

Johannes Kästner

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/564121/publications.pdf>

Version: 2024-02-01

148
papers

7,013
citations

81839

39
h-index

66879

78
g-index

153
all docs

153
docs citations

153
times ranked

6536
citing authors

#	ARTICLE	IF	CITATIONS
1	Umbrella sampling. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2011, 1, 932-942.	6.2	901
2	DL-FIND: An Open-Source Geometry Optimizer for Atomistic Simulations. Journal of Physical Chemistry A, 2009, 113, 11856-11865.	1.1	466
3	Projector augmented wave method: ab initio molecular dynamics with full wave functions. Bulletin of Materials Science, 2003, 26, 33-41.	0.8	374
4	hemS” a modular software package for QM/MM simulations. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2014, 4, 101-110.	6.2	351
5	Bridging the gap between thermodynamic integration and umbrella sampling provides a novel analysis method: “Umbrella integration”. Journal of Chemical Physics, 2005, 123, 144104.	1.2	342
6	Superlinearly converging dimer method for transition state search. Journal of Chemical Physics, 2008, 128, 014106.	1.2	282
7	Atom Tunneling in Chemistry. Angewandte Chemie - International Edition, 2016, 55, 5400-5413.	7.2	175
8	QM/MM Free-Energy Perturbation Compared to Thermodynamic Integration and Umbrella Sampling: Application to an Enzymatic Reaction. Journal of Chemical Theory and Computation, 2006, 2, 452-461.	2.3	152
9	Analysis of the statistical error in umbrella sampling simulations by umbrella integration. Journal of Chemical Physics, 2006, 124, 234106.	1.2	150
10	Ammonia Production at the FeMo Cofactor of Nitrogenase: Results from Density Functional Theory. Journal of the American Chemical Society, 2007, 129, 2998-3006.	6.6	125
11	Nitrogen Binding to the FeMo-Cofactor of Nitrogenase. Journal of the American Chemical Society, 2003, 125, 15772-15778.	6.6	109
12	Locating Instantons in Many Degrees of Freedom. Journal of Chemical Theory and Computation, 2011, 7, 690-698.	2.3	105
13	The Stabilizing Effects in Gold Carbene Complexes. Angewandte Chemie - International Edition, 2015, 54, 10336-10340.	7.2	103
14	Theory and simulation of atom tunneling in chemical reactions. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2014, 4, 158-168.	6.2	83
15	Gaussian process regression for geometry optimization. Journal of Chemical Physics, 2018, 148, .	1.2	81
16	An embedded cluster study of the formation of water on interstellar dust grains. Physical Chemistry Chemical Physics, 2009, 11, 5431.	1.3	78
17	Hydrogen Atom Tunneling Could Contribute to H ₂ Formation in Space. Angewandte Chemie - International Edition, 2010, 49, 7350-7352.	7.2	73
18	Double Regioselective Asymmetric C-Allylation of Isoxazolinones: Iridium-Catalyzed N-Allylation Followed by an Aza-Cope Rearrangement. Angewandte Chemie - International Edition, 2018, 57, 1404-1408.	7.2	71

