## Kenneth Ruud

List of Publications by Year in descending order

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335 papers

16,495 citations

14655 66 h-index 23533 111 g-index

364 all docs

364 docs citations

times ranked

364

8299 citing authors

| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Ab Initio Methods for the Calculation of NMR Shielding and Indirect Spinâ-'Spin Coupling Constants. Chemical Reviews, 1999, 99, 293-352.  | 47.7 | 1,318     |
| 2  | The <scp>D</scp> alton quantum chemistry program system. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2014, 4, 269-284.  | 14.6 | 1,166     |
| 3  | Recent Advances in Wave Function-Based Methods of Molecular-Property Calculations. Chemical Reviews, 2012, 112, 543-631.  | 47.7 | 549       |
| 4  | Multiconfigurational selfâ€consistent field calculations of nuclear shieldings using London atomic orbitals. Journal of Chemical Physics, 1994, 100, 8178-8185.   | 3.0  | 229       |
| 5  | Vibrational Raman optical activity calculations using London atomic orbitals. Faraday Discussions, 1994, 99, 165-180.   | 3.2  | 225       |
| 6  | An efficient approach for calculating vibrational wave functions and zero-point vibrational corrections to molecular properties of polyatomic molecules. Journal of Chemical Physics, 2000, 112, 2668-2683. | 3.0  | 209       |
| 7  | Hartree–Fock limit magnetizabilities from London orbitals. Journal of Chemical Physics, 1993, 99, 3847-3859.  | 3.0  | 202       |
| 8  | Perturbationâ€dependent atomic orbitals for the calculation of spinâ€rotation constants and rotational g tensors. Journal of Chemical Physics, 1996, 105, 2804-2812.  | 3.0  | 201       |
| 9  | Optical rotation studied by density-functional and coupled-cluster methods. Chemical Physics Letters, 2002, 352, 533-539.   | 2.6  | 192       |
| 10 | Gaugeâ€origin independent multiconfigurational selfâ€consistentâ€field theory for vibrational circular dichroism. Journal of Chemical Physics, 1993, 98, 8873-8887.   | 3.0  | 186       |
| 11 | Basis-set dependence of nuclear spin-spin coupling constants. Theoretical Chemistry Accounts, 1998, 99, 175-182.  | 1.4  | 175       |
| 12 | Arbitrary-Order Density Functional Response Theory from Automatic Differentiation. Journal of Chemical Theory and Computation, 2010, 6, 1971-1980.  | 5.3  | 174       |
| 13 | Gauge-Origin Independent Density-Functional Theory Calculations of Vibrational Raman Optical Activity. Journal of Physical Chemistry A, 2002, 106, 7448-7455.   | 2.5  | 162       |
| 14 | Benchmarking two-photon absorption cross sections: performance of CC2 and CAM-B3LYP. Physical Chemistry Chemical Physics, 2015, 17, 19306-19314.  | 2.8  | 160       |
| 15 | Vibrational corrections to indirect nuclear spin–spin coupling constants calculated by density-functional theory. Journal of Chemical Physics, 2003, 118, 9572-9581.  | 3.0  | 156       |
| 16 | TDDFT diagnostic testing and functional assessment for triazene chromophores. Physical Chemistry Chemical Physics, 2009, 11, 4465.  | 2.8  | 145       |
| 17 | Coupled-cluster calculations of optical rotation. Chemical Physics Letters, 2003, 373, 606-614.   | 2.6  | 138       |
| 18 | Zero-Point Vibrational Effects on Proton Shieldings:Â Functional-Group Contributions from ab Initio Calculations. Journal of the American Chemical Society, 2001, 123, 4826-4833.                           | 13.7 | 127       |

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|----|--|------|-----------|
| 19 | Perturbationalab initiocalculations of relativistic contributions to nuclear magnetic resonance shielding tensors. Journal of Chemical Physics, 2003, 119, 2623-2637.  | 3.0  | 124       |
| 20 | Density functional theory calculation of electronic circular dichroism using London orbitals. Chemical Physics Letters, 2004, 388, 110-119.  | 2.6  | 123       |
| 21 | Excitation Energies in Solution: The Fully Polarizable QM/MM/PCM Method. Journal of Physical Chemistry B, 2011, 115, 3027-3037.  | 2.6  | 118       |
| 22 | Rovibrational effects, temperature dependence, and isotope effects on the nuclear shielding tensors of water: A new 17O absolute shielding scale. Journal of Chemical Physics, 1998, 109, 8388-8397.   | 3.0  | 115       |
| 23 | Multiconfigurational self-consistent field linear response for the polarizable continuum model: Theory and application to ground and excited-state polarizabilities of para-nitroaniline in solution. Journal of Chemical Physics, 2003, 119, 5818-5827. | 3.0  | 113       |
| 24 | Leading-order relativistic effects on nuclear magnetic resonance shielding tensors. Journal of Chemical Physics, 2005, 122, 114107.  | 3.0  | 113       |
| 25 | The Ab Initio Calculation of Optical Rotation and Electronic Circular Dichroism. Advances in Quantum Chemistry, 2005, 50, 185-212.   | 0.8  | 109       |
| 26 | Basis Set and Density Functional Dependence of Vibrational Raman Optical Activity Calculations. Journal of Physical Chemistry A, 2005, 109, 7567-7574.   | 2.5  | 105       |
| 27 | Calculation of the vibrational wave function of polyatomic molecules. Journal of Chemical Physics, 2000, 112, 2655-2667.   | 3.0  | 104       |
| 28 | Conformational Effects on the Optical Rotation of Alanine and Proline. Journal of Physical Chemistry A, 2004, 108, 4269-4276.  | 2.5  | 103       |
| 29 | Density-functional-theory study of the electric-field-induced second harmonic generation (EFISHG) of push–pull phenylpolyenes in solution. Chemical Physics Letters, 2006, 425, 267-272.   | 2.6  | 99        |
| 30 | A density matrix-based quasienergy formulation of the Kohn–Sham density functional response theory using perturbation- and time-dependent basis sets. Journal of Chemical Physics, 2008, 129, 214108.  | 3.0  | 99        |
| 31 | The Importance of Molecular Vibrations: The Sign Change of the Optical Rotation of Methyloxirane.<br>Angewandte Chemie - International Edition, 2005, 44, 3594-3596.   | 13.8 | 98        |
| 32 | Quadratic response calculations of the electronic spin-orbit contribution to nuclear shielding tensors. Journal of Chemical Physics, 1998, 109, 1212-1222.   | 3.0  | 97        |
| 33 | Theoretical approaches to the calculation of Raman optical activity spectra. Chirality, 2009, 21, E54-67.  | 2.6  | 97        |
| 34 | Zero-point vibrational effects on optical rotation. Chemical Physics Letters, 2001, 337, 217-223.  | 2.6  | 95        |
| 35 | Electronically Excited States of Vitamin B <sub>12</sub> : Benchmark Calculations Including Time-Dependent Density Functional Theory and Correlated ab Initio Methods. Journal of Physical Chemistry A, 2011, 115, 1280-1292.                            | 2.5  | 94        |
| 36 | Pyrrolo[3,2â€ <i>b</i> )pyrrolesâ€"From Unprecedented Solvatofluorochromism to Twoâ€Photon Absorption. Chemistry - A European Journal, 2015, 21, 18364-18374.  | 3.3  | 93        |

| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Explicit versus Implicit Solvent Modeling of Raman Optical Activity Spectra. Journal of Physical Chemistry B, 2011, 115, 4128-4137.   | 2.6  | 92        |
| 38 | A Combined Atomic Force Microscopy and Computational Approach for the Structural Elucidation of Breitfussin A and B: Highly Modified Halogenated Dipeptides from <i>Thuiaria breitfussi</i> Angewandte Chemie - International Edition, 2012, 51, 12238-12241. | 13.8 | 92        |
| 39 | Optical Rotation Calculation of a Highly Flexible Molecule:Â The Case of Paraconic Acid. Journal of Physical Chemistry A, 2005, 109, 1449-1453.   | 2.5  | 91        |
| 40 | Ab initio calculations of zero-field splitting parameters. Chemical Physics, 2002, 279, 133-142.  | 1.9  | 90        |
| 41 | All-Metal Aromaticity: Revisiting the Ring Current Model among Transition Metal Clusters. Journal of Chemical Theory and Computation, 2013, 9, 4789-4796.   | 5.3  | 90        |
| 42 | ReSpect: Relativistic spectroscopy DFT program package. Journal of Chemical Physics, 2020, 152, 184101.   | 3.0  | 90        |
| 43 | Electric field dependence of magnetic properties: Multiconfigurational selfâ€consistent field calculations of hypermagnetizabilities and nuclear shielding polarizabilities of N2, C2H2, HCN, and H2O. Journal of Chemical Physics, 1995, 102, 8953-8966.     | 3.0  | 89        |
| 44 | Ab initio. Theoretica Chimica Acta, 1995, 90, 441.  | 0.8  | 86        |
| 45 | On the Nature and Incidence of $\hat{l}^2$ -Agostic Interactions in Ethyl Derivatives of Early Transition Metals: $\hat{A}$ Ethyltitanium Trichloride and Related Compounds. Journal of the American Chemical Society, 1998, 120, 3762-3772.                  | 13.7 | 84        |
| 46 | On the molecular electric quadrupole moment and the electric-field-gradient-induced birefringence of CO2 and CS2. Chemical Physics Letters, 2000, 326, 269-276.   | 2.6  | 83        |
| 47 | Structure, solvent, and relativistic effects on the NMR chemical shifts in square-planar transition-metal complexes: assessment of DFT approaches. Physical Chemistry Chemical Physics, 2015, 17, 24944-24955.  | 2.8  | 82        |
| 48 | Density-functional theory calculations of optical rotatory dispersion in the nonresonant and resonant frequency regions. Journal of Chemical Physics, 2004, 120, 5027-5035.   | 3.0  | 81        |
| 49 | An analytical derivative procedure for the calculation of vibrational Raman optical activity spectra. Journal of Chemical Physics, 2007, 127, 204105.   | 3.0  | 79        |
| 50 | Polarizable Density Embedding: A New QM/QM/MM-Based Computational Strategy. Journal of Physical Chemistry A, 2015, 119, 5344-5355.  | 2.5  | 78        |
| 51 | Accurate magnetizabilities of the isoelectronic series BeHâ^², BH, and CH+. The MCSCF-GIAO approach. Chemical Physics, 1995, 195, 157-169.  | 1.9  | 77        |
| 52 | Calculation of two-photon absorption strengths with the approximate coupled cluster singles and doubles model CC2 using the resolution-of-identity approximation. Physical Chemistry Chemical Physics, 2012, 14, 1175-1184.                                   | 2.8  | 76        |
| 53 | A combined quantum mechanics/molecular mechanics study of the one- and two-photon absorption in the green fluorescent protein. Physical Chemistry Chemical Physics, 2012, 14, 5440.   | 2.8  | 76        |
| 54 | Coupled cluster response calculation of natural chiroptical spectra. Journal of Chemical Physics, 1999, 110, 2883-2892.   | 3.0  | 75        |

| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 55 | Second- and third-order spin-orbit contributions to nuclear shielding tensors. Journal of Chemical Physics, 1999, 111, 2900-2909.   | 3.0  | 74        |
| 56 | Solvent Effects on NMR Isotropic Shielding Constants. A Comparison between Explicit Polarizable Discrete and Continuum Approaches. Journal of Physical Chemistry A, 2007, 111, 4199-4210.   | 2.5  | 74        |
| 57 | Magnetizability of Hydrocarbons. Journal of the American Chemical Society, 1994, 116, 10135-10140.  | 13.7 | 73        |
| 58 | Excitation Energies from Real-Time Propagation of the Four-Component Dirac–Kohn–Sham Equation.<br>Journal of Chemical Theory and Computation, 2015, 11, 980-991.  | 5.3  | 72        |
| 59 | A second-order, quadratically convergent multiconfigurational self-consistent field polarizable continuum model for equilibrium and nonequilibrium solvation. Journal of Chemical Physics, 2002, 117, 13-26.                      | 3.0  | 71        |
| 60 | Can Raman Optical Activity Separate Axial from Local Chirality? A Theoretical Study of Helical Deca-Alanine. ChemPhysChem, 2006, 7, 2189-2196.  | 2.1  | 71        |
| 61 | Determining the Absolute Configuration of Two Marine Compounds Using Vibrational Chiroptical Spectroscopy. Journal of Organic Chemistry, 2012, 77, 858-869.   | 3.2  | 71        |
| 62 | Electric and magnetic properties of fullerenes. Journal of Chemical Physics, 1998, 109, 572-577.  | 3.0  | 70        |
| 63 | Solvent Effects on the Indirect Spin–Spin Coupling Constants of Benzene: The DFT-PCM Approach. International Journal of Molecular Sciences, 2003, 4, 119-134.   | 4.1  | 68        |
| 64 | Calculation of the first static hyperpolarizability tensor of three-dimensional periodic compounds with a local basis set: A comparison of LDA, PBE, PBEO, B3LYP, and HF results. Journal of Chemical Physics, 2010, 132, 244106. | 3.0  | 68        |
| 65 | Orbital connections for perturbation-dependent basis sets. Theoretica Chimica Acta, 1995, 90, 421-439.  | 0.8  | 67        |
| 66 | Ab initio calculation of vibrational Raman optical activity. International Journal of Quantum Chemistry, 2005, 104, 816-829.  | 2.0  | 67        |
| 67 | Ab initio determinations of magnetic circular dichroism. Chemical Physics Letters, 1999, 300, 61-68.  | 2.6  | 66        |
| 68 | Internal and external heavy-atom effects on phosphorescence radiative lifetimes calculated using a mean-field spin–orbit Hamiltonian. Chemical Physics Letters, 1999, 310, 215-221.   | 2.6  | 65        |
| 69 | The Absolute Shielding Constants of Heavy Nuclei: Resolving the Enigma of the <sup>119</sup> Sn Absolute Shielding. Journal of Physical Chemistry Letters, 2013, 4, 459-463.  | 4.6  | 64        |
| 70 | Complex polarization propagator calculations of magnetic circular dichroism spectra. Journal of Chemical Physics, 2008, 128, 094103.  | 3.0  | 63        |
| 71 | Relativistic effects on linear and nonlinear polarizabilities studied by effective-core potential,<br>Douglas–Kroll, and Dirac–Hartree–Fock response theory. Journal of Chemical Physics, 2002, 116,<br>6914-6923.                | 3.0  | 60        |
| 72 | Ro-Vibrational Corrections to NMR Parameters. , 2004, , 153-173.  |      | 60        |

