for 14 (hetero)aromatic molecules at RPA, RPA(D), HRPDA, HRPDA(D), SOPPA, SOPPA(CC2), SOPPA(CCSD) and CC3 levels. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26593.	2.0	3
15	On the Unexpected Accuracy of the M06L Functional in the Calculation of ^1J and ^1FC Spin-Spin Coupling Constants. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7712-7723.	5.3	10
16	Noniterative Doubles Corrections to the Random Phase and Higher Random Phase Approximations: Singlet and Triplet Excitation Energies. <i>Journal of Computational Chemistry</i> , 2020, 41, 43-55.	3.3	17
17	NMR parameters of FNNF as a test for coupled-cluster methods: CCSDT shielding and CC3 spin-spin coupling. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 21350-21359.	2.8	10
18	Benchmarking doubles-corrected random-phase approximation methods for frequency dependent polarizabilities: Aromatic molecules calculated at the RPA, HRPDA, RPA(D), HRPDA(D), and SOPPA levels. <i>Journal of Chemical Physics</i> , 2020, 152, 234101.	3.0	10

#	ARTICLE	IF	CITATIONS
19	RPA(D) and HRPA(D): calculation of carbon-carbon spin-spin coupling constants for saturated cycloalkanes. <i>Molecular Physics</i> , 2020, 118, .	1.7	9
20	Interfacial tension in water/n-decane/naphthenic acid systems predicted by a combined COSMO-RS theory and pendant drop experimental study. <i>Molecular Physics</i> , 2020, 118, e1764645.	1.7	3
21	Dalton Project: A Python platform for molecular- and electronic-structure simulations of complex systems. <i>Journal of Chemical Physics</i> , 2020, 152, 214115.	3.0	45
22	Enhancing NMR Quantum Computation by Exploring Heavy Metal Complexes as Multiqubit Systems: A Theoretical Investigation. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4946-4955.	2.5	12
23	On the relationship between bond correction factors and elemental mean excitation energies. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020, 474, 6-9.	1.4	0
24	Bond correction factors and their applications to the calculation of molecular mean excitation energies. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020, 468, 28-36.	1.4	2
25	The Second-Order-Polarization-Propagator-Approximation (SOPPA) in a four-component spinor basis. <i>Journal of Chemical Physics</i> , 2020, 152, 134113.	3.0	16
26	Benchmarking Correlated Methods for Frequency-Dependent Polarizabilities: Aromatic Molecules with the CC3, CCSD, CC2, SOPPA, SOPPA(CC2), and SOPPA(CCSD) Methods. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 3006-3018.	5.3	10
27	Computational Prediction of ^1H and ^{13}C NMR Chemical Shifts for Protonated Alkylpyrroles: Electron Correlation and Not Solvation is the Salvation. <i>ChemPhysChem</i> , 2019, 20, 78-91.	2.1	15
28	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. <i>Advances in Quantum Chemistry</i> , 2019, 80, 127-146.	0.8	3
29	Calculation of mean excitation energies. <i>Advances in Quantum Chemistry</i> , 2019, 80, 225-245.	0.8	10
30	Determining short-lived solid forms during phase transformations using molecular dynamics. <i>CrystEngComm</i> , 2019, 21, 4020-4024.	2.6	16
31	Test of the validity of Bragg's rule for mean excitation energies of small molecules and ions. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 444, 112-116.	1.4	6
32	Mean excitation energies of singly charged atomic anions with $Z \leq 18$. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 095004.	1.5	5
33	Entropy/Enthalpy Compensation in Anion Binding: Biotin[6]uril and Biotin-sulfoxide[6]uril Reveal Strong Solvent Dependency. <i>Journal of Organic Chemistry</i> , 2019, 84, 2577-2584.	3.2	23
34	Through-space spin-spin coupling constants involving fluorine: benchmarking DFT functionals. <i>Molecular Physics</i> , 2019, 117, 1469-1480.	1.7	18
35	On the convergence of the cc-pVXZ and pcj-n basis sets in CCSD calculations of nuclear spin-spin coupling constants: some difficult cases. <i>Theoretical Chemistry Accounts</i> , 2018, 137, 1.	1.4	14
36	Theoretical study of the NMR chemical shift of Xe in supercritical condition. <i>Journal of Molecular Modeling</i> , 2018, 24, 62.	1.8	3

#	ARTICLE	IF	CITATIONS
37	Frontispiece: Relativistic DFT Calculations of Hyperfine Coupling Constants in 5d Hexafluorido Complexes: [ReF ₆] ²⁺ and [IrF ₆] ²⁺ . Chemistry - A European Journal, 2018, 24, .	3.3	1
38	Relativistic DFT Calculations of Hyperfine Coupling Constants in 5d Hexafluorido Complexes: [ReF ₆] ²⁺ and [IrF ₆] ²⁺ . Chemistry - A European Journal, 2018, 24, 5124-5133.	3.3	16