#	ARTICLE	IF	CITATIONS
19	Formation of the prebiotic molecule NH_2CHO on astronomical amorphous solid water surfaces: accurate tunneling rate calculations. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 29278-29285.	1.3	67
20	Adaptive integration grids in instanton theory improve the numerical accuracy at low temperature. <i>Journal of Chemical Physics</i> , 2011, 134, 184107.	1.2	65
21	Gold(I) Vinylidene Complexes as Reactive Intermediates and Their Tendency to π -Backbond. <i>Chemistry - A European Journal</i> , 2016, 22, 2892-2895.	1.7	65
22	Finite-temperature effects in enzymatic reactions – Insights from QM/MM free-energy simulations. <i>Canadian Journal of Chemistry</i> , 2009, 87, 1322-1337.	0.6	64
23	Reaction Mechanism of Monoamine Oxidase from QM/MM Calculations. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14238-14246.	1.2	62
24	Interlayer Interactions as Design Tool for Large-Pore COFs. <i>Journal of the American Chemical Society</i> , 2021, 143, 15711-15722.	6.6	60
25	Deuterium Enrichment of Interstellar Methanol Explained by Atom Tunneling. <i>Journal of Physical Chemistry A</i> , 2011, 115, 10767-10774.	1.1	53
26	Role of Tunneling in the Enzyme Glutamate Mutase. <i>Journal of Physical Chemistry B</i> , 2012, 116, 13682-13689.	1.2	52
27	Gaussian Moments as Physically Inspired Molecular Descriptors for Accurate and Scalable Machine Learning Potentials. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 5410-5421.	2.3	51
28	Asymmetric Ketone Reduction by Imine Reductases. <i>ChemBioChem</i> , 2017, 18, 253-256.	1.3	50
29	Activation and protonation of dinitrogen at the FeMo cofactor of nitrogenase. <i>Journal of Chemical Physics</i> , 2005, 123, 074306.	1.2	49
30	Umbrella integration in two or more reaction coordinates. <i>Journal of Chemical Physics</i> , 2009, 131, 034109.	1.2	49
31	Exploiting QM/MM Capabilities in Geometry Optimization: A Microiterative Approach Using Electrostatic Embedding. <i>Journal of Chemical Theory and Computation</i> , 2007, 3, 1064-1072.	2.3	48
32	Gaussian Process Regression for Transition State Search. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 5777-5786.	2.3	48
33	Towards an Understanding of the Workings of Nitrogenase from DFT Calculations. <i>ChemPhysChem</i> , 2005, 6, 1724-1726.	1.0	45
34	Efficient Production of S_8 in Interstellar Ices: The Effects of Cosmic-Ray-driven Radiation Chemistry and Nondiffusive Bulk Reactions. <i>Astrophysical Journal</i> , 2020, 888, 52.	1.6	45
35	On the Accessible Reaction Channels of Vinyl Gold(I) Species: π - and σ -Pathways. <i>Chemistry - A European Journal</i> , 2017, 23, 10901-10905.	1.7	44
36	Ectodomain orientation, conformational plasticity and oligomerization of ErbB1 receptors investigated by molecular dynamics. <i>Journal of Structural Biology</i> , 2009, 167, 117-128.	1.3	42