| #  | Article  | IF          | Citations |
|----|--|-------------|-----------|
| 73 | Benchmarking density-functional-theory calculations of rotational g tensors and magnetizabilities using accurate coupled-cluster calculations. Journal of Chemical Physics, 2009, 131, 144104. | 3.0         | 60        |
| 74 | Transferability of Various Molecular Property Tensors in Vibrational Spectroscopy. Journal of Chemical Theory and Computation, 2012, 8, 977-985.   | <b>5.</b> 3 | 60        |
| 75 | Four-Component Relativistic Density Functional Theory Calculations of NMR Shielding Tensors for Paramagnetic Systems. Journal of Physical Chemistry A, 2013, 117, 14209-14219.                 | 2.5         | 60        |
| 76 | Rovibrationally averaged magnetizability, rotational g factor, and indirect spin–spin coupling of the hydrogen fluoride molecule. Journal of Chemical Physics, 1999, 110, 9463-9468.           | 3.0         | 59        |
| 77 | Solvent Effects on Raman Optical Activity Spectra Calculated Using the Polarizable Continuum Model.<br>Journal of Physical Chemistry A, 2006, 110, 2807-2815.                                  | 2.5         | 59        |
| 78 | Nuclear magnetic shielding constants of liquid water: Insights from hybrid quantum mechanics/molecular mechanics models. Journal of Chemical Physics, 2007, 126, 034510.                       | 3.0         | 59        |
| 79 | Determination of Absolute Configuration and Conformation of a Cyclic Dipeptide by NMR and Chiral Spectroscopic Methods. Journal of Physical Chemistry A, 2013, 117, 1721-1736.                 | 2.5         | 59        |
| 80 | Chemical Control of Channel Interference in Two-Photon Absorption Processes. Accounts of Chemical Research, 2014, 47, 1604-1612.   | 15.6        | 59        |
| 81 | Magnetizability and nuclear shielding constants of solvated water. Chemical Physics Letters, 1996, 253, 443-447.   | 2.6         | 58        |
| 82 | Solvent effects on nuclear shieldings and spin–spin couplings of hydrogen selenide. Journal of Chemical Physics, 1998, 108, 2528-2537.   | 3.0         | 58        |
| 83 | Polarizable continuum model study of solvent effects on electronic circular dichroism parameters.<br>Journal of Chemical Physics, 2005, 122, 024106.   | 3.0         | 58        |
| 84 | The ab initio calculation of molecular electric, magnetic and geometric properties. Physical Chemistry Chemical Physics, 2011, 13, 2627-2651.  | 2.8         | 58        |
| 85 | X-ray absorption resonances near L <sub>2,3</sub> -edges from real-time propagation of the Dirac–Kohn–Sham density matrix. Physical Chemistry Chemical Physics, 2015, 17, 22566-22570.         | 2.8         | 58        |
| 86 | A multipole reaction-field model for gauge-origin independent magnetic properties of solvated molecules. Journal of Chemical Physics, 1997, 106, 1170-1180.                                    | 3.0         | 57        |
| 87 | DFT as a Powerful Predictive Tool in Photoredox Catalysis: Redox Potentials and Mechanistic Analysis.<br>Organometallics, 2015, 34, 4218-4228.   | 2.3         | 57        |
| 88 | On the validity of the equivalent cores approximation for computing X-ray photoemission and photoabsorption spectral bands. Chemical Physics, 2000, 260, 11-28.                                | 1.9         | 56        |
| 89 | Benchmarking the Performance of Exchange-Correlation Functionals for Predicting Two-Photon Absorption Strengths. Journal of Chemical Theory and Computation, 2018, 14, 3677-3685.              | 5.3         | 56        |
| 90 | The A and B Terms of Magnetic Circular Dichroism Revisited. Journal of Physical Chemistry A, 2008, 112, 9615-9618.   | 2.5         | 55        |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 91  | Gauge-origin independent calculation of magnetizabilities and rotational g tensors at the coupled-cluster level. Journal of Chemical Physics, 2007, 127, 074101.   | 3.0 | 53        |
| 92  | Molecular optical rotation: an evaluation of semiempirical models. Chemical Physics Letters, 2000, 319, 595-600.   | 2.6 | 52        |
| 93  | Atomic Charges of the Water Molecule and the Water Dimer. Journal of Physical Chemistry A, 1998, 102, 7686-7691.   | 2.5 | 51        |
| 94  | Solvent effects on zero-point vibrational corrections to optical rotations and nuclear magnetic resonance shielding constants. Chemical Physics Letters, 2008, 451, 226-232.   | 2.6 | 50        |
| 95  | Ab initio study of the one- and two-photon circular dichroism of R-(+)-3-methyl-cyclopentanone. Journal of Chemical Physics, 2008, 128, 164312.  | 3.0 | 50        |
| 96  | Calibration of the n-electron valence state perturbation theory approach. Journal of Chemical Physics, 2004, 120, 4619-4625.   | 3.0 | 49        |
| 97  | Four-Component Relativistic Density Functional Theory Calculations of EPR <b>g</b> - and Hyperfine-Coupling Tensors Using Hybrid Functionals: Validation on Transition-Metal Complexes with Large Tensor Anisotropies and Higher-Order Spin–Orbit Effects. Journal of Physical Chemistry A, 2015, 12892-12905. | 2.5 | 49        |
| 98  | Correlated response calculations of the spin-orbit interaction contribution to nuclear spin-spin couplings. Journal of Computational Chemistry, 1999, 20, 1314-1327.   | 3.3 | 48        |
| 99  | Ab initio calculations of zero-field splitting parameters in linear polyacenes. Chemical Physics, 2003, 286, 127-137.  | 1.9 | 48        |
| 100 | Acceleration of Relativistic Electron Dynamics by Means of X2C Transformation: Application to the Calculation of Nonlinear Optical Properties. Journal of Chemical Theory and Computation, 2016, 12, 5823-5833.  | 5.3 | 48        |
| 101 | Efficient parallel implementation of response theory: Calculations of the second hyperpolarizability of polyacenes. Chemical Physics Letters, 1996, 253, 1-7.  | 2.6 | 47        |
| 102 | Charge-Transfer Excitations in Uranyl Tetrachloride ([UO <sub>2</sub> Cl <sub>4</sub> ] <sup>2–</sup> ): How Reliable are Electronic Spectra from Relativistic Time-Dependent Density Functional Theory?. Journal of Physical Chemistry A, 2012, 116, 7397-7404.   | 2.5 | 47        |
| 103 | Ab initio calculation of electronic circular dichroism fortrans-cyclooctene using London atomic orbitals. Theoretica Chimica Acta, 1995, 90, 441-458.  | 0.8 | 46        |
| 104 | The magnetizability, rotational g tensor, and quadrupole moment of PF3 revisited. Chemical Physics Letters, 1997, 264, 17-23.  | 2.6 | 46        |
| 105 | Large two-photon absorption cross section: molecular tweezer as a new promising class of compounds for nonlinear optics. Physical Chemistry Chemical Physics, 2009, 11, 2592.  | 2.8 | 46        |
| 106 | Intermolecular charge transfer enhances two-photon absorption in yellow fluorescent protein. Physical Chemistry Chemical Physics, 2014, 16, 5958.  | 2.8 | 46        |
| 107 | The effect of correlation on molecular magnetizabilities and rotational g tensors. Journal of Chemical Physics, 1997, 107, 10599-10606.  | 3.0 | 45        |
| 108 | Computational Study of the One- and Two-Photon Absorption and Circular Dichroism of ( <scp> </scp> )-Tryptophan. Journal of Physical Chemistry B, 2010, 114, 6500-6512.  | 2.6 | 45        |

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|-----|--|-----|-----------|
| 109 | The optical activity of $\hat{l}^2$ , $\hat{l}^3$ -enones in ground and excited states using circular dichroism and circularly polarized luminescence. Physical Chemistry Chemical Physics, 2011, 13, 643-650.                               | 2.8 | 45        |
| 110 | Dalton Project: A Python platform for molecular- and electronic-structure simulations of complex systems. Journal of Chemical Physics, 2020, 152, 214115.  | 3.0 | 45        |
| 111 | A polarizable embedding DFT study of one-photon absorption in fluorescent proteins. Physical Chemistry Chemical Physics, 2013, 15, 4735.   | 2.8 | 44        |
| 112 | On the importance of vibrational contributions to small-angle optical rotation: Fluoro-oxirane in gas phase and solution. Journal of Chemical Physics, 2009, 130, 034310.  | 3.0 | 43        |
| 113 | Electronically Excited States of Vitamin B <sub>12</sub> and Methylcobalamin: Theoretical Analysis of Absorption, CD, and MCD Data. Journal of Physical Chemistry B, 2011, 115, 737-748.   | 2.6 | 43        |
| 114 | GEN1INT: A unified procedure for the evaluation of one-electron integrals over Gaussian basis functions and their geometric derivatives. International Journal of Quantum Chemistry, 2011, 111, 858-872.                                     | 2.0 | 43        |
| 115 | Second-harmonic generation of solvated molecules using multiconfigurational self-consistent-field quadratic response theory and the polarizable continuum model. Journal of Chemical Physics, 2005, 123, 144117.                             | 3.0 | 42        |
| 116 | Intermolecular Interaction-Controlled Tuning of the Two-Photon Absorption of Fullerene Bound in a Buckycatcher. Journal of Physical Chemistry A, 2009, 113, 5485-5488.   | 2.5 | 41        |
| 117 | Geometric Energy Derivatives at the Complete Basis Set Limit: Application to the Equilibrium Structure and Molecular Force Field of Formaldehyde. Journal of Chemical Theory and Computation, 2018, 14, 1333-1350.                           | 5.3 | 41        |
| 118 | Coupled cluster investigation of the electric-field-gradient-induced birefringence of H2, N2, C2H2, and CH4. Journal of Chemical Physics, 1998, 109, 7176-7184.  | 3.0 | 40        |
| 119 | Electric field effects on the shielding constants of noble gases: A four-component relativistic Hartree-Fock study. Journal of Chemical Physics, 2004, 121, 3051-3057.   | 3.0 | 40        |
| 120 | Magnetic properties with multiwavelets and DFT: the complete basis set limit achieved. Physical Chemistry Chemical Physics, 2016, 18, 21145-21161.   | 2.8 | 40        |
| 121 | MCSCF calculations of hypermagnetizabilities and nuclear shielding polarizabilities of CO and CH <sub>4</sub> . Molecular Physics, 1996, 88, 931-947.  | 1.7 | 39        |
| 122 | The use of Coulomb-attenuated methods for the calculation of electronic circular dichroism spectra. Chemical Physics, 2008, 349, 234-243.  | 1.9 | 39        |
| 123 | A modified variation-perturbation approach to zero-point vibrational motion. Theoretical Chemistry Accounts, 2000, 103, 365-373.   | 1.4 | 38        |
| 124 | High-Polarity Solvents Decreasing the Two-Photon Transition Probability of Through-Space Charge-Transfer Systems — A Surprising In Silico Observation. Journal of Physical Chemistry Letters, 2012, 3, 961-966.                              | 4.6 | 38        |
| 125 | Analytic cubic and quartic force fields using density-functional theory. Journal of Chemical Physics, 2014, 140, 034103.   | 3.0 | 38        |
| 126 | Fully adaptive algorithms for multivariate integral equations using the non-standard form and multiwavelets with applications to the Poisson and bound-state Helmholtz kernels in three dimensions. Molecular Physics, 2013, 111, 1143-1160. | 1.7 | 37        |