39	Direct observation of Mg ²⁺ complexes in ionic liquid solutions by ³¹ Mg $\hat{\nu}$ -NMR spectroscopy. Dalton Transactions, 2018, 47, 14431-14435.	3.3	12
40	RPA(D) and HRPA(D): Two new models for calculations of NMR indirect nuclear spin-spin coupling constants. Journal of Computational Chemistry, 2018, 39, 2647-2666.	3.3	21
41	The influence of relativistic effects on nuclear magnetic resonance spin-spin coupling constant polarizabilities of H ₂ O, H ₂ S, H ₂ Se, and H ₂ Te. Journal of Computational Chemistry, 2018, 39, 2589-2600.	3.3	7
42	Analysis of the interactions in FCCF:(H ₂ O) and FCCF:(H ₂ O) ₂ complexes through the study of their indirect spin-spin coupling constants. Molecular Physics, 2018, 116, 2396-2405.	1.7	8
43	A Physical Model of the Proton Radiation Belts of Jupiter inside Europa's Orbit. Journal of Geophysical Research: Space Physics, 2018, 123, 3512-3532.	2.4	30
44	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
45	Development of polarization consistent basis sets for spin-spin coupling constant calculations for the atoms Li, Be, Na, and Mg. Journal of Chemical Physics, 2018, 149, 044117.	3.0	22
46	The role of explicit solvent molecules in the calculation of NMR chemical shifts of glycine in water. Theoretical Chemistry Accounts, 2018, 137, 1.	1.4	16
47	Azadioxatriangulenium and Diazaoxatriangulenium: Quantum Yields and Fundamental Photophysical Properties. ACS Omega, 2017, 2, 193-203.	3.5	29
48	Quadrupole moments of Cd and Zn nuclei: When solid-state, molecular, atomic, and nuclear theory meet. Europhysics Letters, 2017, 117, 62001.	2.0	21
49	Mean excitation energies for molecular ions. Nuclear Instruments & Methods in Physics Research B, 2017, 394, 73-80.	1.4	12
50	Importance of Triples Contributions to NMR Spin-Spin Coupling Constants Computed at the CC3 and CCSDT Levels. Journal of Chemical Theory and Computation, 2017, 13, 696-709.	5.3	41
51	Molecular Switching in Confined Spaces: Effects of Encapsulating the DHA/VHF Photo-switch in Cucurbiturils. Chemistry - A European Journal, 2017, 23, 17010-17016.	3.3	23
52	On the convergence of zero-point vibrational corrections to nuclear shieldings and shielding anisotropies towards the complete basis set limit in water. Molecular Physics, 2017, 115, 144-160.	1.7	19
53	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
54	Calculation of dipole polarizability derivatives of adamantane and their use in electron scattering computations. European Physical Journal D, 2016, 70, 1.	1.3	5

#	ARTICLE	IF	CITATIONS
55	The Effect of Solvation on the Radiation Damage Rate Constants for Adenine. <i>ChemPhysChem</i> , 2016, 17, 3086-3095.	2.1	5
56	Spin-orbit ZORA and four-component Dirac-Coulomb estimation of relativistic corrections to isotropic nuclear shieldings and chemical shifts of noble gas dimers. <i>Journal of Computational Chemistry</i> , 2016, 37, 395-403.	3.3	14
57	DFT and experimental studies on structure and spectroscopic parameters of 3,6-diiodo-9-ethyl-9H-carbazole. <i>Structural Chemistry</i> , 2016, 27, 199-207.	2.0	12
58	Ligand Sphere Conversions in Terminal Carbide Complexes. <i>Organometallics</i> , 2016, 35, 100-105.	2.3	20
59	Rovibrational and Temperature Effects in Theoretical Studies of NMR Parameters. <i>New Developments in NMR</i> , 2016, , 218-266.	0.1	23
60	On the truncation of the number of excited states in density functional theory sum-over-states calculations of indirect spin spin coupling constants. <i>Journal of Chemical Physics</i> , 2015, 143, 244107.	3.0	3
61	Insight into the Mechanism of the Initial Reaction of an OH Radical with DNA/RNA Nucleobases: A Computational Investigation of Radiation Damage. <i>Chemistry - A European Journal</i> , 2015, 21, 17786-17799.	3.3	18
62	SOPPA and CCSD vibrational corrections to NMR indirect spin-spin coupling constants of small hydrocarbons. <i>AIP Conference Proceedings</i> , 2015, , .	0.4	13
63	The Mean Excitation Energy of Atomic Ions. <i>Advances in Quantum Chemistry</i> , 2015, , 29-40.	0.8	14
64	Kinetics and Thermodynamics of the Reaction between the OH Radical and Adenine: A Theoretical Investigation. <i>Journal of Physical Chemistry A</i> , 2015, 119, 6516-6527.	2.5	21
65	Molecular modeling and experimental studies on structure and NMR parameters of 9-benzyl-3,6-diiodo-9H-carbazole. <i>Structural Chemistry</i> , 2015, 26, 997-1006.	2.0	18