#	ARTICLE	IF	CITATIONS
37	Strategies for the construction of machine-learning potentials for accurate and efficient atomic-scale simulations. <i>Machine Learning: Science and Technology</i> , 2021, 2, 031001.	2.4	42
38	Fe or Fe ₂ NO Catalysis? A Quantum Chemical Investigation of the [Fe(CO) ₃ (NO)] ⁺ Catalyzed Cloke-Wilson Rearrangement. <i>Chemistry - A European Journal</i> , 2014, 20, 7254-7257.	1.7	41
39	Efficient training of ANN potentials by including atomic forces via Taylor expansion and application to water and a transition-metal oxide. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	40
40	Path Length Determines the Tunneling Decay of Substituted Carbenes. <i>Chemistry - A European Journal</i> , 2013, 19, 8207-8212.	1.7	38
41	High Oxidation State Molybdenum η^5 -Heterocyclic Carbene Alkylidyne Complexes: Synthesis, Mechanistic Studies, and Reactivity. <i>Chemistry - A European Journal</i> , 2017, 23, 15484-15490.	1.7	38
42	Atom Tunneling in the Water Formation Reaction H ₂ + OH \rightarrow H ₂ O + H on an Ice Surface. <i>ACS Earth and Space Chemistry</i> , 2017, 1, 399-410.	1.2	38
43	Human Epidermal Growth Factor Receptor (EGFR) Aligned on the Plasma Membrane Adopts Key Features of Drosophila EGFR Asymmetry. <i>Molecular and Cellular Biology</i> , 2011, 31, 2241-2252.	1.1	37
44	Quantum tunneling during interstellar surface-catalyzed formation of water: the reaction H + H ₂ O \rightarrow H ₂ + OH. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 33021-33030.	1.3	36
45	Proton Affinities of N-Heterocyclic Olefins and Their Implications for Organocatalyst Design. <i>Journal of Organic Chemistry</i> , 2019, 84, 2209-2218.	1.7	36
46	Kinetic isotope effects calculated with the instanton method. <i>Journal of Computational Chemistry</i> , 2011, 32, 3456-3463.	1.5	35
47	Averaging Techniques for Reaction Barriers in QM/MM Simulations. <i>ChemPhysChem</i> , 2014, 15, 3264-3269.	1.0	35
48	N ₂ Binding to the FeMoCofactor of Nitrogenase. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2015, 641, 118-122.	0.6	34
49	Atom Tunneling in the Hydroxylation Process of Taurine/ α -Ketoglutarate Dioxygenase Identified by Quantum Mechanics/Molecular Mechanics Simulations. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5347-5354.	1.2	34
50	Synergistic Substrate and Oxygen Activation in Salicylate Dioxygenase Revealed by QM/MM Simulations. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1168-1172.	7.2	33
51	Model for Acetylene Reduction by Nitrogenase Derived from Density Functional Theory. <i>Inorganic Chemistry</i> , 2005, 44, 4568-4575.	1.9	32
52	The Fragmentation/Recombination Mechanism of the Enzyme Glutamate Mutase Studied by QM/MM Simulations. <i>Journal of the American Chemical Society</i> , 2011, 133, 10195-10203.	6.6	32
53	An Aluminum Fluoride Complex with an Appended Ammonium Salt as an Exceptionally Active Cooperative Catalyst for the Asymmetric Carboxycyanation of Aldehydes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4056-4060.	7.2	32
54	C(sp ³)-H Bond Activation by Vinylidene Gold(I) Complexes: A Concerted Asynchronous or Stepwise Process?. <i>Chemistry - A European Journal</i> , 2017, 23, 16097-16103.	1.7	32

#	ARTICLE	IF	CITATIONS
55	The Case of H ₂ C ₃ O Isomers, Revisited: Solving the Mystery of the Missing Propadienone. <i>Astrophysical Journal</i> , 2019, 878, 80.	1.6	32
56	Der Tunneleffekt von Atomen in der Chemie. <i>Angewandte Chemie</i> , 2016, 128, 5488-5502.	1.6	31
57	Reaction Mechanism of the Bicopper Enzyme Peptidylglycine Î±-Hydroxylating Monooxygenase. <i>Journal of Biological Chemistry</i> , 2014, 289, 13726-13738.	1.6	30
58	Nudged-elastic band used to find reaction coordinates based on the free energy. <i>Journal of Chemical Physics</i> , 2014, 140, 074109.	1.2	30
59	Molybdenum and Tungsten Alkylidyne Complexes Containing Mono-, Bi-, and Tridentate N-Heterocyclic Carbenes. <i>Organometallics</i> , 2019, 38, 4133-4146.	1.1	30
60	Reaction rates and kinetic isotope effects of H ₂ + OH â†’ H ₂ O + H. <i>Journal of Chemical Physics</i> , 2016, 144, 174303.	1.2	29
61	Hydrogen transfer reactions of interstellar complex organic molecules. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 2007-2015.	1.6	29
62	Tunneling Above the Crossover Temperature. <i>Journal of Physical Chemistry A</i> , 2014, 118, 78-82.	1.1	28
63	The Lewis Pair Polymerization of Lactones Using Metal Halides and N-Heterocyclic Olefins: Theoretical Insights. <i>Molecules</i> , 2018, 23, 432.	1.7	27
64	Hydrogenation and Deuteration of C ₂ H ₂ and C ₂ H ₄ on Cold Grains: A Clue to the Formation Mechanism of C ₂ H ₆ with Astronomical Interest. <i>Astrophysical Journal</i> , 2017, 837, 155.	1.6	26
65	Influence of Surface and Bulk Water Ice on the Reactivity of a Water-forming Reaction. <i>Astrophysical Journal</i> , 2017, 846, 43.	1.6	26
66	Tunneling Rate Constants for H ₂ CO+H on Amorphous Solid Water Surfaces. <i>Astrophysical Journal</i> , 2017, 850, 118.	1.6	26
67	Formation of Acetaldehyde on CO-Rich Ices. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 958-963.	1.2	25
68	Isomers in Interstellar Environments. I. The Case of Z- and E-cyanomethanimine. <i>Astrophysical Journal</i> , 2020, 897, 158.	1.6	25
69	Revisiting the reactivity between HCO and CH ₃ on interstellar grain surfaces. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 2523-2527.	1.6	25
70	Influence of the Environment on the Oxidative Deamination of <i>p</i> -Substituted Benzylamines in Monoamine Oxidase. <i>Journal of Physical Chemistry B</i> , 2015, 119, 3678-3686.	1.2	24
71	Tunneling Reaction Kinetics for the Hydrogen Abstraction Reaction H + H ₂ S â†’ H ₂ + HS in the Interstellar Medium. <i>Journal of Physical Chemistry A</i> , 2017, 121, 9736-9741.	1.1	24
72	Hessian Matrix Update Scheme for Transition State Search Based on Gaussian Process Regression. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 5083-5089.	2.3	24

