

# Klaus R. Liedl

## List of Publications by Year in descending order

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327  
papers

9,587  
citations

38742

50  
h-index

74163

75  
g-index

356  
all docs

356  
docs citations

356  
times ranked

10708  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bornâˆ“Oppenheimer ab Initio QM/MM Dynamics Simulations of Na+and K+in Water:Â From Structure Making to Structure Breaking Effects. <i>Journal of Physical Chemistry A</i> , 1998, 102, 10340-10347.	2.5	218
2	Ice nucleation by water-soluble macromolecules. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 4077-4091.	4.9	198
3	How To Optimize Shape-Based Virtual Screening: Choosing the Right Query and Including Chemical Information. <i>Journal of Chemical Information and Modeling</i> , 2009, 49, 678-692.	5.4	178
4	A QM/MM simulation method applied to the solution of Li+ in liquid ammonia. <i>Chemical Physics</i> , 1996, 211, 313-323.	1.9	175
5	Prediction of the structure of human Janus kinase 2 (JAK2) comprising the two carboxy-terminal domains reveals a mechanism for autoregulation. <i>Protein Engineering, Design and Selection</i> , 2001, 14, 27-37.	2.1	154
6	On the Surprising Kinetic Stability of Carbonic Acid (H2CO3). <i>Angewandte Chemie - International Edition</i> , 2000, 39, 891-894.	13.8	152
7	CACNA1D De Novo Mutations in Autism Spectrum Disorders Activate Cav1.3 L-Type Calcium Channels. <i>Biological Psychiatry</i> , 2015, 77, 816-822.	1.3	147
8	Influenza neuraminidase: A druggable target for natural products. <i>Natural Product Reports</i> , 2012, 29, 11-36.	10.3	146
9	Identification of Novel Functional Inhibitors of Acid Sphingomyelinase. <i>PLoS ONE</i> , 2011, 6, e23852.	2.5	145
10	Heteroaromatic Î€-Stacking Energy Landscapes. <i>Journal of Chemical Information and Modeling</i> , 2014, 54, 1371-1379.	5.4	144
11	Solvation of Ca2+in Water Studied by Bornâˆ“Oppenheimer ab Initio QM/MM Dynamics. <i>Journal of Physical Chemistry A</i> , 1997, 101, 6299-6309.	2.5	140
12	Carbonic Acid in the Gas Phase and Its Astrophysical Relevance. <i>Science</i> , 1998, 279, 1332-1335.	12.6	125
13	Antiviral Potential and Molecular Insight into Neuraminidase Inhibiting Diarylheptanoids from <i>Alpinia katsumadai</i> . <i>Journal of Medicinal Chemistry</i> , 2010, 53, 778-786.	6.4	114
14	Characterization of the Vitamin E-Binding Properties of Human Plasma Afamin. <i>Biochemistry</i> , 2002, 41, 14532-14538.	2.5	103
15	Qualitative prediction of bloodâ€™brain barrier permeability on a large and refined dataset. <i>Journal of Computer-Aided Molecular Design</i> , 2011, 25, 1095-1106.	2.9	97
16	DPPC-cholesterol phase diagram using coarse-grained Molecular Dynamics simulations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 2846-2857.	2.6	95
17	Toward elimination of discrepancies between theory and experiment: The rate constant of the atmospheric conversion of SO3 to H2SO4. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 8874-8878.	7.1	91
18	The Protein Data Bank (PDB), Its Related Services and Software Tools as Key Components for In Silico Guided Drug Discovery. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 7021-7040.	6.4	91