66	Exploring the relationship between the conformation and pK_a : can a pK_a value be used to determine the conformational equilibrium?. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 3116-3121.	2.8	13
67	Performance of SOPPA-based methods in the calculation of vertical excitation energies and oscillator strengths. <i>Molecular Physics</i> , 2015, 113, 2026-2045.	1.7	31
68	Anion binding by biotin[6]uril in water. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 369-373.	2.8	76
69	Optimizing the Structure of Tetracyanoplatinate (II): A Comparison of Relativistic Density Functional Theory Methods. <i>Current Inorganic Chemistry</i> , 2014, 3, 213-219.	0.2	7
70	On the Use of Locally Dense Basis Sets in the Calculation of EPR Hyperfine Couplings: A Study on Model Systems for Bio-Inorganic Fe and Co Complexes. <i>Current Inorganic Chemistry</i> , 2014, 3, 270-283.	0.2	6
71	Communication: Localized molecular orbital analysis of the effect of electron correlation on the anomalous isotope effect in the NMR spin-spin coupling constant in methane. <i>Journal of Chemical Physics</i> , 2014, 141, 151101.	3.0	8
72	The Second-Order Polarization Propagator Approximation (SOPPA) method coupled to the polarizable continuum model. <i>Computational and Theoretical Chemistry</i> , 2014, 1040-1041, 54-60.	2.5	9

#	ARTICLE	IF	CITATIONS
73	The Dalton quantum chemistry program system. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2014, 4, 269-284.	14.6	1,166
74	Coupled cluster calculations of mean excitation energies of the noble gas atoms He, Ne and Ar and of the H ₂ molecule. Molecular Physics, 2014, 112, 751-761.	1.7	12
75	On the transferability of atomic contributions to the optical rotatory power of hydrogen peroxide, methyl hydroperoxide and dimethyl peroxide. Molecular Physics, 2014, 112, 1624-1632.	1.7	3
76	First example of a high-level correlated calculation of the indirect spin-spin coupling constants involving tellurium: tellurophene and divinyl telluride. Physical Chemistry Chemical Physics, 2013, 15, 13101-13107.	2.8	30
77	Failures of TDDFT in describing the lowest intramolecular charge-transfer excitation in <i>para</i> -nitroaniline. Molecular Physics, 2013, 111, 1235-1248.	1.7	79
78	On the Determination of the Mean Excitation Energy of Water. Advances in Quantum Chemistry, 2013, 65, 63-77.	0.8	14
79	Halogen effect on structure and ¹³ C NMR chemical shift of 3,6-disubstituted <i>N</i> -alkyl carbazoles. Magnetic Resonance in Chemistry, 2013, 51, 630-635.	1.9	27
80	Magnetic interactions in oxide-bridged dichromium(III) complexes. Computational determination of the importance of non-bridging ligands. Inorganica Chimica Acta, 2013, 396, 72-77.	2.4	10
81	Estimation of isotropic nuclear magnetic shieldings in the CCSD(T) and MP2 complete basis set limit using affordable correlation calculations. Magnetic Resonance in Chemistry, 2013, 51, 482-489.	1.9	24
82	Validating and Analyzing EPR Hyperfine Coupling Constants with Density Functional Theory. Journal of Chemical Theory and Computation, 2013, 9, 2380-2388.	5.3	29
83	Effective potential energy curves of the ground electronic state of CH ⁺ . Journal of Chemical Physics, 2013, 138, 024315.	3.0	19
84	Relation between properties of long-range diatomic bound states. Physical Review A, 2013, 87, .	2.5	10
85	Quantum-dynamical Modeling of the Rydberg to Valence Excited-State Internal Conversion in Cyclobutanone and Cyclopentanone. EPJ Web of Conferences, 2013, 41, 02033.	0.3	0
86	Symmetry, vibrational energy redistribution and vibronic coupling: The internal conversion processes of cycloketones. Journal of Chemical Physics, 2012, 137, 22A522.	3.0	17
87	A comparison of density functional theory and coupled cluster methods for the calculation of electric dipole polarizability gradients of methane. AIP Conference Proceedings, 2012, , .	0.4	13
88	Fully relativistic coupled cluster and DFT study of electric field gradients at Hg in 199Hg compounds. Physical Chemistry Chemical Physics, 2012, 14, 2651.	2.8	31
89	On the discrepancy between theory and experiment for the F-F spin-spin coupling constant of difluoroethyne. Physical Chemistry Chemical Physics, 2012, 14, 16440.	2.8	19
90	Electric field gradients in Hg compounds: Molecular orbital (MO) analysis and comparison of 4-component and 2-component (ZORA) methods. Physical Chemistry Chemical Physics, 2012, 14, 16070.	2.8	13