#	ARTICLE	IF	CITATIONS
73	Rate constants from instanton theory via a microcanonical approach. <i>Journal of Chemical Physics</i> , 2017, 146, 074105.	1.2	23
74	Potential energy surface interpolation with neural networks for instanton rate calculations. <i>Journal of Chemical Physics</i> , 2018, 148, 094106.	1.2	23
75	Gaussian Process Regression for Minimum Energy Path Optimization and Transition State Search. <i>Journal of Physical Chemistry A</i> , 2019, 123, 9600-9611.	1.1	23
76	Instanton rate constant calculations close to and above the crossover temperature. <i>Journal of Computational Chemistry</i> , 2017, 38, 2570-2580.	1.5	22
77	Silicate-mediated interstellar water formation: a theoretical study. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 5389-5400.	1.6	22
78	Field evaporation and atom probe tomography of pure water tips. <i>Scientific Reports</i> , 2020, 10, 20271.	1.6	22
79	The ribosome catalyzes peptide bond formation by providing high ionic strength. <i>Molecular Physics</i> , 2010, 108, 293-306.	0.8	21
80	How maltose influences structural changes to bind to maltose-binding protein: Results from umbrella sampling simulation. <i>Proteins: Structure, Function and Bioinformatics</i> , 2013, 81, 185-198.	1.5	19
81	Charge Distribution in Cationic Molybdenum Imido Alkylidene λ^5 -N-Heterocyclic Carbene Complexes: A Combined X-ray, XAS, XES, DFT, Mössbauer, and Catalysis Approach. <i>ACS Catalysis</i> , 2020, 10, 14810-14823.	5.5	19
82	An algorithm to find minimum free-energy paths using umbrella integration. <i>Journal of Chemical Physics</i> , 2012, 137, 034105.	1.2	18
83	Dual-Level Approach to Instanton Theory. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 1865-1872.	2.3	18
84	Unfolding of DNA by co-solutes: insights from Kirkwood-Buff integrals and transfer free energies. <i>European Physical Journal: Special Topics</i> , 2019, 227, 1665-1679.	1.2	18
85	Neural-network assisted study of nitrogen atom dynamics on amorphous solid water: I. adsorption and desorption. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 499, 1373-1384.	1.6	18
86	Catalytic Mechanism of Salicylate Dioxygenase: QM/MM Simulations Reveal the Origin of Unexpected Regioselectivity of the Ring Cleavage. <i>Chemistry - A European Journal</i> , 2017, 23, 8949-8962.	1.7	17
87	Asymmetric Carboxycyanation of Aldehydes by Cooperative AlF/Onium Salt Catalysts: from Cyanofornate to KCN as Cyanide Source. <i>Chemistry - A European Journal</i> , 2019, 25, 1515-1524.	1.7	17
88	A cryogenic ice setup to simulate carbon atom reactions in interstellar ices. <i>Review of Scientific Instruments</i> , 2020, 91, 054501.	0.6	17
89	Geometry Optimization in Internal Coordinates Based on Gaussian Process Regression: Comparison of Two Approaches. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 5955-5967.	2.3	17
90	Carbon Atom Reactivity with Amorphous Solid Water: H ₂ O-Catalyzed Formation of H ₂ CO. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 10854-10860.	2.1	17