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19	The hydration shell structure of Li <sup>+</sup> investigated by Born–Oppenheimer ab initio QM/MM dynamics. <i>Chemical Physics Letters</i> , 1998, 286, 56-64.	2.6	89
20	A critical analysis of electronic density functionals for structural, energetic, dynamic, and magnetic properties of hydrogen fluoride clusters. <i>Journal of Computational Chemistry</i> , 1997, 18, 1695-1719.	3.3	85
21	Towards the Experimental Decomposition Rate of Carbonic Acid (H <sub>2</sub> CO <sub>3</sub> ) in Aqueous Solution. <i>Chemistry - A European Journal</i> , 2002, 8, 66-73.	3.3	84
22	Reactivity and Regioselectivity of Hydroxyl Radical Addition to Halogenated Ethenes. <i>Journal of Physical Chemistry A</i> , 1998, 102, 1583-1594.	2.5	81
23	The optimal tunneling path for the proton transfer in malonaldehyde. <i>Journal of Chemical Physics</i> , 2002, 117, 1962-1966.	3.0	80
24	Broadly neutralizing antibodies target a haemagglutinin anchor epitope. <i>Nature</i> , 2022, 602, 314-320.	27.8	78
25	A challenging system: Free energy prediction for factor Xa. <i>Journal of Computational Chemistry</i> , 2011, 32, 1743-1752.	3.3	75
26	Dispersion dominated halogen–π interactions: energies and locations of minima. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 14941.	2.8	73
27	Characterizing the Diversity of the CDR-H3 Loop Conformational Ensembles in Relationship to Antibody Binding Properties. <i>Frontiers in Immunology</i> , 2018, 9, 3065.	4.8	73
28	Toward Elimination of Discrepancies between Theory and Experiment: Double Proton Transfer in Dimers of Carboxylic Acids. <i>Journal of the American Chemical Society</i> , 1998, 120, 12595-12600.	13.7	72
29	Automated Docking of Ligands to Antibodies: Methods and Applications. <i>Methods</i> , 2000, 20, 280-291.	3.8	72
30	The ground-state tunneling splitting of various carboxylic acid dimers. <i>Journal of Chemical Physics</i> , 2004, 120, 631-637.	3.0	71
31	Has the Dimer of Carbonic Acid a Lower Energy Than Its Constituents Water and Carbon Dioxide?. <i>Journal of the American Chemical Society</i> , 1997, 119, 3782-3784.	13.7	70
32	The Impact of Nitration on the Structure and Immunogenicity of the Major Birch Pollen Allergen Bet v 1.0101. <i>PLoS ONE</i> , 2014, 9, e104520.	2.5	70
33	Investigation of Cu <sup>2+</sup> Hydration and the Jahn–Teller Effect in Solution by QM/MM Monte Carlo Simulations. <i>Journal of Physical Chemistry A</i> , 1999, 103, 11387-11393.	2.5	69
34	Water-Mediated Proton Transfer: A Mechanistic Investigation on the Example of the Hydration of Sulfur Oxides. <i>Journal of Physical Chemistry A</i> , 2001, 105, 5137-5145.	2.5	69
35	Modeling Anhydrous and Aqua Copper(II) Amino Acid Complexes: A New Molecular Mechanics Force Field Parametrization Based on Quantum Chemical Studies and Experimental Crystal Data. <i>Inorganic Chemistry</i> , 2003, 42, 2268-2279.	4.0	69
36	Fold stability during endolysosomal acidification is a key factor for allergenicity and immunogenicity of the major birch pollen allergen. <i>Journal of Allergy and Clinical Immunology</i> , 2016, 137, 1525-1534.	2.9	69

