## **Gunnar Schmitz**

List of Publications by Year in descending order

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| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | An automatized workflow from molecular dynamic simulation to quantum chemical methods to<br>identify elementary reactions and compute reaction constants. Journal of Computational Chemistry,<br>2021, 42, 2264-2282.             | 3.3 | 6         |
| 2  | Implementation of the iterative triples model CC3 for excitation energies using pair natural orbitals and Laplace transformation techniques. Journal of Chemical Physics, 2020, 153, 034109.                                      | 3.0 | 6         |
| 3  | A Gaussian process regression adaptive density guided approach for potential energy surface construction. Journal of Chemical Physics, 2020, 153, 064105.   | 3.0 | 17        |
| 4  | Can Small Polyaromatics Describe Their Larger Counterparts for Local Reactions? A Computational<br>Study on the H-Abstraction Reaction by an H-Atom from Polyaromatics. Journal of Physical Chemistry<br>A, 2020, 124, 9626-9637. | 2.5 | 8         |
| 5  | TURBOMOLE: Modular program suite for <i>ab initio</i> quantum-chemical and condensed-matter simulations. Journal of Chemical Physics, 2020, 152, 184107.  | 3.0 | 616       |
| 6  | Assessment of the DLPNO Binding Energies of Strongly Noncovalent Bonded Atmospheric Molecular<br>Clusters. ACS Omega, 2020, 5, 7601-7612.   | 3.5 | 38        |
| 7  | Machine learning for potential energy surfaces: An extensive database and assessment of methods.<br>Journal of Chemical Physics, 2019, 150, 244113.   | 3.0 | 42        |
| 8  | Approximate high mode coupling potentials using Gaussian process regression and adaptive density guided sampling. Journal of Chemical Physics, 2019, 150, 131102.   | 3.0 | 36        |
| 9  | Assessment of the overlap metric in the context of RI-MP2 and atomic batched tensor decomposed MP2. Chemical Physics Letters, 2018, 701, 7-14.  | 2.6 | 3         |
| 10 | Gaussian process regression to accelerate geometry optimizations relying on numerical differentiation. Journal of Chemical Physics, 2018, 148, 241704.  | 3.0 | 54        |
| 11 | Atomic-batched tensor decomposed two-electron repulsion integrals. Journal of Chemical Physics, 2017, 146, 134112.  | 3.0 | 9         |
| 12 | The PNO–MP2 gradient and its application to molecular geometry optimisations. Molecular Physics, 2017, 115, 343-356.  | 1.7 | 32        |
| 13 | Accuracy of Explicitly Correlated Local PNO-CCSD(T). Journal of Chemical Theory and Computation, 2017, 13, 2623-2633.   | 5.3 | 37        |
| 14 | Combining Accuracy and Efficiency: An Incremental Focal-Point Method Based on Pair Natural<br>Orbitals. Journal of Chemical Theory and Computation, 2017, 13, 6023-6042.  | 5.3 | 14        |
| 15 | Accuracy of Frequencies Obtained with the Aid of Explicitly Correlated Wave Function Based Methods. Journal of Chemical Theory and Computation, 2017, 13, 3602-3613.  | 5.3 | 6         |
| 16 | Perturbative triples correction for local pair natural orbital based explicitly correlated CCSD(F12*)<br>using Laplace transformation techniques. Journal of Chemical Physics, 2016, 145, 234107.                                 | 3.0 | 72        |
| 17 | Explicitly correlated PNO-MP2 and PNO-CCSD and their application to the S66 set and large molecular systems. Physical Chemistry Chemical Physics, 2014, 16, 22167-22178.  | 2.8 | 92        |
| 18 | A scaling PNO–MP2 method using a hybrid OSV–PNO approach with an iterative direct generation of<br>OSVs <sup>â€</sup> . Molecular Physics, 2013, 111, 2463-2476.  | 1.7 | 60        |

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|----|--|-----|-----------|
| 19 | Auxiliary basis sets for density-fitted correlated wavefunction calculations: weighted core-valence and ECP basis sets for post-d elements. Physical Chemistry Chemical Physics, 2012, 14, 6549. | 2.8 | 53        |