#	ARTICLE	IF	CITATIONS
91	A Quadratically-Converging Nudged Elastic Band Optimizer. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 3498-3504.	2.3	16
92	Highly Active Cooperative Lewis Acid–Ammonium Salt Catalyst for the Enantioselective Hydroboration of Ketones. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5544-5553.	7.2	16
93	Atom tunnelling in the reaction $\text{NH}_3 + \text{H}_2 \rightarrow \text{NH}_4 + \text{H}$ and its astrochemical relevance. <i>Faraday Discussions</i> , 2016, 195, 69-80.	1.6	15
94	Importance of tunneling in H-abstraction reactions by OH radicals. <i>Astronomy and Astrophysics</i> , 2017, 599, A132.	2.1	15
95	Adsorption of H_2 on amorphous solid water studied with molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7552-7563.	1.3	15
96	Computational Study of the Hydrogenation Sequence of the Phosphorous Atom on Interstellar Dust Grains. <i>Astrophysical Journal</i> , 2021, 910, 55.	1.6	15
97	Umbrella integration with higher-order correction terms. <i>Journal of Chemical Physics</i> , 2012, 136, 234102.	1.2	14
98	Carbonylation of alkyl halides with $[\text{Fe}(\text{CO})_3(\text{NO})]^-$: in silico identification of a common intermediate. <i>Dalton Transactions</i> , 2013, 42, 7519.	1.6	14
99	Unraveling the Nature of the Catalytic Power of Fluoroacetate Dehalogenase. <i>ChemCatChem</i> , 2018, 10, 1052-1063.	1.8	14
100	Fast and Sample-Efficient Interatomic Neural Network Potentials for Molecules and Materials Based on Gaussian Moments. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 6658-6670.	2.3	14
101	Stable Cycling of Room-Temperature Sodium–Sulfur Batteries Based on an In Situ Crosslinked Gel Polymer Electrolyte. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	14
102	Calculation of Reaction Rate Constants in the Canonical and Microcanonical Ensemble. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 5489-5498.	2.3	13
103	Low-Temperature Kinetic Isotope Effects in $\text{CH}_3\text{OH} + \text{H} \rightarrow \text{CH}_2\text{OH} + \text{H}_2$ Shed Light on the Deuteration of Methanol in Space. <i>Journal of Physical Chemistry A</i> , 2019, 123, 9061-9068.	1.1	13
104	Alcohols on the Rocks: Solid-State Formation in a $\text{H}_3\text{CC}\%_i\text{CH} + \text{OH}$ Cocktail under Dark Cloud Conditions. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 986-999.	1.2	13
105	Hydrogenation of small aromatic heterocycles at low temperatures. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 3157-3164.	1.6	13
106	Predicting properties of periodic systems from cluster data: A case study of liquid water. <i>Journal of Chemical Physics</i> , 2022, 156, 114103.	1.2	13
107	Ein Aluminium–Fluorid-Komplex mit gekoppelter Ammonium-Einheit als außergewöhnlich aktiver kooperativer Katalysator in der asymmetrischen Carboxycyanierung von Aldehyden. <i>Angewandte Chemie</i> , 2017, 129, 4115-4119.	1.6	12
108	Comparison of classical reaction paths and tunneling paths studied with the semiclassical instanton theory. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 23085-23094.	1.3	12