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37	Enthalpic and Entropic Contributions to Hydrophobicity. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 4600-4610.	5.3	68
38	Highly Electrophilic, Catalytically Active and Redox-Responsive Cobaltoceniumyl and Ferrocenyl Triazolylidene Coinage Metal Complexes. <i>Chemistry - A European Journal</i> , 2018, 24, 3742-3753.	3.3	67
39	Matched Molecular Pair Analysis: Significance and the Impact of Experimental Uncertainty. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 3786-3802.	6.4	62
40	Polyreactive Broadly Neutralizing B cells Are Selected to Provide Defense against Pandemic Threat Influenza Viruses. <i>Immunity</i> , 2020, 53, 1230-1244.e5.	14.3	61
41	Asymmetric arginine dimethylation of RelA provides a repressive mark to modulate TNF $\alpha$ /NF- $\kappa$ B response. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 4326-4331.	7.1	60
42	Stabilizing of a Globular Protein by a Highly Complex Water Network: A Molecular Dynamics Simulation Study on Factor Xa. <i>Journal of Physical Chemistry B</i> , 2010, 114, 7405-7412.	2.6	59
43	Predictions of rate constants and estimates for tunneling splittings of concerted proton transfer in small cyclic water clusters. <i>Journal of Chemical Physics</i> , 1998, 109, 2672-2679.	3.0	57
44	Conformationally Induced Changes in the Electronic Structures of Some Flexible Benzenes. A Molecular Orbital Model. <i>Journal of the American Chemical Society</i> , 1998, 120, 12573-12582.	13.7	57
45	B-DNA's BI $\alpha$ ' BII Conformer Substate Dynamics Is Coupled with Water Migration. <i>Journal of Physical Chemistry B</i> , 1998, 102, 8934-8940.	2.6	57
46	Evaporation cycle experiments - A simulation of salt-induced peptide synthesis under possible prebiotic conditions. <i>Origins of Life and Evolution of Biospheres</i> , 1993, 23, 167-176.	1.9	56
47	A gatekeeper helix determines the substrate specificity of Sj $\alpha$ gren $\alpha$ -Larsson Syndrome enzyme fatty aldehyde dehydrogenase. <i>Nature Communications</i> , 2014, 5, 4439.	12.8	55
48	Peptidic Macrocycles - Conformational Sampling and Thermodynamic Characterization. <i>Journal of Chemical Information and Modeling</i> , 2018, 58, 982-992.	5.4	55
49	Double hydrogen tunneling revisited: The breakdown of experimental tunneling criteria. <i>Journal of Chemical Physics</i> , 2004, 120, 11650-11657.	3.0	54
50	One Concept, Three Implementations of 3D Pharmacophore-Based Virtual Screening: Distinct Coverage of Chemical Search Space. <i>Journal of Chemical Information and Modeling</i> , 2010, 50, 1241-1247.	5.4	54
51	Charge Anisotropy: Where Atomic Multipoles Matter Most. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 4488-4496.	5.3	54
52	Molecular dynamics simulation studies of novel $\beta$ -lactamase inhibitor. <i>Journal of Molecular Graphics and Modelling</i> , 2017, 74, 143-152.	2.4	53
53	Dangers of counterpoise corrected hypersurfaces. Advantages of basis set superposition improvement. <i>Journal of Chemical Physics</i> , 1998, 108, 3199-3204.	3.0	51
54	Backbone Flexibility Controls the Activity and Specificity of a Protein-Protein Interface: Specificity in Snake Venom Metalloproteases. <i>Journal of the American Chemical Society</i> , 2010, 132, 10330-10337.	13.7	51

