

# J Christian SchÃ¶n

## List of Publications by Year in descending order

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Version: 2024-02-01

54

papers

1,858

citations

279798

23

h-index

265206

42

g-index

60

all docs

60

docs citations

60

times ranked

1501

citing authors

| #  | ARTICLE                                                                                                                                                                                                                       | IF   | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1  | Molecular dynamics and DFT study of 38-atom coinage metal clusters. Computational Materials Science, 2022, 201, 110908.                                                                                                       | 3.0  | 9         |
| 2  | Energy landscapes of low-dimensional systems – concepts and examples. Frontiers of Nanoscience, 2022, , 279-310.                                                                                                              | 0.6  | 1         |
| 3  | Energy landscapes of pure and doped ZnO: from bulk crystals to nanostructures. Frontiers of Nanoscience, 2022, , 151-193.                                                                                                     | 0.6  | 6         |
| 4  | Examination of possible high-pressure candidates of SnTiO <sub>3</sub> : The search for novel ferroelectric materials. APL Materials, 2021, 9, 021103.                                                                        | 5.1  | 5         |
| 5  | Exploring energy landscapes at the DFTB quantum level using the threshold algorithm: the case of the anionic metal cluster Au <sub>20</sub> . Theoretical Chemistry Accounts, 2021, 140, 1.                                   | 1.4  | 3         |
| 6  | Real and virtual polymorphism of titanium selenide with robust interatomic potentials. Journal of Materials Chemistry A, 2020, 8, 14054-14061.                                                                                | 10.3 | 8         |
| 7  | Short-range Structural Correlations in Amorphous 2D Polymers. ChemPhysChem, 2019, 20, 2340-2347.                                                                                                                              | 2.1  | 8         |
| 8  | Polymorphism in carbohydrate self-assembly at surfaces: STM imaging and theoretical modelling of trehalose on Cu(100). RSC Advances, 2019, 9, 35813-35819.                                                                    | 3.6  | 15        |
| 9  | Applications of crystal structure prediction – inorganic and network structures: general discussion. Faraday Discussions, 2018, 211, 613-642.                                                                                 | 3.2  | 6         |
| 10 | ZnO/ZnS (hetero)structures: <i>ab initio</i> investigations of polytypic behavior of mixed ZnO and ZnS compounds. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2018, 74, 628-642. | 1.1  | 25        |
| 11 | Structure searching methods: general discussion. Faraday Discussions, 2018, 211, 133-180.                                                                                                                                     | 3.2  | 3         |
| 12 | Crystal structure evaluation: calculating relative stabilities and other criteria: general discussion. Faraday Discussions, 2018, 211, 325-381.                                                                               | 3.2  | 7         |
| 13 | Applications of crystal structure prediction – organic molecular structures: general discussion. Faraday Discussions, 2018, 211, 493-539.                                                                                     | 3.2  | 8         |
| 14 | Two-dimensional Silicon-Carbon Compounds: Structure Prediction and Band Structures. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 1368-1373.                                                                 | 1.2  | 12        |
| 15 | The threshold algorithm: Description of the methodology and new developments. Journal of Chemical Physics, 2017, 147, 152713.                                                                                                 | 3.0  | 18        |
| 16 | Theoretical and Experimental Study of Structural Phases in CoMoO <sub>4</sub> . Crystal Research and Technology, 2017, 52, 1700069.                                                                                           | 1.3  | 20        |
| 17 | Combining pressure and temperature control in dynamics on energy landscapes. European Physical Journal B, 2017, 90, 1.                                                                                                        | 1.5  | 2         |
| 18 | Tungsten Disilicide (WSi <sub>2</sub> ): Synthesis, Characterization, and Prediction of New Crystal Structures. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 2088-2094.                                     | 1.2  | 17        |