| #   | Article   | IF          | Citations |
|-----|---|-------------|-----------|
| 127 | Convergence of environment polarization effects in multiscale modeling of excitation energies. Computational and Theoretical Chemistry, 2014, 1040-1041, 304-311.   | 2.5         | 36        |
| 128 | NMR Shielding Tensors and Indirect Spin-Spin Coupling Tensors in HCN, HNC, CH3CN, and Ch3NC Molecules. Journal of Magnetic Resonance Series A, 1995, 114, 212-218.  | 1.6         | 35        |
| 129 | The dispersion of the polarizability of C60: A confirmation of recent experimental results through theoretical calculations. Journal of Chemical Physics, 2001, 114, 4331-4332.                                   | 3.0         | 35        |
| 130 | Plasmon resonances in linear noble-metal chains. Journal of Chemical Physics, 2012, 137, 194307.  | 3.0         | 35        |
| 131 | Ab initio and relativistic DFT study of spin–rotation and NMR shielding constants in XF6 molecules, X = S, Se, Te, Mo, and W. Journal of Chemical Physics, 2014, 140, 194308.                                     | 3.0         | 35        |
| 132 | Open-Ended Recursive Approach for the Calculation of Multiphoton Absorption Matrix Elements. Journal of Chemical Theory and Computation, 2015, 11, 1129-1144.   | <b>5.</b> 3 | 35        |
| 133 | Solvent effects on the NMR parameters of H2S and HCN. Journal of Computational Chemistry, 1999, 20, 1281-1291.  | 3.3         | 34        |
| 134 | Coupledâ€Cluster Calculations of Vibrational Raman Optical Activity Spectra. ChemPhysChem, 2011, 12, 3442-3448.   | 2.1         | 34        |
| 135 | Multiconfigurational Self-Consistent Field Calculations of the Magnetically Induced Current Density Using Gauge-Including Atomic Orbitals. Journal of Chemical Theory and Computation, 2013, 9, 2189-2198.        | 5.3         | 34        |
| 136 | A general, recursive, and openâ€ended response code. Journal of Computational Chemistry, 2014, 35, 622-633.   | 3.3         | 34        |
| 137 | Some recent developments of high-order response theory. International Journal of Quantum Chemistry, 1998, 70, 219-239.  | 2.0         | 33        |
| 138 | Mercury Methylation by Cobalt Corrinoids: Relativistic Effects Dictate the Reaction Mechanism. Angewandte Chemie - International Edition, 2016, 55, 11503-11506.  | 13.8        | 33        |
| 139 | Orbital connections for perturbation-dependent basis sets. Theoretica Chimica Acta, 1995, 90, 421.  | 0.8         | 33        |
| 140 | Basis set convergence and correlation effects in vibrational circular dichroism calculations using London atomic orbitals. Faraday Discussions, 1994, 99, 121-129.  | 3.2         | 32        |
| 141 | Energetics and Dynamics of Intermolecular Proton-Transfer Processes. 2. Ab Initio Direct Dynamics Calculations of the Reaction H3O++ NH3â†' NH4++ H2O. The Journal of Physical Chemistry, 1996, 100, 15388-15392. | 2.9         | 32        |
| 142 | Magnetizabilities and Nuclear Shielding Constants of the Fluoromethanes in the Gas Phase and Solution. The Journal of Physical Chemistry, 1996, 100, 19771-19782.   | 2.9         | 32        |
| 143 | Internuclear distance dependence of the spin–orbit coupling contributions to proton NMR chemical shifts. Chemical Physics Letters, 1998, 295, 455-461.  | 2.6         | 32        |
| 144 | Solvent effects on the conformational distribution and optical rotation of $\hat{l}^3$ -methyl paraconic acids and esters. Chirality, 2006, 18, 357-369.  | 2.6         | 32        |

| #   | Article  | IF          | CITATIONS |
|-----|--|-------------|-----------|
| 145 | Two-photon absorption of [2.2]paracyclophane derivatives in solution: A theoretical investigation. Journal of Chemical Physics, 2007, 127, 244103.   | 3.0         | 32        |
| 146 | Importance of backbone angles versus amino acid configurations in peptide vibrational Raman optical activity spectra. Chemical Physics, 2008, 343, 200-209.  | 1.9         | 32        |
| 147 | Porphyrin Protonation Studied by Magnetic Circular Dichroism. Journal of Physical Chemistry A, 2012, 116, 778-783.   | 2.5         | 32        |
| 148 | Four-Component Relativistic Density-Functional Theory Calculations of Nuclear Spin–Rotation Constants: Relativistic Effects in <i>p</i> -Block Hydrides. Journal of Chemical Theory and Computation, 2015, 11, 3729-3739.      | <b>5.</b> 3 | 32        |
| 149 | Absolute Configuration of C76 from Optical Rotatory Dispersion. ChemPhysChem, 2005, 6, 2535-2540.  | 2.1         | 31        |
| 150 | An IEF-PCM study of solvent effects on the Faraday ${\mathbb F}_{B}$ term of MCD. Theoretical Chemistry Accounts, 2008, 119, 231-244.  | 1.4         | 31        |
| 151 | The First and Second Static Electronic Hyperpolarizabilities of Zigzag Boron Nitride Nanotubes. An ab Initio Approach through the Coupled Perturbed Kohn–Sham Scheme. Journal of Physical Chemistry A, 2011, 115, 12631-12637. | 2.5         | 31        |
| 152 | Theoretical calculations of the magnetizability of some small fluorine-containing molecules using London atomic orbitals. Chemical Physics Letters, 1994, 223, 12-18.  | 2.6         | 30        |
| 153 | Analytic Calculations of Vibrational Hyperpolarizabilities in the Atomic Orbital Basis. Journal of Physical Chemistry A, 2008, 112, 11942-11950.   | 2.5         | 30        |
| 154 | Structure and NMR Spectra of Some [2.2]Paracyclophanes. The Dilemma of [2.2]Paracyclophane Symmetry. Journal of Physical Chemistry A, 2011, 115, 10638-10649.  | 2.5         | 30        |
| 155 | Absolute Configuration of a Cyclic Dipeptide Reflected in Vibrational Optical Activity: Ab Initio and Experimental Investigation. Journal of Physical Chemistry A, 2012, 116, 2554-2563.                                       | 2.5         | 30        |
| 156 | Rotational averaging of multiphoton absorption cross sections. Journal of Chemical Physics, 2014, 141, 204103.   | 3.0         | 30        |
| 157 | MCSCF calculations of Verdet constants. Chemical Physics Letters, 1994, 222, 263-266.  | 2.6         | 29        |
| 158 | Multiconfigurational selfâ€consistent field calculations of nuclear magnetic resonance indirect spin–spin coupling constants. Journal of Chemical Physics, 1994, 101, 6822-6828.   | 3.0         | 29        |
| 159 | Isotope and temperature effects on the 13C and 77Se nuclear shielding in carbon diselenide. Journal of Chemical Physics, 1997, 107, 1350-1361.   | 3.0         | 29        |
| 160 | Cotton-Mouton effect and shielding polarizabilities of ethylene: An MCSCF study. Chemical Physics, 1997, 216, 53-66.   | 1.9         | 29        |
| 161 | Spin–spin coupling constants in C2H2. Chemical Physics Letters, 2001, 336, 473-478.  | 2.6         | 29        |
| 162 | Basis set convergence of atomic axial tensors obtained from selfâ€consistent field calculations using London atomic orbitals. Journal of Chemical Physics, 1994, 100, 6620-6627.   | 3.0         | 28        |