#	ARTICLE	IF	CITATIONS
109	A sodium bis(perfluoropinacol) borate-based electrolyte for stable, high-performance room temperature sodium-sulfur batteries based on sulfurized poly(acrylonitrile). <i>Electrochemistry Communications</i> , 2021, 132, 107137.	2.3	12
110	A New Tabu-Search-Based Algorithm for Solvation of Proteins. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 814-821.	2.3	11
111	Vibrational analysis of methyl cation rare gas atom complexes: CH ₃ ⁺ Rg (Rg = He, Ne, Ar, Kr). <i>Journal of Chemical Physics</i> , 2019, 150, 084306.	1.2	11
112	Quantitative Distinction between Noble Metals Located in Mesopores from Those on the External Surface. <i>Chemistry - A European Journal</i> , 2021, 27, 17012-17023.	1.7	11
113	Instanton rate constant calculations using interpolated potential energy surfaces in nonredundant, rotationally and translationally invariant coordinates. <i>Journal of Computational Chemistry</i> , 2019, 40, 866-874.	1.5	10
114	Experimental and Theoretical Study on the Role of Monomeric vs Dimeric Rhodium Oxazolidinone Norbornadiene Complexes in Catalytic Asymmetric 1,2- and 1,4-Additions. <i>Organometallics</i> , 2020, 39, 3131-3145.	1.1	10
115	New copper(II) complexes with (Z)-N-((2-hydroxynaphthalen-1-yl)methylene)acetohydrazide]: X-ray structure, Hirshfeld analysis, X-band electron paramagnetic resonance spectra, TD-DFT calculations and superoxide dismutase mimetic activity. <i>Polyhedron</i> , 2021, 195, 114969.	1.0	10
116	Highly Active Cooperative Lewis Acid Ammonium Salt Catalyst for the Enantioselective Hydroboration of Ketones. <i>Angewandte Chemie</i> , 2021, 133, 5604-5613.	1.6	10
117	3D sub-nanometer analysis of glucose in an aqueous solution by cryo-atom probe tomography. <i>Scientific Reports</i> , 2021, 11, 11607.	1.6	10
118	Thermally Averaged Magnetic Anisotropy Tensors via Machine Learning Based on Gaussian Moments. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 1-12.	2.3	10
119	Tunnelling dominates the reactions of hydrogen atoms with unsaturated alcohols and aldehydes in the dense medium. <i>Astronomy and Astrophysics</i> , 2018, 617, A25.	2.1	9
120	Binding energies and sticking coefficients of H ₂ on crystalline and amorphous CO ice. <i>Astronomy and Astrophysics</i> , 2021, 648, A84.	2.1	9
121	Hydrogen abstraction reactions in formic and thioformic acid isomers by hydrogen and deuterium atoms. <i>Astronomy and Astrophysics</i> , 2022, 663, A41.	2.1	9
122	Theoretical exploration of seleno and tellurophenols as promising alternatives to sulfur ligands for anchoring to gold (111) materials. <i>RSC Advances</i> , 2016, 6, 4458-4468.	1.7	8
123	Status and Direction of Atom Probe Analysis of Frozen Liquids. <i>Microscopy and Microanalysis</i> , 2022, 28, 1150-1167.	0.2	8
124	Evaporation and Fragmentation of Organic Molecules in Strong Electric Fields Simulated with DFT. <i>Journal of Physical Chemistry A</i> , 2020, 124, 8633-8642.	1.1	7
125	Gas-phase spectroscopic characterization of neutral and ionic polycyclic aromatic phosphorus heterocycles (PAPHs). <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 500, 2564-2576.	1.6	7
126	Comment on "Computational evidence for sulfur atom tunneling in the ring flipping reaction of S ₄ N ₄ ". <i>Chemical Physics Letters</i> , 2020, 754, 137678.	1.2	7

