

# Christopher J Stein

## List of Publications by Year in descending order

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33  
papers

2,736  
citations

430874

18  
h-index

434195

31  
g-index

38  
all docs

38  
docs citations

38  
times ranked

2529  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Origin of the different reactivity of the high-valent coinage-metal complexes [RCu <sup>III</sup> Me <sub>3</sub> ] <sup>+</sup> and [RAg <sup>III</sup> Me <sub>3</sub> ] <sup>+</sup> (R=allyl)**. Chemistry - A European Journal, 2022, 28, . | 3.3  | 2         |
| 2  | NewtonNet: a Newtonian message passing network for deep learning of interatomic potentials and forces. , 2022, 1, 333-343.   |      | 42        |
| 3  | A benchmark dataset for Hydrogen Combustion. Scientific Data, 2022, 9, 215.  | 5.3  | 6         |
| 4  | Software for the frontiers of quantum chemistry: An overview of developments in the Q-Chem 5 package. Journal of Chemical Physics, 2021, 155, 084801.  | 3.0  | 518       |
| 5  | Stripping away ion hydration shells in electrical double-layer formation: Water networks matter. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .   | 7.1  | 20        |
| 6  | Modern quantum chemistry with [Open]Molcas. Journal of Chemical Physics, 2020, 152, 214117.  | 3.0  | 281       |
| 7  | Semiclassical Dispersion Corrections Efficiently Improve Multiconfigurational Theory with Short-Range Density-Functional Dynamic Correlation. Journal of Physical Chemistry A, 2020, 124, 2834-2841.   | 2.5  | 4         |
| 8  | Orbital Entanglement Analysis of Exchange-Coupled Systems. Journal of Physical Chemistry Letters, 2019, 10, 6762-6770.   | 4.6  | 14        |
| 9  | OpenMolcas: From Source Code to Insight. Journal of Chemical Theory and Computation, 2019, 15, 5925-5964.  | 5.3  | 661       |
| 10 | autoCAS: A Program for Fully Automated Multiconfigurational Calculations. Journal of Computational Chemistry, 2019, 40, 2216-2226.   | 3.3  | 60        |
| 11 | Optimization of highly excited matrix product states with an application to vibrational spectroscopy. Journal of Chemical Physics, 2019, 150, 094113.  | 3.0  | 29        |
| 12 | The Poisson-Boltzmann model for implicit solvation of electrolyte solutions: Quantum chemical implementation and assessment via Sechenov coefficients. Journal of Chemical Physics, 2019, 151, 224111.   | 3.0  | 24        |
| 13 | Structure and dynamics of the radical cation of ethane arising from the Jahn-Teller and pseudo-Jahn-Teller effects. Physical Chemistry Chemical Physics, 2018, 20, 1072-1081.  | 2.8  | 11        |
| 14 | Engineering Molecular Iodine Catalysis for Alkyl-Nitrogen Bond Formation. ACS Catalysis, 2018, 8, 3918-3925.   | 11.2 | 83        |
| 15 | Measuring multi-configurational character by orbital entanglement. Molecular Physics, 2017, 115, 2110-2119.  | 1.7  | 49        |
| 16 | Kooperative Licht-aktivierte Iod- und Photoredox-Katalyse zur Aminierung von C-H-Bindungen. Angewandte Chemie, 2017, 129, 8117-8121.   | 2.0  | 63        |
| 17 | Cooperative Light-Activated Iodine and Photoredox Catalysis for the Amination of C-H Bonds. Angewandte Chemie - International Edition, 2017, 56, 8004-8008.  | 13.8 | 181       |
| 18 | Quantum Chemical Spin Densities for Radical Cations of Photosynthetic Pigment Models. Photochemistry and Photobiology, 2017, 93, 815-833.  | 2.5  | 9         |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Redox Activity of Oxo-Bridged Iridium Dimers in an N <sub>2</sub> O-Donor Environment: Characterization of Remarkably Stable Ir(IV,V) Complexes. <i>Journal of the American Chemical Society</i> , 2017, 139, 9672-9683. | 13.7 | 45        |
| 20 | Vibrational Density Matrix Renormalization Group. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 3764-3777.   | 5.3  | 46        |
| 21 | Automated Identification of Relevant Frontier Orbitals for Chemical Compounds and Processes. <i>Chimia</i> , 2017, 71, 170.  | 0.6  | 63        |
| 22 | New Approaches for ab initio Calculations of Molecules with Strong Electron Correlation. <i>Chimia</i> , 2016, 70, 244.  | 0.6  | 94        |
| 23 | Highly Accurate Spectroscopic Parameters from Ab Initio Calculations. , 2016, , .  |      | 0         |
| 24 | The Delicate Balance of Static and Dynamic Electron Correlation. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 3764-3773.  | 5.3  | 78        |
| 25 | Automated Selection of Active Orbital Spaces. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 1760-1771.   | 5.3  | 237       |
| 26 | Theoretical rovibrational spectroscopy of $\text{NO}^2$ . <i>Journal of Molecular Spectroscopy</i> , 2015, 311, 12-18.   | 1.2  | 5         |
| 27 | High-level theoretical spectroscopic parameters for three ions of astrochemical interest. <i>Molecular Physics</i> , 2015, 113, 2169-2178.   | 1.7  | 10        |
| 28 | Challenging High-Level <i>ab initio</i> Rovibrational Spectroscopy: The Nitrous Oxide Molecule. <i>Zeitschrift Fur Physikalische Chemie</i> , 2015, 229, 1663-1690.  | 2.8  | 17        |
| 29 | Accurate Calculation of the Dissociation Energy of the Highly Anharmonic System $\text{ClHCl}^+$ . <i>Journal of Physical Chemistry A</i> , 2015, 119, 5158-5164.  | 2.5  | 4         |
| 30 | STRONG THEORETICAL SUPPORT FOR THE ASSIGNMENT OF B11244 $\text{TO}^3\text{H}^+$ . <i>Astrophysical Journal</i> , 2014, 787, 72.  | 4.5  | 30        |
| 31 | Accurate bond dissociation energies (D <sub>0</sub> ) for FHF <sup>+</sup> isotopologues. <i>Molecular Physics</i> , 2013, 111, 2647-2652.   | 1.7  | 17        |
| 32 | Rovibrational States of $\text{N}^3+$ and $\text{CO}^2$ Up to High <i>J</i> : A Theoretical Study Beyond <i>fc</i> -CCSD(T). <i>Journal of Physical Chemistry A</i> , 2013, 117, 13806-13814.                            | 2.5  | 13        |
| 33 | $\text{FHF}^+$ Isotopologues: Highly Anharmonic Hydrogen-Bonded Systems with Strong Coriolis Interaction. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9695-9703.   | 2.5  | 16        |