| #   | Article  | IF               | Citations  |
|-----|--|------------------|------------|
| 163 | An Atomic-Orbital-Based Lagrangian Approach for Calculating Geometric Gradients of Linear Response Properties. Journal of Chemical Theory and Computation, 2010, 6, 1028-1047.   | 5.3              | 28         |
| 164 | Strong Duschinsky Mixing Induced Breakdown of Kasha's Rule in an Organic Phosphor. Journal of Physical Chemistry Letters, 2019, 10, 369-374.   | 4.6              | 28         |
| 165 | A numerically stable orbital connection for the calculation of analytical Hessians using perturbation-dependent basis sets. Chemical Physics Letters, 1995, 235, 47-52.  | 2.6              | 27         |
| 166 | Ab initio calculation of the NMR shielding and indirect spin-spin coupling constants of fluoroethylene. Molecular Physics, 1997, 91, 881-890.  | 1.7              | 27         |
| 167 | Zero-point vibrational contributions to fluorine shieldings in organic molecules. Physical Chemistry Chemical Physics, 2003, 5, 5015-5020.   | 2.8              | 27         |
| 168 | <i>Ab initio</i> calculation of magnetic circular dichroism. Wiley Interdisciplinary Reviews:<br>Computational Molecular Science, 2012, 2, 443-455.  | 14.6             | 27         |
| 169 | Communication: The absolute shielding scales of oxygen and sulfur revisited. Journal of Chemical Physics, 2015, 142, 091102.   | 3.0              | 27         |
| 170 | Analytic calculations of anharmonic infrared and Raman vibrational spectra. Physical Chemistry Chemical Physics, 2016, 18, 4201-4215.  | 2.8              | 27         |
| 171 | Solvent effects on the spin–spin coupling constants of acetylene revisited: supermolecular and polarizable continuum model calculations. Magnetic Resonance in Chemistry, 2004, 42, S128-S137.                             | 1.9              | 26         |
| 172 | Electronic g-tensors of solvated molecules using the polarizable continuum model. Journal of Chemical Physics, 2004, 121, 5051-5060.   | 3.0              | 26         |
| 173 | Choosing Bad versus Worse: Predictions of Two-Photon-Absorption Strengths Based on Popular Density Functional Approximations. Journal of Chemical Theory and Computation, 2022, 18, 1046-1060.                             | 5.3              | 26         |
| 174 | Vibrationally averaged magnetizabilities and rotational g tensors of the water molecule. Chemical Physics Letters, 1998, 297, 467-474.   | 2.6              | 25         |
| 175 | Relativistic Spinâ^'Orbit Coupling Effects on Secondary Isotope Shifts of 13C Nuclear Shielding in CX2(X) Tj ETQq1   | 1 0,7843<br>13.7 | 14 rgBT /O |
| 176 | Solvatochromic shift of phenol blue in water from a combined Car–Parrinello molecular dynamics hybrid quantum mechanics-molecular mechanics and <scp>ZINDO</scp> approach. Journal of Chemical Physics, 2010, 132, 234508. | 3.0              | 25         |
| 177 | Spin-rotation and NMR shielding constants in HCl. Journal of Chemical Physics, 2013, 139, 234302.  | 3.0              | 25         |
| 178 | Molecular length dependence of optical properties of hydrocarbon oligomers. Chemical Physics Letters, 1998, 285, 160-163.  | 2.6              | 24         |
| 179 | Saturation of the Optical Band Gap and Properties of Five-Membered Heteroaromatic Oligomers. Journal of Physical Chemistry B, 1998, 102, 1710-1712.  | 2.6              | 24         |
| 180 | Should Gaseous BF3 and SiF4 Be Described as Ionic Compounds?. Journal of Chemical Education, 2000, 77, 1076.   | 2.3              | 24         |

| #   | Article   | IF  | Citations |
|-----|---|-----|-----------|
| 181 | Nuclear magnetic resonance shielding constants in XH4group XIV hydrides. Molecular Physics, 2006, 104, 2139-2148.   | 1.7 | 24        |
| 182 | Cob(I)alamin: Insight Into the Nature of Electronically Excited States Elucidated via Quantum Chemical Computations and Analysis of Absorption, CD and MCD Data. Journal of Physical Chemistry A, 2013, 117, 863-876. | 2.5 | 24        |
| 183 | All-electron fully relativistic Kohn-Sham theory for solids based on the Dirac-Coulomb Hamiltonian and Gaussian-type functions. Physical Review B, 2019, 99, .  | 3.2 | 24        |
| 184 | Combined density functional/polarizable continuum model study of magnetochiral birefringence: Can theory and experiment be brought to agreement?. Journal of Chemical Physics, 2006, 125, 234105.                     | 3.0 | 23        |
| 185 | Analytical calculations of frequency-dependent hypermagnetizabilities and Cotton–Mouton constants using London atomic orbitals. Journal of Chemical Physics, 2008, 129, 164110.                                       | 3.0 | 23        |
| 186 | NMR absolute shielding scale and nuclear magnetic dipole moment of <sup>207</sup> Pb. Physical Chemistry Chemical Physics, 2016, 18, 16483-16490.   | 2.8 | 23        |
| 187 | Open-ended response theory with polarizable embedding: multiphoton absorption in biomolecular systems. Physical Chemistry Chemical Physics, 2016, 18, 28339-28352.  | 2.8 | 23        |
| 188 | Resolution-of-identity accelerated relativistic two- and four-component electron dynamics approach to chiroptical spectroscopies. Journal of Chemical Physics, 2018, 149, 204104.                                     | 3.0 | 23        |
| 189 | On the convergence of MBPT and CC nuclear magnetic shielding constants of BH toward the full CI limit. International Journal of Quantum Chemistry, 1995, 56, 437-442.   | 2.0 | 22        |
| 190 | Towards more reliable prediction of formaldehyde multinuclear NMR parameters and harmonic vibrations in the gas phase and solution. Computational and Theoretical Chemistry, 1999, 467, 63-78.                        | 1.5 | 22        |
| 191 | Differences in Twoâ€Photon and Oneâ€Photon Absorption Profiles Induced by Vibronic Coupling: The Case of Dioxaborine Heterocyclic Dye. ChemPhysChem, 2011, 12, 3392-3403.   | 2.1 | 22        |
| 192 | Code interoperability and standard data formats in quantum chemistry and quantum dynamics: The Q5/D5Cost data model. Journal of Computational Chemistry, 2014, 35, 611-621.   | 3.3 | 22        |
| 193 | Origin of Dual-Peak Phosphorescence and Ultralong Lifetime of 4,6-Diethoxy-2-carbazolyl-1,3,5-triazine.<br>Journal of Physical Chemistry Letters, 2017, 8, 1253-1258.   | 4.6 | 22        |
| 194 | Four-component relativistic density functional theory with the polarisable continuum model: application to EPR parameters and paramagnetic NMR shifts. Molecular Physics, 2017, 115, 214-227.                         | 1.7 | 21        |
| 195 | The calculation of molecular geometrical properties in the Hellmann-Feynman approximation. Molecular Physics, 1999, 96, 653-671.  | 1.7 | 21        |
| 196 | The Cotton-Mouton effect of liquid water. Part I: The dielectric continuum model. Journal of Chemical Physics, 1997, 107, 894-901.  | 3.0 | 20        |
| 197 | The Cotton–Mouton effect of liquid water. Part II: The semi-continuum model. Journal of Chemical Physics, 1998, 108, 599-603.   | 3.0 | 20        |
| 198 | Vibrational effects on electric and magnetic susceptibilities: application to the properties of the water molecule. Physical Chemistry Chemical Physics, 2000, 2, 2161-2171.  | 2.8 | 20        |