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55	Why Are Copper(II) Amino Acid Complexes Not Planar in Their Crystal Structures? An ab Initio and Molecular Mechanics Study. <i>Inorganic Chemistry</i> , 1999, 38, 2764-2774.	4.0	50
56	Spectroscopic Observation of Matrix-Isolated Carbonic Acid Trapped from the Gas Phase. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1939-1943.	13.8	50
57	Structure of the Major Apple Allergen Mal d 1. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 1606-1612.	5.2	50
58	Cleavage Entropy as Quantitative Measure of Protease Specificity. <i>PLoS Computational Biology</i> , 2013, 9, e1003007.	3.2	49
59	CDR-H3 loop ensemble in solution – conformational selection upon antibody binding. <i>MAbs</i> , 2019, 11, 1077-1088.	5.2	49
60	Identification of PPAR $\gamma$ Partial Agonists of Natural Origin (I): Development of a Virtual Screening Procedure and In Vitro Validation. <i>PLoS ONE</i> , 2012, 7, e50816.	2.5	48
61	Salt induced peptide formation: on the selectivity of the copper induced peptide formation under possible prebiotic conditions. <i>Inorganica Chimica Acta</i> , 1995, 228, 207-214.	2.4	47
62	An accurate semiclassical method to predict ground-state tunneling splittings. <i>Journal of Chemical Physics</i> , 2002, 117, 1967-1974.	3.0	47
63	Coil-Globule Transition Thermodynamics of Poly( <i>N</i> -isopropylacrylamide). <i>Journal of Physical Chemistry B</i> , 2019, 123, 8838-8847.	2.6	45
64	Catalytic Site p <i>K<sub>a</sub></i> Values of Aspartic, Cysteine, and Serine Proteases: Constant pH MD Simulations. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 3030-3042.	5.4	44
65	Reaction-Path Dynamics of Hydroxyl Radical Reactions with Ethane and Haloethanes. <i>Journal of Physical Chemistry A</i> , 1997, 101, 4245-4253.	2.5	43
66	About the Stability of Sulfurous Acid (H <sub>2</sub> SO <sub>3</sub> ) and Its Dimer. <i>Chemistry - A European Journal</i> , 2002, 8, 5644-5651.	3.3	43
67	Development of Anti-Viral Agents Using Molecular Modeling and Virtual Screening Techniques. <i>Infectious Disorders - Drug Targets</i> , 2011, 11, 64-93.	0.8	43
68	Molecular Docking Studies of Natural Cholinesterase-Inhibiting Steroidal Alkaloids from <i>Sarcococcaligna</i> . <i>Journal of Medicinal Chemistry</i> , 2003, 46, 5087-5090.	6.4	42
69	Reciprocal regulation of PKA and Rac signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8531-8536.	7.1	42
70	Solvation Free Energy as a Measure of Hydrophobicity: Application to Serine Protease Binding Interfaces. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 5872-5882.	5.3	42
71	Complex of B-DNA with Polyamides Freezes DNA Backbone Flexibility. <i>Journal of the American Chemical Society</i> , 2001, 123, 5044-5049.	13.7	41
72	Interaction mechanisms of a melatonergic inhibitor in the melatonin synthesis pathway. <i>Journal of Molecular Liquids</i> , 2016, 221, 507-517.	4.9	39