#	ARTICLE	IF	CITATIONS
91	Analysis of the interactions between difluoroacetylene and one or two hydrogen fluoride molecules based on calculated spin-spin coupling constants. Computational and Theoretical Chemistry, 2012, 998, 98-105.	2.5	14
92	Improving the calculation of electron paramagnetic resonance hyperfine coupling tensors for d-block metals. Physical Chemistry Chemical Physics, 2012, 14, 10669.	2.8	31
93	Nuclear magnetic resonance J coupling constant polarizabilities of hydrogen peroxide: A basis set and correlation study. Journal of Computational Chemistry, 2012, 33, 1845-1853.	3.3	13
94	On the importance of excited state dynamic response electron correlation in polarizable embedding methods. Journal of Computational Chemistry, 2012, 33, 2012-2022.	3.3	38
95	Estimating the carbonyl anharmonic vibrational frequency from affordable harmonic frequency calculations. Journal of Molecular Modeling, 2012, 18, 2471-2478.	1.8	10
96	Theoretical study of the triplet excited state of PtPOP and the exciplexes M-PtPOP (M=Tl, Ag) in solution and comparison with ultrafast X-ray scattering results. Chemical Physics, 2012, 393, 117-122.	1.9	14
97	Definitive Benchmark Study of Ring Current Effects on Amide Proton Chemical Shifts. Journal of Chemical Theory and Computation, 2011, 7, 2078-2084.	5.3	16
98	An Isogomine Analogue with an Amidine at the Pseudoanomeric Position. Organic Letters, 2011, 13, 2908-2911.	4.6	15
99	Optimized Basis Sets for Calculation of Electron Paramagnetic Resonance Hyperfine Coupling Constants: aug-cc-pVTZ-J for the 3d Atoms Sc-Zn. Journal of Chemical Theory and Computation, 2011, 7, 4077-4087.	5.3	78
100	Nuclear magnetic resonance shielding constants and chemical shifts in linear 199Hg compounds: A comparison of three relativistic computational methods. Journal of Chemical Physics, 2011, 135, 044306.	3.0	55
101	Pople Style Basis Sets for the Calculation of NMR Spin-Spin Coupling Constants: the 6-31G-J and 6-311G-J Basis Sets. Journal of Chemical Theory and Computation, 2011, 7, 4070-4076.	5.3	52
102	Mean Excitation Energies for Biomolecules. Advances in Quantum Chemistry, 2011, 62, 215-242.	0.8	18
103	Electric field effects on nuclear spin-spin coupling tensors and chiral discrimination via NMR spectroscopy. Theoretical Chemistry Accounts, 2011, 129, 359-366.	1.4	18
104	Calculated rotational and vibrational $\langle i \rangle g \langle i \rangle$ factors of LiH X $\langle \sup \rangle 1 \langle \sup \rangle \hat{\Sigma} \langle \sup \rangle + \langle \sup \rangle$ and evaluation of parameters in radial functions from rotational and vibrational rotational spectra. International Journal of Quantum Chemistry, 2011, 111, 736-752.	2.0	4
105	David M. Bishop: Esteemed colleague and dear friend. International Journal of Quantum Chemistry, 2011, 111, 723-724.	2.0	0
106	David M. Bishop Curriculum Vitae. International Journal of Quantum Chemistry, 2011, 111, 725-725.	2.0	0
107	From CCSD(T)/aug-cc-pVTZ to CCSD(T) complete basis set limit isotropic nuclear magnetic shieldings via affordable DFT/CBS calculations. Magnetic Resonance in Chemistry, 2011, 49, 231-236.	1.9	50
108	The coupling constant polarizability and hyperpolarizability of $\langle \sup \rangle 1 \langle \sup \rangle \langle i \rangle \langle i \rangle$ (NH) in $\langle i \rangle N \langle i \rangle$ -methylacetamide, and its application for the multipole spin-spin coupling constant polarizability/reaction field approach to solvation. Journal of Computational Chemistry, 2011, 32, 3168-3174.	3.3	4

#	ARTICLE	IF	CITATIONS
109	Heterobimetallic Nitride Complexes from Terminal Chromium(V) Nitride Complexes: Hyperfine Coupling Increases with Distance. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4480-4483.	13.8	27
110	Benchmarking SOPPA(CC2) for the calculation of indirect nuclear spin-spin coupling constants: Carbocycles. <i>Chemical Physics</i> , 2011, 381, 35-43.	1.9	31
111	Benchmarking the multipole shielding polarizability/reaction field approach to solvation against QM/MM: Applications to the shielding constants of N-methylacetamide. <i>Journal of Chemical Physics</i> , 2011, 134, 044514.	3.0	9
112	Comparison of the directional characteristics of swift ion excitation for two small biomolecules: glycine and alanine. <i>European Physical Journal D</i> , 2010, 60, 71-76.	1.3	11