| #  | ARTICLE                                                                                                                                                                                                                                                                                         | IF   | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Computational studies of stable hexanuclear Cu <sub>2</sub> Ag <sub>1</sub> m <sub>1</sub> Au <sub>2</sub> ( <i>l</i> <sub>1</sub> <i>m</i> <sub>1</sub> <i>l</i> <sub>2</sub> <i>m</i> <sub>2</sub> ) <sub>2</sub> clusters. International Journal of Quantum Chemistry, 2016, 116, 1006-1015. |      | 6         |
| 20 | A Threshold-Minimization Scheme for Exploring the Energy Landscape of Biomolecules: Application to a Cyclic Peptide and a Disaccharide. Journal of Chemical Theory and Computation, 2016, 12, 2471-2479.                                                                                        | 5.3  | 6         |
| 21 | Prediction and clarification of structures of (bio)molecules on surfaces. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2016, 71, 351-374.                                                                                                                           | 0.7  | 14        |
| 22 | Rate constants, timescales, and free energy barriers. Journal of Non-Equilibrium Thermodynamics, 2016, 41, 13-18.                                                                                                                                                                               | 4.2  | 13        |
| 23 | <math>\text{Ab initio}</math> computation of the transition temperature of the charge density wave transition in<math>\text{TiS}</math><math>\text{e}</math><math>\text{2}</math>. Physical Review B, 2015, 92,                                                                                 | 3.2  | 44        |
| 24 | Energy Landscape Exploration of Subâ€Nanometre Copperâ€Silver Clusters. ChemPhysChem, 2015, 16, 1461-1469.                                                                                                                                                                                      | 2.1  | 20        |
| 25 | Prediction of possible CaMnO <sub>3</sub> modifications using an<math>\text{ab initio}</math> minimization data-mining approach. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2014, 70, 809-819.                                                    | 1.1  | 17        |
| 26 | How can Databases assist with the Prediction of Chemical Compounds?. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 2717-2726.                                                                                                                                                  | 1.2  | 18        |
| 27 | Determination of the energy landscape of Pd <sub>12</sub> Pt <sub>1</sub> using a combined genetic algorithm and threshold energy method. RSC Advances, 2013, 3, 11571.                                                                                                                         | 3.6  | 12        |
| 28 | Evolution of order in amorphous-to-crystalline phase transformation of MgF <sub>2</sub> . Journal of Applied Crystallography, 2013, 46, 1105-1116.                                                                                                                                              | 4.5  | 39        |
| 29 | Energy Landscape Investigations Using the Prescribed Path Method in the ZnO System. Journal of Physical Chemistry C, 2012, 116, 16726-16739.                                                                                                                                                    | 3.1  | 34        |
| 30 | Tetrahelix Conformations and Transformation Pathways in Pt <sub>1</sub> Pd <sub>12</sub> Clusters. Journal of Physical Chemistry A, 2012, 116, 5235-5239.                                                                                                                                       | 2.5  | 15        |
| 31 | Theoretical and Experimental Exploration of the Energy Landscape of the Quasiâ€Binary Cesium Chloride/Lithium Chloride System. Chemistry - A European Journal, 2012, 18, 3559-3565.                                                                                                             | 3.3  | 10        |
| 32 | Sterically Active Electron Pairs in Lead Sulfide? An Investigation of the Electronic and Vibrational Properties of PbS in the Transition Region Between the Rock Salt and the GeTe Type Modifications. Chemistry - A European Journal, 2012, 18, 10929-10936.                                   | 3.3  | 35        |
| 33 | A Universal Representation of the States of Chemical Matter Including Metastable Configurations in Phase Diagrams. Angewandte Chemie - International Edition, 2012, 51, 132-135.                                                                                                                | 13.8 | 37        |
| 34 | Competitive trapping in complex state spaces. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 075101.                                                                                                                                                                             | 2.1  | 10        |
| 35 | Addressing chemical diversity by employing the energy landscape concept. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, 518-534.                                                                                                                                         | 0.3  | 35        |
| 36 | Predicting solid compounds via global exploration of the energy landscape of solids on the<math>\text{ab initio}</math> level without recourse to experimental information. Physica Status Solidi (B): Basic Research, 2010, 247, 23-39.                                                        | 1.5  | 89        |