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73	Structure, Reaction Enthalpies, Entropies, and Free Energies of Cation-Molecule Complexes. A Theoretical Study by Means of the ab Initio Complete Basis Set CBS-Q Method. <i>Journal of Physical Chemistry A</i> , 1998, 102, 771-777.	2.5	38
74	Quantitative Analysis of the Structural Requirements for Blockade of the N-Methyl-d-aspartate Receptor at the Phencyclidine Binding Site. <i>Journal of Medicinal Chemistry</i> , 1998, 41, 393-400.	6.4	38
75	Cooperative effects on the formation of intercalation sites. <i>Nucleic Acids Research</i> , 2004, 32, 4696-4703.	14.5	38
76	Computer-Guided Approach to Access the Anti-influenza Activity of Licorice Constituents. <i>Journal of Natural Products</i> , 2014, 77, 563-570.	3.0	38
77	Strong Nonadditivity as a Key Structure-Activity Relationship Feature: Distinguishing Structural Changes from Assay Artifacts. <i>Journal of Chemical Information and Modeling</i> , 2015, 55, 483-494.	5.4	38
78	Mechanism of Olefin Metathesis with Neutral and Cationic Molybdenum Imido Alkylidene $\eta^5$ -N-Heterocyclic Carbene Complexes. <i>Journal of the American Chemical Society</i> , 2019, 141, 8264-8276.	13.7	38
79	Antibodies exhibit multiple paratope states influencing VH-VL domain orientations. <i>Communications Biology</i> , 2020, 3, 589.	4.4	38
80	New Insights into the Dynamics of Concerted Proton Tunneling in Cyclic Water and Hydrogen Fluoride Clusters. <i>Journal of Physical Chemistry A</i> , 1997, 101, 4707-4716.	2.5	37
81	Theoretical Prediction of Hydrogen Bond Strength for Use in Molecular Modeling. <i>Journal of Chemical Information and Modeling</i> , 2009, 49, 2067-2076.	5.4	37
82	Identification of FAH Domain-containing Protein 1 (FAHD1) as Oxaloacetate Decarboxylase. <i>Journal of Biological Chemistry</i> , 2015, 290, 6755-6762.	3.4	37
83	Different electrostatic descriptors in comparative molecular field analysis: A comparison of molecular electrostatic and coulomb potentials. <i>Journal of Computational Chemistry</i> , 1996, 17, 1296-1308.	3.3	36
84	New High-Pressure Gallium Borate $\text{Ga}_2\text{B}_3\text{O}_7(\text{OH})$ with Photocatalytic Activity. <i>Inorganic Chemistry</i> , 2016, 55, 676-681.	4.0	36
85	C5-Methylation of Cytosine in B-DNA Thermodynamically and Kinetically Stabilizes BI. <i>Journal of the American Chemical Society</i> , 2003, 125, 14990-14991.	13.7	35
86	On the Formation of the Sulfonate Ion from Hydrated Sulfur Dioxide. <i>Journal of Physical Chemistry A</i> , 2004, 108, 3859-3864.	2.5	35
87	Ligand Binding Modulates the Structural Dynamics and Compactness of the Major Birch Pollen Allergen. <i>Biophysical Journal</i> , 2014, 107, 2972-2981.	0.5	35
88	Ab initio calculations concerning the reaction mechanism of the copper(II) catalyzed glycine condensation in aqueous sodium chloride solution. <i>Chemical Physics Letters</i> , 1992, 197, 181-186.	2.6	34
89	Novel neuraminidase inhibitors: identification, biological evaluation and investigations of the binding mode. <i>Future Medicinal Chemistry</i> , 2011, 3, 437-450.	2.3	34
90	Antibody CDR loops as ensembles in solution vs. canonical clusters from X-ray structures. <i>MAbs</i> , 2020, 12, 1744328.	5.2	34