113	Structural trends of $^{77}\text{Se} \text{ } ^1\text{H}$ spin-spin coupling constants and conformational behavior of 2-substituted selenophenes. <i>Magnetic Resonance in Chemistry</i> , 2010, 48, 44-52.	1.9	77
114	Thermal averaging of the indirect nuclear spin-spin coupling constants of ammonia: The importance of the large amplitude inversion mode. <i>Journal of Chemical Physics</i> , 2010, 132, 114305.	3.0	33
115	Optimized basis sets for the calculation of indirect nuclear spin-spin coupling constants involving the atoms B, Al, Si, P, and Cl. <i>Journal of Chemical Physics</i> , 2010, 133, 054308.	3.0	83
116	Communication: Rotational g-factor and spin-rotation constant of CH^+ . <i>Journal of Chemical Physics</i> , 2010, 133, 171101.	3.0	10
117	Mean Excitation Energies and Energy Deposition Characteristics of Bio-organic Molecules. <i>Journal of Physical Chemistry B</i> , 2010, 114, 633-637.	2.6	16
118	Mean Excitation Energies and Their Directional Characteristics for Energy Deposition by Swift Ions on the DNA and RNA Nucleobases. <i>Journal of Physical Chemistry C</i> , 2010, 114, 20335-20341.	3.1	14
119	Stopping power of molecules for fast ions. <i>Molecular Physics</i> , 2010, 108, 2891-2897.	1.7	8
120	Basis set effects on coupled cluster benchmarks of electronically excited states: CC3, CCSDR(3) and CC2. <i>Molecular Physics</i> , 2010, 108, 453-465.	1.7	142
121	The Effect of Solvation on the Mean Excitation Energy of Glycine. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 242-245.	4.6	20
122	Benchmarking NMR indirect nuclear spin-spin coupling constants: SOPPA, SOPPA(CC2), and SOPPA(CCSD) versus CCSD. <i>Journal of Chemical Physics</i> , 2010, 133, 144106.	3.0	72
123	Benchmarks of electronically excited states: Basis set effects on CASPT2 results. <i>Journal of Chemical Physics</i> , 2010, 133, 174318.	3.0	201
124	On the relation between the non-adiabatic vibrational reduced mass and the electric dipole moment gradient of a diatomic molecule. <i>Theoretical Chemistry Accounts</i> , 2009, 122, 137-143.	1.4	5
125	Partial charges as reactivity descriptors for nitrido complexes. <i>Computational and Theoretical Chemistry</i> , 2009, 913, 1-7.	1.5	15
126	Benchmarking Second Order Methods for the Calculation of Vertical Electronic Excitation Energies: Valence and Rydberg States in Polycyclic Aromatic Hydrocarbons. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11995-12012.	2.5	51

#	ARTICLE	IF	CITATIONS
127	Benchmarks for Electronically Excited States: A Comparison of Noniterative and Iterative Triples Corrections in Linear Response Coupled Cluster Methods: CCSDR(3) versus CC3. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 555-564.	5.3	115
128	Prediction of spin-spin coupling constants in solution based on combined density functional theory/molecular mechanics. <i>Journal of Chemical Physics</i> , 2009, 130, 134508.	3.0	48
129	Analysis of isotope effects in NMR one-bond indirect nuclear spin-spin coupling constants in terms of localized molecular orbitals. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 3987.	2.8	17
130	The Anomalous Deuterium Isotope Effect in the NMR Spectrum of Methane: An Analysis in Localized Molecular Orbitals. <i>ChemPhysChem</i> , 2008, 9, 1259-1261.	2.1	15
131	On the aromaticity of tetrathiafulvalene cations. <i>Chemical Physics Letters</i> , 2008, 453, 136-139.	2.6	25
132	On the Accuracy of Density Functional Theory to Predict Shifts in Nuclear Magnetic Resonance Shielding Constants due to Hydrogen Bonding. <i>Journal of Chemical Theory and Computation</i> , 2008, 4, 267-277.	5.3	51
133	A Comparison of Møller-Plesset and Coupled Cluster Linear Response Theory Methods for the Calculation of Dipole Oscillator Strength Sum Rules and C6 Dispersion Coefficients. <i>Collection of Czechoslovak Chemical Communications</i> , 2008, 73, 1415-1436.	1.0	10
134	Benchmarks for electronically excited states: Time-dependent density functional theory and density functional theory based multireference configuration interaction. <i>Journal of Chemical Physics</i> , 2008, 129, 104103.	3.0	478
135	Benchmarks for electronically excited states: CASPT2, CC2, CCSD, and CC3. <i>Journal of Chemical Physics</i> , 2008, 128, 134110.	3.0	833
136	Amino Acid Mean Excitation Energies and Directional Dependencies from Core and Bond Calculations. , 2008, , .		5