| #  | ARTICLE                                                                                                                                                                                                             | IF   | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Ab initio prediction of low-temperature phase diagrams in the Al–Ga–In–As system, MAs <sub>2</sub> As (M, M <sup>2+</sup> = Tl, ETQql 1.0.78<br>Chemical Physics, 2010, 12, 8491.                                   | 2.8  | 18        |
| 38 | Structural Insights into 19-Atom Pd/Pt Nanoparticles: A Computational Perspective. Journal of Physical Chemistry C, 2009, 113, 15904-15908.                                                                         | 3.1  | 21        |
| 39 | Stability of Alkali Metal Halide Polymorphs as a Function of Pressure. Chemistry - an Asian Journal, 2008, 3, 561-572.                                                                                              | 3.3  | 63        |
| 40 | Possible Existence of Alkali Metal Orthocarbonates at High Pressure. Chemistry - A European Journal, 2007, 13, 7330-7348.                                                                                           | 3.3  | 35        |
| 41 | The Route to the Structure Determination of Amorphous Solids: A Case Study of the Ceramic Si <sub>3</sub> B <sub>3</sub> N <sub>7</sub> . Angewandte Chemie - International Edition, 2006, 45, 4244-4263.           | 13.8 | 38        |
| 42 | “Design in Chemical Synthesis” An Illusion?. Angewandte Chemie - International Edition, 2006, 45, 3406-3412.                                                                                                        | 13.8 | 107       |
| 43 | Kinetic Features of Preferential Trapping on Energy Landscapes. Foundations of Physics Letters, 2005, 18, 171-182.                                                                                                  | 0.6  | 25        |
| 44 | Modeling the sol-gel synthesis route of amorphous Si <sub>3</sub> B <sub>3</sub> N <sub>7</sub> . Journal of Materials Chemistry, 2005, 15, 1167-1178.                                                              | 6.7  | 23        |
| 45 | Computational Design and Prediction of Interesting Not-Yet-Synthesized Structures of Inorganic Materials by Using Building Unit Concepts. Chemistry - A European Journal, 2002, 8, 4102-4113.                       | 3.3  | 105       |
| 46 | Prediction of high pressure phases in the systems Li <sub>3</sub> N, Na <sub>3</sub> N, (Li,Na) <sub>3</sub> N, Li <sub>2</sub> S and Na <sub>2</sub> S. Journal of Materials Chemistry, 2001, 11, 69-77.           | 6.7  | 55        |
| 47 | The lid method for exhaustive exploration of metastable states of complex systems. Computer Physics Communications, 1999, 116, 17-27.                                                                               | 7.5  | 44        |
| 48 | Properties of the energy landscape of network models for covalent glasses. Journal of Physics A, 1998, 31, 8165-8178.                                                                                               | 1.6  | 28        |
| 49 | Preferential trapping on energy landscapes in regions containing deep-lying minima: The reason for the success of simulated annealing?. Journal of Physics A, 1997, 30, 2367-2389.                                  | 1.6  | 37        |
| 50 | Auf dem Weg zur Syntheseplanung in der Festkörperchemie: Vorhersage existenzfähiger Strukturkandidaten mit Verfahren zur globalen Strukturoptimierung. Angewandte Chemie, 1996, 108, 1358-1377.                     | 2.0  | 76        |
| 51 | First Step Towards Planning of Syntheses in Solid-State Chemistry: Determination of Promising Structure Candidates by Global Optimization. Angewandte Chemie International Edition in English, 1996, 35, 1286-1304. | 4.4  | 268       |
| 52 | Does the Death Knell Toll for the Metallic Bond?. Angewandte Chemie International Edition in English, 1995, 34, 1081-1083.                                                                                          | 4.4  | 14        |
| 53 | Contact structure in thermodynamic theory. Reports on Mathematical Physics, 1991, 29, 109-121.                                                                                                                      | 0.8  | 113       |
| 54 | Statistical approach to the geometric structure of thermodynamics. Physical Review A, 1990, 41, 3156-3160.                                                                                                          | 2.5  | 92        |