| #   | Article   | IF          | CITATIONS     |
|-----|---|-------------|---------------|
| 199 | Assignment of the absolute configuration of ( $\hat{a}$ )-linarinic acid by theoretical calculation and asymmetric total synthesis. Tetrahedron: Asymmetry, 2006, 17, 179-183.            | 1.8         | 20            |
| 200 | Degenerate Perturbation Theory for Electronic g Tensors: Leading-Order Relativistic Effects. Journal of Chemical Theory and Computation, 2008, 4, 1810-1828.                              | 5.3         | 20            |
| 201 | Long-range effects of interatomic interactions on NMR shielding constants. Chemical Physics Letters, 1996, 250, 1-8.  | 2.6         | 19            |
| 202 | Analytic ab initio calculations of coherent anti-Stokes Raman scattering (CARS). Physical Chemistry Chemical Physics, 2009, 11, 2293.   | 2.8         | 19            |
| 203 | Fourâ€component relativistic chemical shift calculations of halogenated organic compounds. Journal of Physical Organic Chemistry, 2013, 26, 679-687.                                      | 1.9         | 19            |
| 204 | First Principles Studies of the Vibrationally Resolved Magnetic Circular Dichroism Spectra of Biphenylene. Journal of Chemical Theory and Computation, 2013, 9, 1557-1567.                | <b>5.</b> 3 | 19            |
| 205 | NMR shielding and spin–rotation constants in XCO (X = Ni, Pd, Pt) molecules. Molecular Physics, 2015, 113, 1576-1584.   | 1.7         | 19            |
| 206 | MCSCF calculations of nitrogen NMR shielding constants using London atomic orbitals. Chemical Physics Letters, 1994, 220, 154-160.  | 2.6         | 18            |
| 207 | Molecular Magnetizabilities:Â Zero-Point Vibrational Effects and the Breakdown of Pascal's Rule.<br>Journal of Physical Chemistry A, 2001, 105, 9926-9930.                                | 2.5         | 18            |
| 208 | Density-functional theory calculation of the nuclear magnetic resonance indirect nuclear spinâ€"spin coupling constants in C60. Molecular Physics, 2003, 101, 1997-2002.                  | 1.7         | 18            |
| 209 | Atomic orbital-based cubic response theory for one-, two-, and four-component relativistic self-consistent field models. Chemical Physics, 2009, 356, 177-186.                            | 1.9         | 18            |
| 210 | Absolute NMR shielding scales and nuclear spin–rotation constants in 175LuX and 197AuX (X = 19F,) Tj ETQq   | 0 030 rgB   | Γ/Qverlock 10 |
| 211 | The magnetic hyperpolarizability anisotropy of the neon atom. Chemical Physics Letters, 1992, 191, 599-602.   | 2.6         | 17            |
| 212 | Full CI calculations of the magnetizability and rotational g factor of the hydrogen molecule. Computational and Theoretical Chemistry, 1996, 388, 231-235.                                | 1.5         | 17            |
| 213 | Mechanisms, energetics and dynamics of a key reaction sequence during the decomposition of nitromethane: HNO + HNO ↠N2O + H2O. Computational and Theoretical Chemistry, 1997, 393, 59-71. | 1.5         | 17            |
| 214 | Perturbational relativistic theory of electron spin resonance g-tensor. Journal of Chemical Physics, 2004, 121, 1258-1265.  | 3.0         | 17            |
| 215 | Determination of Molecular Structure of Bisphenylene Homologues of BINOL-Based Phosphoramidites by Chiroptical Methods. Journal of Physical Chemistry A, 2009, 113, 10717-10725.          | 2.5         | 17            |
| 216 | Experimental and fourâ€component relativistic DFT studies of tungsten carbonyl complexes. Journal of Physical Organic Chemistry, 2015, 28, 723-731.                                       | 1.9         | 17            |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Molecular quantum mechanical gradients within the polarizable embedding approachâ€"Application to the internal vibrational Stark shift of acetophenone. Journal of Chemical Physics, 2015, 142, 034119.               | 3.0 | 17        |
| 218 | Anomalous Phosphorescence from an Organometallic White-Light Phosphor. Journal of Physical Chemistry Letters, 2017, 8, 4893-4897.   | 4.6 | 17        |
| 219 | Relativistic four-component linear damped response TDDFT for electronic absorption and circular dichroism calculations. Journal of Chemical Physics, 2019, 151, 194112.   | 3.0 | 17        |
| 220 | Electron-Spin Structure and Metal–Ligand Bonding in Open-Shell Systems from Relativistic EPR and NMR: A Case Study of Square-Planar Iridium Catalysts. Journal of Chemical Theory and Computation, 2019, 15, 201-214. | 5.3 | 17        |
| 221 | An ab initio nuclear magnetic resonance spectrum of vinyllithium. Chemical Physics Letters, 1994, 226, 1-10.  | 2.6 | 16        |
| 222 | Hyperfine and nuclear quadrupole coupling in chlorine and fluorine dioxides. Journal of Chemical Physics, 1997, 106, 1847-1855.   | 3.0 | 16        |
| 223 | The Hartree–Fock magnetizability of C60. Chemical Physics Letters, 1998, 285, 205-209.  | 2.6 | 16        |
| 224 | Generalized integral-screening for efficient calculations of nonlinear optical properties of large molecules. Journal of Chemical Physics, 1998, 108, 7973-7979.  | 3.0 | 16        |
| 225 | Density functional theory study of indirect nuclear spin-spin coupling constants with spin-orbit corrections. Journal of Chemical Physics, 2005, 123, 014101.   | 3.0 | 16        |
| 226 | The aqueous Raman optical activity spectra of 4( <i>R</i> )â€hydroxyproline: theory and experiment. Journal of Raman Spectroscopy, 2010, 41, 1200-1210.   | 2.5 | 16        |
| 227 | Five-Photon Absorption and Selective Enhancement of Multiphoton Absorption Processes. ACS Photonics, 2015, 2, 572-577.  | 6.6 | 16        |
| 228 | Channel interference in multiphoton absorption. Journal of Chemical Physics, 2017, 146, 244116.   | 3.0 | 16        |
| 229 | Ab initio calculation of the NMR shielding and indirect spin-spin coupling constants of fluoroethylene. Molecular Physics, 1997, 91, 881-889.   | 1.7 | 16        |
| 230 | The Cotton–Mouton effect of gaseous CO2, N2O, OCS, and CS2. A cubic response multiconfigurational self-consistent field study. Journal of Chemical Physics, 2001, 114, 8372-8381.                                     | 3.0 | 15        |
| 231 | Interatomic interactions and the Cottonâ€"Mouton effect for helium. Molecular Physics, 2002, 100, 799-807.  | 1.7 | 15        |
| 232 | Degenerate Four-Wave Mixing in Solution by Cubic Response Theory and the Polarizable Continuum Model. Journal of Physical Chemistry B, 2007, 111, 8965-8973.  | 2.6 | 15        |
| 233 | Solvent Effects on the Three-Photon Absorption of a Symmetric Charge-Transfer Molecule. Journal of Physical Chemistry B, 2008, 112, 4703-4710.  | 2.6 | 15        |
| 234 | Efficient Calculation of ROA Tensors with Analytical Gradients and Fragmentation. Chirality, 2012, 24, 1018-1030.   | 2.6 | 15        |