137	Atomic partition of the optical rotatory power of methylhydroperoxide. <i>Journal of Chemical Physics</i> , 2008, 128, 064318.	3.0	10
138	Calculations of Polarizabilities and Their Gradients for Electron Energy-Loss Spectroscopy. <i>Collection of Czechoslovak Chemical Communications</i> , 2008, 73, 1509-1524.	1.0	5
139	Gauge invariant calculations of nuclear magnetic shielding constants using the continuous transformation of the origin of the current density approach. II. Density functional and coupled cluster theory. <i>Journal of Chemical Physics</i> , 2007, 126, 154111.	3.0	34
140	The Rotational g Factor of Diatomic Molecules in State $1^1\Sigma^+$ or 0^+ . <i>Advances in Chemical Physics</i> , 2007, , 475-536.	0.3	15
141	On the Angular Dependence of the Vicinal Fluorine-Fluorine Coupling Constant in 1,2-Difluoroethane: Deviation from a Karplus-like Shape. <i>Journal of Chemical Theory and Computation</i> , 2006, 2, 1019-1027.	5.3	28
142	Directional Dependence of the Mean Excitation Energy and Spectral Moments of the Dipole Oscillator Strength Distribution of Glycine and Its Zwitterion. <i>Journal of Physical Chemistry A</i> , 2006, 110, 8811-8817.	2.5	26
143	Two-photon absorption cross sections: An investigation of the accuracy of calculated absolute and relative values. <i>Journal of Chemical Physics</i> , 2006, 124, 114108.	3.0	23
144	Quantum-Chemical Calculations of Radial Functions for Rotational and Vibrational g Factors, Electric Dipolar Moment and Adiabatic Corrections to the Potential Energy for Analysis of Spectra of HeH ⁺ . <i>Advances in Quantum Chemistry</i> , 2005, , 319-334.	0.8	17

#	ARTICLE	IF	CITATIONS
145	On the Usage of Locally Dense Basis Sets in the Calculation of NMR Indirect Nuclear Spin-Spin Coupling Constants: Vicinal Fluorine-Fluorine Couplings. <i>Advances in Quantum Chemistry</i> , 2005, , 161-183.	0.8	65
146	Analysis of Pure Rotational and Vibration-rotational Spectra of NaCl X1 ¹ and Quantum-chemical Calculation of Related Molecular Properties. <i>Journal of the Chinese Chemical Society</i> , 2005, 52, 631-639.	1.4	4
147	Calculations of Dipole and Quadrupole Polarizability Radial Functions for LiH and HF: A Comparison of Different Linear Response Methods. <i>Advances in Quantum Chemistry</i> , 2005, 48, 185-208.	0.8	15
148	The Rotational g Tensor of HF, H ₂ O, NH ₃ , and CH ₄ : A Comparison of Correlated Ab Initio Methods. <i>Advances in Quantum Chemistry</i> , 2005, 48, 469-490.	0.8	5
149	The vibrational g-factor of dihydrogen from theoretical calculation and analysis of vibration-rotational spectra. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 1747.	2.8	27
150	Interaction Energies and NMR Indirect Nuclear Spin-Spin Coupling Constants in Linear HCN and HNC Complexes. <i>Journal of Physical Chemistry A</i> , 2005, 109, 6555-6564.	2.5	52
151	First principle calculations of ¹¹³ Cd chemical shifts for proteins and model systems. <i>Journal of Biological Inorganic Chemistry</i> , 2004, 9, 591-599.	2.6	35
152	Non-empirical calculations of NMR indirect carbon-carbon coupling constants. Part 8 Monocycloalkanes. <i>Magnetic Resonance in Chemistry</i> , 2004, 42, 671-686.	1.9	50
153	Large Long-Range F-F Indirect Spin-Spin Coupling Constants. Prediction of Measurable F-F Couplings over a Few Nanometers. <i>Journal of Physical Chemistry A</i> , 2004, 108, 5393-5398.	2.5	49
154	Substituent Effects on Scalar 2J(¹⁹ F, ¹⁹ F) and 3J(¹⁹ F, ¹⁹ F) NMR Couplings: A Comparison of SOPPA and DFT Methods. <i>Journal of Physical Chemistry A</i> , 2003, 107, 4748-4754.	2.5	103
155	Correlated and gauge invariant calculations of nuclear magnetic shielding constants using the continuous transformation of the origin of the current density approach. <i>Journal of Chemical Physics</i> , 2003, 118, 6830-6845.	3.0	46
156	Response theory in the multipole reaction field model for equilibrium and nonequilibrium solvation: Exact theory and the second order polarization propagator approximation. <i>Journal of Chemical Physics</i> , 2003, 119, 3849-3870.	3.0	15
157	Special Issue on Nuclear Magnetic Resonance Spin-Spin Coupling Constants Calculations and Measurements. <i>International Journal of Molecular Sciences</i> , 2003, 4, 62-63.	4.1	1
158	The Effect of Substituents on Indirect Nuclear Spin-Spin Coupling Constants: Methan- and Ethanimine, Methanal- and Ethanaloxime. <i>International Journal of Molecular Sciences</i> , 2003, 4, 231-248.	4.1	24
