Martin Korth

List of Publications by Year
in descending order

34 papers	2,103 citations	318942 23 h-index	425179 34 g-index
36 all docs	36 docs citations	36 times ranked	2876 citing authors

#	Article	IF	Citations
1	Magnesium-based additives for the cathode slurry to enable high voltage application of lithium-ion batteries. Electrochimica Acta, 2017, 228, 9-17.	2.6	16
2	Density Functional Theory: Not Quite the Right Answer for the Right Reason Yet. Angewandte Chemie - International Edition, 2017, 56, 5396-5398.	7.2	45
3	Cyano Ester as Solvent for High Voltage Electrochemical Double Layer Capacitors. Electrochimica Acta, 2017, 224, 278-284.	2.6	22
4	Merging Empirical Valence Bond Theory with Quantum Chemistry to Model Proton Transfer Processes in Water. Electrocatalysis, 2017, 8, 630-636.	1.5	1
5	Developing adaptive QM/MM computer simulations for electrochemistry. Journal of Computational Chemistry, 2017, 38, 51-58.	1.5	29
6	Recent Progress in Treating Proteinâ€“Ligand Interactions with Quantum-Mechanical Methods. International Journal of Molecular Sciences, 2016, 17, 742.	1.8	29
7	Alternative Singleâ€Solvent Electrolytes Based on Cyanoesters for Safer Lithiumâ€Ion Batteries. ChemSusChem, 2016, 9, 1704-1711.	3.6	30
8	Counterintuitive Role of Magnesium Salts as Effective Electrolyte Additives for High Voltage Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2016, 3, 1600096.	1.9	57
9	Insights into Bulk Electrolyte Effects on the Operative Voltage of Electrochemical Double-Layer Capacitors. Journal of Physical Chemistry C, 2016, 120, 12325-12336.	1.5	15
10	Impact of Selected LiPF₆ Hydrolysis Products on the High Voltage Stability of Lithium-Ion Battery Cells. ACS Applied Materials & Interfaces, 2016, 8, 30871-30878.	4.0	66
11	Rational design of new electrolyte materials for electrochemical double layer capacitors. Journal of Power Sources, 2016, 326, 541-548.	4.0	61
12	11th German Conference on Chemoinformatics (GCC 2015). Journal of Cheminformatics, 2016, 8, 18.	2.8	1
13	Prospects of Applying Enhanced Semi-Empirical QM Methods for 2101 Virtual Drug Design. Current Medicinal Chemistry, 2016, 23, 2101-2111.	1.2	16
14	Toward New Solvents for EDLCs: From Computational Screening to Electrochemical Validation. Journal of Physical Chemistry C, 2015, 119, 13413-13424.	1.5	66
15	Benchmark of electronic structure methods for proteinâ€“ligand interactions based on high-level reference data. Journal of Theoretical and Computational Chemistry, 2015, 14, 1540001.	1.8	7
16	Enhanced semiempirical QM methods for biomolecular interactions. Computational and Structural Biotechnology Journal, 2015, 13, 169-175.	1.9	61
17	Large-scale virtual high-throughput screening for the identification of new battery electrolyte solvents: computing infrastructure and collective properties. Physical Chemistry Chemical Physics, 2015, 17, 3394-3401.	1.3	56
18	Charting the known chemical space for non-aqueous lithiumâ€“air battery electrolyte solvents. Physical Chemistry Chemical Physics, 2015, 17, 22596-22603.	1.3	55

#	Article	IF	Citations
19	How to estimate solid-electrolyte-interphase features when screening electrolyte materials. Physical Chemistry Chemical Physics, 2015, 17, 22799-22808.	1.3	36
20	A third-generation dispersion and third-generation hydrogen bonding corrected PM6 method: PM6-D3H+. PeerJ, 2014, 2, e449.	0.9	46
21	Computational studies of solid electrolyte interphase formation. Chemical Modelling, 2014, , 57-87.	0.2	6
22	Large-scale virtual high-throughput screening for the identification of new battery electrolyte solvents: evaluation of electronic structure theory methods. Physical Chemistry Chemical Physics, 2014, 16, 7919-7926.	1.3	81
23	Error estimates for (semi-)empirical dispersion terms and large biomacromolecules. Organic and Biomolecular Chemistry, 2013, 11, 6515.	1.5	9
24	Comparison of Molecular Mechanics, Semi-Empirical Quantum Mechanical, and Density Functional Theory Methods for Scoring Proteinâ€“Ligand Interactions. Journal of Physical Chemistry B, 2013, 117, 8075-8084.	1.2	55
25	A quantum chemical view of enthalpyâ€“entropy compensation. MedChemComm, 2013, 4, 1025.	3.5	15
26	The Lithiumâ€“Thiophene Riddle Revisited. Journal of Physical Chemistry A, 2011, 115, 11734-11739.	1.1	21
27	Benchmarking Semiempirical Methods for Thermochemistry, Kinetics, and Noncovalent Interactions: OMx Methods Are Almost As Accurate and Robust As DFT-GGA Methods for Organic Molecules. Journal of Chemical Theory and Computation, 2011, 7, 2929-2936.	2.3	89
28	Empirical Hydrogenâ€Bond Potential Functionsâ€”An Old Hat Reconditioned. ChemPhysChem, 2011, 12, 3131-3142.	1.0	29
29	Third-Generation Hydrogen-Bonding Corrections for Semiempirical QM Methods and Force Fields. Journal of Chemical Theory and Computation, 2010, 6, 3808-3816.	2.3	213
30	A Transferable H-Bonding Correction for Semiempirical Quantum-Chemical Methods. Journal of Chemical Theory and Computation, 2010, 6, 344-352.	2.3	249
31	â€œMindlessâ€•DFT Benchmarking. Journal of Chemical Theory and Computation, 2009, 5, 993-1003.	2.3	215
32	Toward the Exact Solution of the Electronic SchrÃ¶dinger Equation for Noncovalent Molecular Interactions:â€‰ Worldwide Distributed Quantum Monte Carlo Calculations. Journal of Physical Chemistry A, 2008, 112, 2104-2109.	1.1	47
33	How to Compute Isomerization Energies of Organic Molecules with Quantum Chemical Methods. Journal of Organic Chemistry, 2007, 72, 2118-2126.	1.7	234
34	The Importance of Inter- and Intramolecular van der Waals Interactions in Organic Reactions: the Dimerization of Anthracene Revisited. Angewandte Chemie - International Edition, 2006, 45, 625-629.	7.2	124