| #   | Article   | lF  | Citations |
|-----|---|-----|-----------|
| 235 | Spin-Rotation and NMR Shielding Constants in XF Molecules ( $X = B$ , Al, Ga, In, and Tl). Journal of Physical Chemistry A, 2014, 118, 9588-9595.   | 2.5 | 15        |
| 236 | The magnetizability anisotropy and rotational g factor of deuterium hydride and the deuterium molecule. Chemical Physics Letters, 1997, 271, 163-166.   | 2.6 | 14        |
| 237 | Electric field gradient, generalized Sternheimer shieldings and electric field gradient polarizabilities by multiconfigurational SCF response. Journal of Chemical Physics, 1998, 109, 2264-2274.                       | 3.0 | 14        |
| 238 | Ab initio study of nonhomogeneous broadening of the zero-field splitting of triplet guest molecules in diluted glasses. Journal of Chemical Physics, 2003, 119, 3120-3129.  | 3.0 | 14        |
| 239 | New developments in the symmetry-adapted algorithm of the Polarizable Continuum Model. Journal of Computational Chemistry, 2004, 25, 375-385.   | 3.3 | 14        |
| 240 | Analytic calculations of nonlinear mixed electric and magnetic frequency-dependent molecular properties using London atomic orbitals: Buckingham birefringence. Physical Chemistry Chemical Physics, 2009, 11, 816-825. | 2.8 | 14        |
| 241 | Zero-point vibrational corrections to isotropic hyperfine coupling constants in polyatomic molecules. Physical Chemistry Chemical Physics, 2011, 13, 696-707.   | 2.8 | 14        |
| 242 | Behind the scenes of spin-forbidden decay pathways in transition metal complexes. Physical Chemistry Chemical Physics, 2021, 23, 59-81.   | 2.8 | 14        |
| 243 | Comment on "On the Magnetic Susceptibility of Fluorine― Journal of Physical Chemistry A, 2000, 104, 168-169.  | 2.5 | 13        |
| 244 | Anab initioinvestigation of the Buckingham birefringence of furan, thiophene, and selenophene in cyclohexane solution. Journal of Chemical Physics, 2007, 127, 164321.  | 3.0 | 13        |
| 245 | Molecular Electric, Magnetic, and Optical Properties. , 2012, , 361-441.  |     | 13        |
| 246 | Loss of H2 from CH3NH3+, CH3OH2+ and CH3FH+. Reaction mechanisms and dynamics from observation of metastable ion fragmentations and ab initio calculations. European Journal of Mass Spectrometry, 1995, 1, 121.        | 0.7 | 12        |
| 247 | The calculation of molecular geometrical properties in the Hellmann—Feynman approximation.<br>Molecular Physics, 1999, 96, 653-671.   | 1.7 | 12        |
| 248 | Solvent effects on optically detected magnetic resonance in triplet spin labels. Theoretical Chemistry Accounts, 2004, 111, 168-175.  | 1.4 | 12        |
| 249 | Microscopic Theory of Nonlinear Optics. Challenges and Advances in Computational Chemistry and Physics, 2006, , 1-49.   | 0.6 | 12        |
| 250 | Analytic calculations of hyper-Raman spectra from density functional theory hyperpolarizability gradients. Journal of Chemical Physics, 2014, 141, 134107.  | 3.0 | 12        |
| 251 | Cob(II)alamin: Relativistic DFT Analysis of the EPR Parameters. Journal of Chemical Theory and Computation, 2014, 10, 2125-2136.  | 5.3 | 12        |
| 252 | Chiral recognition by fullerenes: CHFClBr enantiomers in the C82cage. Physical Chemistry Chemical Physics, 2016, 18, 26057-26068.   | 2.8 | 12        |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 253 | Accurate X-ray Absorption Spectra near L- and M-Edges from Relativistic Four-Component Damped Response Time-Dependent Density Functional Theory. Inorganic Chemistry, 2022, 61, 830-846. | 4.0 | 12        |
| 254 | Ab Initio Studies of the [AX]2 Spin Systems ofcis- andtrans-N2F2., 1996, 34, 646-649.  |     | 11        |
| 255 | Electric and magnetic properties of the nitroethene molecule. Molecular Physics, 1997, 92, 89-96.  | 1.7 | 11        |
| 256 | MCSCF nuclear magnetic shieldings and spin-rotation constants of 170 in 160170160 and 170160160. Chemical Physics Letters, 1998, 287, 677-681.   | 2.6 | 11        |
| 257 | Parallel calculations of molecular properties. Computer Physics Communications, 2000, 128, 412-433.  | 7.5 | 11        |
| 258 | Interplay of twist angle and solvents with two-photon optical channel interference in aryl-substituted BODIPY dyes. Physical Chemistry Chemical Physics, 2017, 19, 29461-29471.          | 2.8 | 11        |
| 259 | Superlinear scaling in master-slave quantum chemical calculations using in-core storage of two-electron integrals. Journal of Computational Chemistry, 2006, 27, 326-333.                | 3.3 | 10        |
| 260 | Parallelization of the integral equation formulation of the polarizable continuum model for higher-order response functions. Journal of Chemical Physics, 2006, 125, 154112.             | 3.0 | 10        |
| 261 | Vibrationally resolved circular dichroism spectra of a molecule with isotopically engendered chirality. Physical Chemistry Chemical Physics, 2012, 14, 3669.                             | 2.8 | 10        |
| 262 | Shape-Dependent Electronic Excitations in Metallic Chains. Journal of Physical Chemistry C, 2014, 118, 13059-13069.  | 3.1 | 10        |
| 263 | Structure, NMR and Electronic Spectra of [ <i>m.n</i> )]Paracyclophanes with Varying Bridges Lengths ( <i>m, n = </i> >2–4). Journal of Physical Chemistry A, 2016, 120, 724-736.        | 2.5 | 10        |
| 264 | Three-photon circular dichroism: towards a generalization of chiroptical non-linear light absorption. Physical Chemistry Chemical Physics, 2016, 18, 4174-4184.                          | 2.8 | 10        |
| 265 | Rare and Nonexistent Nitrosyls: Periodic Trends and Relativistic Effects in Ruthenium and Osmium Porphyrin-Based {MNO} <sup>7</sup> Complexes. ACS Omega, 2018, 3, 10513-10516.          | 3.5 | 10        |
| 266 | Full CI calculations of the magnetizability and rotational g factor of the hydrogen molecule. Computational and Theoretical Chemistry, 1996, 388, 231-235.                               | 1.5 | 10        |
| 267 | Nuclear magnetic shielding tensor for the ethylenic carbon atom in tetrachlorocyclopropene.<br>Chemical Physics Letters, 1993, 204, 608-610.   | 2.6 | 9         |
| 268 | NMR properties of N3â <sup>-</sup> . A comparison of theory and experiment. Chemical Physics Letters, 1995, 243, 144-150.  | 2.6 | 9         |
| 269 | Darmstadtium, roentgenium, and copernicium form strong bonds with cyanide. International Journal of Quantum Chemistry, 2018, 118, e25393.  | 2.0 | 9         |
| 270 | Unraveling the Microscopic Origin of Triplet Lasing from Organic Solids. Journal of Physical Chemistry Letters, 2018, 9, 4314-4318.  | 4.6 | 9         |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 271 | Vibrational magnetism of HCN and its isotopomers using rotational London atomic orbitals. Chemical Physics, 1996, 208, 341-349.  | 1.9 | 8         |
| 272 | Vibronic transitions from coupled-cluster response theory: Theory and application to HSiF and H[sub 2]O. Journal of Chemical Physics, 2002, 116, 8334.   | 3.0 | 8         |
| 273 | Excited-state polarizabilities of solvated molecules using cubic response theory and the polarizable continuum model. Journal of Chemical Physics, 2010, 132, 024107.  | 3.0 | 8         |
| 274 | Gauge-origin independent calculations of Jones birefringence. Journal of Chemical Physics, 2011, 135, 134114.  | 3.0 | 8         |
| 275 | Cryptophanes for Methane and Xenon Encapsulation: A Comparative Density Functional Theory Study of Binding Properties and NMR Chemical Shifts. Journal of Physical Chemistry A, 2017, 121, 9669-9677.  | 2.5 | 8         |
| 276 | Relativistic effects on Sternheimer shieldings and the polarizabilities of the electric-field gradient at the nucleus: HX (X=F,Cl,Br,I,At) and Br2. Computational and Theoretical Chemistry, 2003, 633, 163-176.                                     | 1.5 | 7         |
| 277 | Synthesis, characterization and assignment of the absolute configuration of 4,4-dimethyl-5-oxo-tetrahydrofuran-3-carboxylic acid and its esters: a combined experimental and theoretical investigation. Tetrahedron: Asymmetry, 2009, 20, 1459-1467. | 1.8 | 7         |
| 278 | Effect of donor–acceptor orientation on solvent-dependent three-photon activity in through-space charge-transfer systems – case study of [2,2]-paracyclophane derivatives. Physical Chemistry Chemical Physics, 2013, 15, 17570.                     | 2.8 | 7         |
| 279 | The origin dependence of the material constants: the permittivity and the inverse permeability. Molecular Physics, 2015, 113, 1899-1913.   | 1.7 | 7         |
| 280 | Indirect NMR spin–spin coupling constants in diatomic alkali halides. Journal of Chemical Physics, 2016, 145, 244308.  | 3.0 | 7         |
| 281 | Insight into the fluorescence quenching of Trp214 at HSA by the Dimetridazole ligand from simulation. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 354, 86-100.  | 3.9 | 7         |