159	Electric field gradients of water: A systematic investigation of basis set, electron correlation, and rovibrational effects. <i>Journal of Chemical Physics</i> , 2002, 116, 1424-1434.	3.0	20
160	Non-empirical calculations of NMR indirect carbon-carbon coupling constants: 1. Three-membered rings. <i>Magnetic Resonance in Chemistry</i> , 2002, 40, 187-194.	1.9	69
161	Infrared spectra of CO in absorption and evaluation of radial functions for potential energy and electric dipolar moment. <i>Theoretical Chemistry Accounts</i> , 2002, 108, 85-97.	1.4	42
162	The effect of lone pairs and electronegativity on the indirect nuclear spin-spin coupling constants in CH ₂ X (X=CH ₂ , NH, O, S): Ab initio calculations using optimized contracted basis sets. <i>Journal of Chemical Physics</i> , 2001, 115, 1324-1334.	3.0	252

#	ARTICLE	IF	CITATIONS
163	A multipole second order Müller–Plesset solvent reaction field method. <i>Journal of Chemical Physics</i> , 2001, 114, 7753-7760.	3.0	11
164	Theoretical Investigation of Steric and Electronic Effects in Coenzyme B12 Models. <i>Organometallics</i> , 2001, 20, 550-556.	2.3	58
165	Ab initio calculations on 2-imidazolyl-2-thiazolyl azo compounds – an investigation of potential near-infrared absorbing structures. <i>Chemical Physics Letters</i> , 2001, 343, 171-177.	2.6	12
166	Relativistic calculations of the rotational g factor of the hydrogen halides and noble gas hydride cations. <i>Journal of Chemical Physics</i> , 2001, 114, 84.	3.0	20
167	Nuclear spin–spin coupling in silane and its isotopomers: Ab initio calculation and experimental investigation. <i>Journal of Chemical Physics</i> , 2001, 115, 5994-6006.	3.0	70
168	Five-membered rings as diazo components in optical data storage devices: an ab initio investigation of the lowest singlet excitation energies. <i>Chemical Physics Letters</i> , 2000, 325, 115-119.	2.6	57
169	Nuclear spin–spin coupling in the acetylene isotopomers calculated from ab initio correlated surfaces for 1J(C,â€ŠH), 1J(C,â€ŠC), 2J(C,â€ŠH), and 3J(H,â€ŠH). <i>Journal of Chemical Physics</i> , 2000, 112, 3735-3746.	3.0	98
170	Nuclear magnetic shielding in the acetylene isotopomers calculated from correlated shielding surfaces. <i>Journal of Chemical Physics</i> , 2000, 112, 736-746.	3.0	51
171	Atomic integral driven second order polarization propagator calculations of the excitation spectra of naphthalene and anthracene. <i>Journal of Chemical Physics</i> , 2000, 112, 4173-4185.	3.0	131
172	Unexpected differential sensitivity of nuclear spin–spin-coupling constants to bond stretching in BH4 ⁻ , â€ŠNH4 ⁺ , and SiH4. <i>Journal of Chemical Physics</i> , 2000, 113, 3121-3129.	3.0	78
173	The use of locally dense basis sets in the calculation of indirect nuclear spin–spin coupling constants: The vicinal coupling constants in H3Câ€ŠCH2X (X=H, F, Cl, Br, I). <i>Journal of Chemical Physics</i> , 2000, 112, 6201-6208.	3.0	86
174	The computation of Karplus equation coefficients and their components using self-consistent field and second-order polarization propagator methods. <i>Molecular Physics</i> , 2000, 98, 1981-1990.	1.7	28
175	Ab Initio Calculation of the Electronic Spectrum of Azobenzene Dyes and Its Impact on the Design of Optical Data Storage Materials. <i>Journal of the American Chemical Society</i> , 2000, 122, 3482-3487.	13.7	114
176	Calculations of the indirect nuclear spin-spin coupling constants of PbH 4. <i>Theoretical Chemistry Accounts</i> , 1999, 103, 146-153.	1.4	53
177	The Bethe Sum Rule and Basis Set Selection in the Calculation of Generalized Oscillator Strengths. <i>Advances in Quantum Chemistry</i> , 1999, , 175-192.	0.8	8
178	Calculated nuclear shielding surfaces in the water molecule; prediction and analysis of Îšf(O), Îšf(H) and Îšf(D) in water isotopomers. <i>Molecular Physics</i> , 1999, 96, 1595-1607.	1.7	30
179	Calculated nuclear shielding surfaces in the water molecule; prediction and analysis of sigma(O), sigma(H) and sigma(D) in water isotopomers. <i>Molecular Physics</i> , 1999, 96, 1595-1607.	1.7	7
180	A second-order doubles correction to excitation energies in the random-phase approximation. <i>Chemical Physics Letters</i> , 1998, 284, 47-55.	2.6	39

#	ARTICLE	IF	CITATIONS
181	A relation between the rotational g-factor and the electric dipole moment of a diatomic molecule. Chemical Physics Letters, 1998, 297, 475-483.	2.6	20