#	ARTICLE	IF	CITATIONS
127	Exploration of transferable and uniformly accurate neural network interatomic potentials using optimal experimental design. <i>Machine Learning: Science and Technology</i> , 2021, 2, 035009.	2.4	7
128	QM/MM-Simulationen ergeben synergetische Substrat- und Sauerstoffaktivierung in Salicylat-Dioxygenase. <i>Angewandte Chemie</i> , 2016, 128, 1182-1187.	1.6	6
129	Influence of layer slipping on adsorption of light gases in covalent organic frameworks: A combined experimental and computational study. <i>Microporous and Mesoporous Materials</i> , 2022, 336, 111796.	2.2	6
130	Copper coordination in formylglycine generating enzymes. <i>European Physical Journal: Special Topics</i> , 2019, 227, 1657-1664.	1.2	5
131	Neural-network assisted study of nitrogen atom dynamics on amorphous solid water – II. Diffusion. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 510, 3063-3070.	1.6	5
132	Are different stoichiometries feasible for complexes between lymphotoxin-alpha and tumor necrosis factor receptor 1?. <i>BMC Structural Biology</i> , 2012, 12, 8.	2.3	4
133	An anionic molybdenum amidato bisalkyl alkylidene complex. <i>Journal of Organometallic Chemistry</i> , 2015, 799-800, 223-225.	0.8	4
134	Free energy reaction root mapping of alanine tripeptide in water. <i>Molecular Physics</i> , 2019, 117, 2284-2292.	0.8	4
135	HOCO formation in astrochemical environments by radical-induced H-abstraction from formic acid. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 293-300.	1.6	4
136	Asymmetric Hydroboration of Ketones by Cooperative Lewis Acid-Onium Salt Catalysis: A Quantum Chemical and Microkinetic Study to Combine Theory and Experiment. <i>ACS Catalysis</i> , 2022, 12, 1497-1507.	5.5	4
137	The role of atom tunneling in gas-phase reactions in planet-forming disks. <i>Astronomy and Astrophysics</i> , 2019, 627, A45.	2.1	3
138	Exploration of the Activation Mechanism of the Epigenetic Regulator MLL3: A QM/MM Study. <i>Biomolecules</i> , 2021, 11, 1051.	1.8	3
139	Interplay of Polarity and Confinement in Asymmetric Catalysis with Chiral Rh Diene Complexes in Microemulsions. <i>Chemistry - A European Journal</i> , 2021, 27, 16853-16870.	1.7	3
140	Particle methods in natural science and engineering. <i>European Physical Journal: Special Topics</i> , 2019, 227, 1493-1499.	1.2	2
141	Reaction Mechanism of Ring-Closing Metathesis with a Cationic Molybdenum Imido Alkylidene σ -Heterocyclic Carbene Catalyst. <i>Organometallics</i> , 2020, 39, 3146-3159.	1.1	2
142	Tungsten Sulfido Alkylidene and Cationic Tungsten Sulfido Alkylidene σ -Heterocyclic Carbene Complexes. <i>Organometallics</i> , 2021, 40, 4026-4034.	1.1	2
143	Inside Cover: Hydrogen-Atom Tunneling Could Contribute to H ₂ Formation in Space (<i>Angew. Chem. Int.</i>) Tj ETQq1 1, 0.784314 rgBT /Ov	7.2	1
144	Ruthenium-Catalyzed Secondary Amine Formation Studied by Density Functional Theory. <i>ChemCatChem</i> , 2021, 13, 1383-1388.	1.8	1

#	ARTICLE	IF	CITATIONS
145	Innentitelbild: Tunneln von Wasserstoffatomen kann zur Bildung von H ₂ im Weltraum beitragen (Angew. Chem. 40/2010). Angewandte Chemie, 2010, 122, 7296-7296.	1.6	0
146	Theoretische Chemie 2010. Nachrichten Aus Der Chemie, 2011, 59, 284-290.	0.0	0
147	Radiation chemistry in astrochemical models: From the laboratory to the ISM. Proceedings of the International Astronomical Union, 2019, 15, 454-455.	0.0	0
148	Frontispiece: Interplay of Polarity and Confinement in Asymmetric Catalysis with Chiral Rh Diene Complexes in Microemulsions. Chemistry - A European Journal, 2021, 27, .	1.7	0