| 282 | A generalized few-state model for the first hyperpolarizability. Journal of Chemical Physics, 2020, 152, 244106.   | 3.0 | 7         |
| 283 | SCF calculations of the NMR shielding tensor for the ethylenic carbon atom in C3Cl4. Molecular Physics, 1995, 85, 671-673.   | 1.7 | 6         |
| 284 | Ab initio study of coherent anti-Stokes Raman scattering (CARS) of the 1,3,5-trinitro-1,3,5-triazacyclohexane (RDX) explosive. Chemical Physics Letters, 2010, 485, 320-325.   | 2.6 | 6         |
| 285 | Role of zero-point vibrational corrections to carbon hyperfine coupling constants in organic π radicals. Journal of Chemical Physics, 2013, 138, 054310.   | 3.0 | 6         |
| 286 | Analytic evaluation of the dipole Hessian matrix in coupled-cluster theory. Journal of Chemical Physics, 2013, 139, 154106.  | 3.0 | 6         |
| 287 | Analytic Density Functional Theory Calculations of Pure Vibrational Hyperpolarizabilities: The First<br>Dipole Hyperpolarizability of Retinal and Related Molecules. Journal of Physical Chemistry A, 2014, 118,<br>748-756.                         | 2.5 | 6         |
| 288 | Harmonic Infrared and Raman Spectra in Molecular Environments Using the Polarizable Embedding Model. Journal of Chemical Theory and Computation, 2021, 17, 3599-3617.  | 5.3 | 6         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 289 | Demystifying the Origin of Vibrational Coherence Transfer Between the S <sub>1</sub> and T <sub>1</sub> States of the Pt-pop Complex. Journal of Physical Chemistry Letters, 2021, 12, 9768-9773. | 4.6 | 6         |
| 290 | MCSCF calculations of hypermagnetizabilities and nuclear shielding polarizabilities of CO and CH4. Molecular Physics, 1996, 88, 931-948.  | 1.7 | 6         |
| 291 | Vibrational Effects on Molecular Properties in Large Molecules. Journal of Computational Methods in Sciences and Engineering, 2003, 3, 7-39.  | 0.2 | 5         |
| 292 | The calculation of excited-state polarizabilities of solvated molecules. Journal of Computational Methods in Sciences and Engineering, 2004, 4, 381-397.  | 0.2 | 5         |
| 293 | Atomic dipole moments calculated using analytical molecular second-moment gradients. Journal of Chemical Physics, 2004, 120, 10368-10378.   | 3.0 | 5         |
| 294 | The Rotational g Tensor as a Benchmark for Ab Initio Molecular Property Calculations. Advances in Quantum Chemistry, 2005, , 77-90.   | 0.8 | 5         |
| 295 | Spatial structure and NMR spectra of strained [2.2.2]cyclophanes. Magnetic Resonance in Chemistry, 2009, 47, 407-414.   | 1.9 | 5         |
| 296 | Jones and magnetoelectric birefringence of pure substances — A computational study. Canadian Journal of Chemistry, 2009, 87, 1352-1361.   | 1.1 | 5         |
| 297 | Hyper Raman spectra calculated in a time-dependent Hartree–Fock method. Molecular Physics, 2012, 110, 2315-2320.  | 1.7 | 5         |
| 298 | Open-Ended Recursive Calculation of Single Residues of Response Functions for Perturbation-Dependent Basis Sets. Journal of Chemical Theory and Computation, 2015, 11, 4814-4824.                 | 5.3 | 5         |
| 299 | Complete analytic anharmonic hyper-Raman scattering spectra. Physical Chemistry Chemical Physics, 2016, 18, 22331-22342.  | 2.8 | 5         |
| 300 | Molecular Electric, Magnetic, and Optical Properties., 2017,, 497-592.  |     | 5         |
| 301 | Gauge-origin independent calculations of electric-field-induced second-harmonic generation circular intensity difference using London atomic orbitals. Molecular Physics, 2017, 115, 241-251.     | 1.7 | 5         |
| 302 | Open-ended formulation of self-consistent field response theory with the polarizable continuum model for solvation. Physical Chemistry Chemical Physics, 2017, 19, 366-379.                       | 2.8 | 5         |
| 303 | Computational Investigation on the Photophysical Properties of Halogenated Tetraphenyl BODIPY. Journal of Physical Chemistry C, 2020, 124, 11100-11109.   | 3.1 | 5         |
| 304 | Calculations of circular intensity differences in electric-field-induced second harmonic generation. Chemical Physics Letters, 1998, 288, 371-376.  | 2.6 | 4         |
| 305 | Sternheimer shieldings and EFG polarizabilities: a density-functional theory study. Chemical Physics Letters, 2003, 372, 377-385.   | 2.6 | 4         |
| 306 | Gauge-origin-independent magnetizabilities of solvated molecules using the polarizable continuum model. Journal of Chemical Physics, 2005, 123, 204104.   | 3.0 | 4         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 307 | Relativistic four-component calculations of Buckingham birefringence using London atomic orbitals. Theoretical Chemistry Accounts, 2011, 129, 685-699.   | 1.4 | 4         |
| 308 | Structure and NMR spectra of cyclophanes with unsaturated bridges (cyclophenes). Magnetic Resonance in Chemistry, 2012, 50, 449-457.   | 1.9 | 4         |
| 309 | Effective time-independent studies on resonance Raman spectroscopy of trans-stilbene including the Duschinsky effect. Molecular Physics, 2013, 111, 1511-1525.   | 1.7 | 4         |
| 310 | Mercury Methylation by Cobalt Corrinoids: Relativistic Effects Dictate the Reaction Mechanism. Angewandte Chemie, 2016, 128, 11675-11678.  | 2.0 | 4         |
| 311 | The Molecular Zeeman Effect of Norbornadiene, its g-Values, Magnetizability Anisotropics, and Molecular Electric Quadrupole Moment; A High-Resolution Microwave Fourier-Transform Study Combined with Quantum Chemical Calculations. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences. 1998, 53, 67-76. | 1.5 | 3         |
| 312 | Molecular polarizabilities and magnetizabilities. Theoretical and Computational Chemistry, 1999, , 147-188.  | 0.4 | 3         |
| 313 | Properties and Spectroscopies. , 0, , 125-312.   |     | 3         |
| 314 | Gauge-origin independent magnetizabilities from hybrid quantum mechanics/molecular mechanics models: Theory and applications to liquid water. Chemical Physics Letters, 2007, 442, 322-328.  | 2.6 | 3         |
| 315 | FemExâ€"female excellence in theoretical and computational chemistry. International Journal of Quantum Chemistry, 2015, 115, 1195-1196.  | 2.0 | 3         |
| 316 | Photo-Transformation Trajectories of Nitro-Spiropyran in Hybrid Compounds with [60]Fullerene. Journal of Physical Chemistry C, 2019, 123, 18215-18221.   | 3.1 | 3         |
| 317 | Two-photon absorption in host-guest complexes. Molecular Physics, 2020, 118, e1777335.   | 1.7 | 3         |
| 318 | Electric and magnetic properties of the nitroethene molecule. Molecular Physics, 1997, 92, 89-96.  | 1.7 | 3         |
| 319 | Parallelization of the polarizable embedding scheme for higher-order response functions. Molecular Physics, 2012, 110, 2579-2586.  | 1.7 | 2         |
| 320 | Relativistic Theory of Nuclear Spin-Rotation Tensor., 2017,, 693-723.  |     | 2         |
| 321 | Molecular Electric, Magnetic, and Optical Properties. , 2015, , 1-97.  |     | 2         |
| 322 | Relativistic Four-Component DFT Calculations of Vibrational Frequencies. Journal of Physical Chemistry A, 2021, 125, 10315-10320.  | 2.5 | 2         |
| 323 | The magnetic properties of the $\tilde{A}f1A2$ excited state of H2CS. Chemical Physics Letters, 1999, 306, 64-70.  | 2.6 | 1         |
| 324 | Theoretical investigation of two model systems for molecular photoswitch functionality. I. 2-(4-nitropyrimidin-2-yl)ethenol. Molecular Physics, 2014, 112, 818-835.  | 1.7 | 1         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 325 | An efficient pseudo-spectral method for the description of atomic electronic wave functions – Application to the hydrogen atom in a uniform magnetic field. Chemical Physics, 2018, 515, 299-314. | 1.9 | 1         |
| 326 | Ro-Vibrational Corrections to NMR Parameters. ChemInform, 2005, 36, no.   | 0.0 | 0         |
| 327 | A general toolbox for the calculation of higher-order molecular properties using SCF wave functions at the one-, two- and four-component levels of theory. , 2012, , .                            |     | O         |
| 328 | FAIR and transparent research data. Open Science Talk, 2021, , .  | 0.1 | 0         |
| 329 | DORA in practice. Septentrio Conference Series, 2021, , .   | 0.0 | O         |
| 330 | Relativistic Theory of Nuclear Spin-Rotation Tensor. , 2015, , 1-31.  |     | 0         |
| 331 | Institutional transformation towards Open Science: Experiences from UiT The Arctic University of Norway. Septentrio Conference Series, 2017, , .  | 0.0 | 0         |
| 332 | Implementing DORA at UiT The Arctic University of Norway. Septentrio Conference Series, 2018, , .   | 0.0 | 0         |
| 333 | Arctic Advanced Education and Research. , 2020, , 133-141.  |     | 0         |
| 334 | Opening speech for the 15th Munin Conference on Scholarly Publishing 2020. Septentrio Conference Series, 2020, , .  | 0.0 | 0         |
| 335 | Implementing DORA. Open Science Talk, 2020, , .   | 0.1 | O         |