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91	Unexpected B II Conformer Substate Population in Unoriented Hydrated Films of the d(CGCGAATTCGCG) 2 Dodecamer and of Native B-DNA from Salmon Testes. <i>Biophysical Journal</i> , 1999, 77, 398-409.	0.5	33
92	Raman Spectroscopic Study of the Phase Transition of Amorphous to Crystalline $\text{H}_2\text{O}$ -Carbonic Acid. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 2690-2694.	13.8	33
93	Matrix Isolation Studies of Carbonic Acid $\text{H}_2\text{O}$ The Vapor Phase above the $\text{H}_2\text{O}$ -Polymorph. <i>Journal of the American Chemical Society</i> , 2013, 135, 7732-7737.	13.7	33
94	High-Pressure Synthesis of $\text{Cd}(\text{NH}_3)_2(\text{BO}_3)_2$ : Pioneering the Way to the Substance Class of Ammine Borates. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6360-6363.	13.8	33
95	Biophysical classification of a CACNA1D de novo mutation as a high-risk mutation for a severe neurodevelopmental disorder. <i>Molecular Autism</i> , 2020, 11, 4.	4.9	33
96	Antipneumococcal activity of neuraminidase inhibiting artocarpin. <i>International Journal of Medical Microbiology</i> , 2015, 305, 289-297.	3.6	32
97	Elbow Flexibility and Ligand-Induced Domain Rearrangements in Antibody Fab NC6.8: Large Effects of a Small Hapten. <i>Biophysical Journal</i> , 2000, 79, 614-628.	0.5	31
98	Simulation of EcoRI Dodecamer Netropsin Complex Confirms Class I Complexation Mode. <i>Journal of the American Chemical Society</i> , 2000, 122, 3927-3931.	13.7	31
99	A Novel Paramagnetic Relaxation Enhancement Tag for Nucleic Acids: A Tool to Study Structure and Dynamics of RNA. <i>ACS Chemical Biology</i> , 2013, 8, 2697-2706.	3.4	31
100	The fumarylacetoacetate hydrolase (FAH) superfamily of enzymes: multifunctional enzymes from microbes to mitochondria. <i>Biochemical Society Transactions</i> , 2018, 46, 295-309.	3.4	30
101	The Hydrogenobryic Acid Structure Reveals the Corrin Ligand as an Entatic State Module Empowering $\text{B}_{12}$ Cofactors for Catalysis. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10756-10760.	13.8	30
102	Toward novel inhibitors against KdsB: a highly specific and selective broad-spectrum bacterial enzyme. <i>Journal of Biomolecular Structure and Dynamics</i> , 2019, 37, 1326-1345.	3.5	30
103	Large Curvature Tunneling Effects Reveal Concerted Hydrogen Exchange Rates in Cyclic Hydrogen Fluoride Clusters Comparable to Carboxylic Acid Dimers. <i>Journal of the American Chemical Society</i> , 1998, 120, 404-412.	13.7	29
104	Local and Global Rigidification Upon Antibody Affinity Maturation. <i>Frontiers in Molecular Biosciences</i> , 2020, 7, 182.	3.5	29
105	Gas-phase acidities of $\text{HM}(=\text{X})\text{XH}$ ( $\text{M}=\text{C, Si; X}=\text{O, S}$ ) acids calculated by ab initio molecular orbital methods at the G2 level of theory. <i>Chemical Physics Letters</i> , 1996, 263, 379-384.	2.6	28
106	$\text{Cu}(\text{SO}_4)_2$ and $\text{Cu}(\text{SO}_4)_2(\text{HSO}_4)_2$ : Two Silicate Analogue Borosulfates Differing in their Dimensionality: A Comparative Study of Stability and Acidity. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9548-9552.	13.8	28
107	$\text{V}_\text{H}$ - $\text{V}_\text{L}$ interdomain dynamics observed by computer simulations and NMR. <i>Proteins: Structure, Function and Bioinformatics</i> , 2020, 88, 830-839.	2.6	28
108	Influence of Backbone Conformations of Human Carbonic Anhydrase II on Carbon Dioxide Hydration: Hydration Pathways and Binding of Bicarbonate. <i>Journal of the American Chemical Society</i> , 2003, 125, 8921-8927.	13.7	28