182	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.	1.4	287
183	The vibrational and temperature dependence of the indirect nuclear spin-spin coupling constants of the oxonium (H ₃ O ⁺) and hydroxyl (OH [•]) ions. Chemical Physics, 1998, 238, 385-399.	1.9	49
184	Correlated, Static and Dynamic Polarizabilities of Small Molecules. Comparison of Four "Black Box" Methods. Journal of Physical Chemistry A, 1998, 102, 5269-5274.	2.5	64
185	Calculated spin-spin coupling surfaces in the water molecule; prediction and analysis of J(O, H), J(O, D) and J(H, D) in water isotopomers. Molecular Physics, 1998, 94, 851-862.	1.7	88
186	Second-order polarization propagator approximation with coupled-cluster singles and doubles amplitudes - SOPPA(CCSD): the polarizability and hyperpolarizability of. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 3773-3780.	1.5	147
187	Calculation, with the inclusion of vibrational corrections, of the dc-electric-field-induced second-harmonic-generation hyperpolarizability of methane. Journal of Chemical Physics, 1997, 107, 8502-8509.	3.0	46
188	The vibrational dependence of the hydrogen and oxygen nuclear magnetic shielding constants in OH [•] and OH [•] · H ₂ O. Chemical Physics, 1997, 214, 91-101.	1.9	19
189	Theoretical estimates of the rotational g-factor, magnetizability and electric dipole moment of GaH. Chemical Physics Letters, 1996, 260, 271-279.	2.6	30
190	Calculations of magnetic hyperfine structure constants for the low-lying rovibrational levels of LiH, HF, CH ₃ ⁺ , and BH. Chemical Physics, 1995, 201, 405-425.	1.9	24
191	Calculated molecular mean excitation energies for some small molecules. Nuclear Instruments & Methods in Physics Research B, 1995, 100, 458-463.	1.4	31
192	Experimental and Theoretical Estimates of the Rotational g Factor of AlH in the Electronic Ground State X ¹ Σ ⁺ . The Journal of Physical Chemistry, 1994, 98, 8617-8621.	2.9	44
193	Correlated dipole oscillator sum rules. Journal of Chemical Physics, 1994, 100, 8969-8975.	3.0	30
194	The vibrational and temperature dependence of the magnetic properties of the oxonium ion (H ₃ O ⁺). Chemical Physics, 1994, 184, 1-11.	1.9	26
195	Correlated polarization propagator calculations of static polarizabilities. International Journal of Quantum Chemistry, 1994, 50, 317-332.	2.0	40
196	Correlated and gauge origin independent calculations of magnetic properties. Theoretica Chimica Acta, 1994, 88, 351-361.	0.8	47
197	Correlated dipole polarizabilities and dipole moments of the halides HX and CH ₃ X (X=F, Cl and Br). Theoretica Chimica Acta, 1994, 89, 323-333.	0.8	26
198	Evaluation of adiabatic and nonadiabatic effects from vibration-rotational spectra of LiH X ¹ Σ ⁺ . Chemical Physics Letters, 1994, 228, 183-190.	2.6	33

#	ARTICLE	IF	CITATIONS
199	Correlated and gauge origin independent calculations of magnetic properties. <i>Molecular Physics</i> , 1994, 81, 87-118.	1.7	59
200	Calculation of the Verdet constants for H ₂ , N ₂ , CO, and FH. <i>Journal of Chemical Physics</i> , 1993, 98, 487-495.	3.0	40
201	Directional characteristics of the moments of the dipole-oscillator-strength distribution of molecules:H ₂ andH ₂ O. <i>Physical Review A</i> , 1993, 47, 1123-1129.	2.5	21
202	Paramagnetism of closed shell diatomic hydrides with six valence electrons. <i>Journal of Chemical Physics</i> , 1993, 98, 9748-9757.	3.0	50
203	A sum-over-states formulation of the diamagnetic contribution to the indirect nuclear spin-spin coupling constant. <i>Journal of Chemical Physics</i> , 1993, 98, 9220-9221.	3.0	29
204	Correlated calculations of the rotational g-tensor and origin independent magnetizability surface of BH. <i>Molecular Physics</i> , 1992, 76, 445-465.	1.7	44
205	The magnetizability and g-factor surfaces of ammonia. <i>Chemical Physics</i> , 1991, 153, 189-200.	1.9	35
206	Second-order polarization propagator calculations of dynamic dipole polarizabilities and C ₆ coefficients. <i>International Journal of Quantum Chemistry</i> , 1991, 39, 667-679.	2.0	39
207	Magnesium(II)-ATP Complexes in Ethylmethylimidazolium Acetate Solutions Characterized by ³¹ Mg ² -Radiation-Detected NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 0, , .	13.8	1
208	Magnesium(II)-ATP Complexes in Ethylmethylimidazolium Acetate Solutions Characterized by ³¹ Mg ² -Radiation-Detected NMR Spectroscopy. <i>Angewandte Chemie</i> , 0, , .	2.0	1