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109	Helix Morphology Changes in B-DNA Induced By Spontaneous B <sub>I</sub> ↔ B <sub>II</sub> Substate Interconversion. <i>Journal of Biomolecular Structure and Dynamics</i> , 1999, 17, 223-235.	3.5	27
110	About the Kinetic Feasibility of the Lipscomb Mechanism in Human Carbonic Anhydrase II. <i>Journal of Physical Chemistry B</i> , 2003, 107, 12013-12020.	2.6	27
111	Toward elimination of discrepancies between theory and experiment: The gas-phase reaction of N <sub>2</sub> O <sub>5</sub> with H <sub>2</sub> O. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 487-495.	2.8	27
112	Mechanism of the Cis ↔ Trans Isomerization of Bis(glycinato)copper(II). <i>Journal of Physical Chemistry B</i> , 2004, 108, 2098-2102.	2.6	27
113	DNA Minor Groove Pharmacophores Describing Sequence Specific Properties. <i>Journal of Chemical Information and Modeling</i> , 2007, 47, 1580-1589.	5.4	27
114	Dynamic Regulation of Phenylalanine Hydroxylase by Simulated Redox Manipulation. <i>PLoS ONE</i> , 2012, 7, e53005.	2.5	27
115	<i>N</i> -Heterocyclic Carbene Gold(I) Complexes: Mechanism of the Ligand Scrambling Reaction and Their Oxidation to Gold(III) in Aqueous Solutions. <i>Inorganic Chemistry</i> , 2020, 59, 15312-15323.	4.0	27
116	Significance of Ligand Tails for Interaction with the Minor Groove of B-DNA. <i>Biophysical Journal</i> , 2001, 81, 1588-1599.	0.5	26
117	Indirect Readout of the trp-Repressor Operator Complex by B-DNA's Backbone Conformation Transitions. <i>Biochemistry</i> , 2002, 41, 4088-4095.	2.5	26
118	The structure, modelling and dynamics of 2,7-diisopropoxy-1,8-diarylnaphthalenes. <i>Perkin Transactions II RSC</i> , 2002, , 1510-1519.	1.1	26
119	The ground state tunneling splitting of the 2-pyridone-2-hydroxypyridine dimer. <i>Chemical Physics</i> , 2003, 292, 47-52.	1.9	26
120	Local structural order in carbonic acid polymorphs: Raman and FT-IR spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 108-115.	2.5	26
121	Polarizable and non-polarizable force fields: Protein folding, unfolding, and misfolding. <i>Journal of Chemical Physics</i> , 2020, 153, 185102.	3.0	26
122	<i>CACNA1I</i> gain-of-function mutations differentially affect channel gating and cause neurodevelopmental disorders. <i>Brain</i> , 2021, 144, 2092-2106.	7.6	26
123	Ligand-induced domain movement in an antibody fab: molecular dynamics studies confirm the unique domain movement observed experimentally for fab NC6.8 upon complexation and reveal its segmental flexibility 1 Edited by I. Wilson. <i>Journal of Molecular Biology</i> , 1998, 278, 301-306.	4.2	25
124	On the competing hydrations of sulfur dioxide and sulfur trioxide in our atmosphere. <i>Chemical Communications</i> , 2000, , 999-1000.	4.1	25
125	Deriving Static Atomic Multipoles from the Electrostatic Potential. <i>Journal of Chemical Information and Modeling</i> , 2013, 53, 3410-3417.	5.4	25
126	CaB <sub>2</sub> S <sub>4</sub> O <sub>16</sub> : A Borosulfate Exhibiting a New Structure Type with Phyllosilicate Analogue Topology. <i>Chemistry - A European Journal</i> , 2017, 23, 16773-16781.	3.3	25



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127	Zinc Substitution of Cobalt in Vitamin B12: Zincobyrinic acid and Zincobalamin as Luminescent Structural B12 Mimics. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14568-14572.	13.8	25
128	Characterizing Protease Specificity: How Many Substrates Do We Need?. <i>PLoS ONE</i> , 2015, 10, e0142658.	2.5	25
129	Application of multivariate data analysis methods to comparative molecular field analysis (CoMFA) data: proton affinities and pKa prediction for nucleic acids components. <i>Journal of Computer-Aided Molecular Design</i> , 1999, 13, 611-623.	2.9	24
130	Hydration of Hydroxypyrrrole Influences Binding of ImHpPyPy- $\beta$ -Dp Polyamide to DNA. <i>Journal of the American Chemical Society</i> , 2003, 125, 1088-1095.	13.7	24
131	Daunomycin Intercalation Stabilizes Distinct Backbone Conformations of DNA. <i>Journal of Biomolecular Structure and Dynamics</i> , 2004, 21, 713-724.	3.5	24
132	Interface dynamics explain assembly dependency of influenza neuraminidase catalytic activity. <i>Journal of Biomolecular Structure and Dynamics</i> , 2015, 33, 104-120.	3.5	24
133	Independent Metrics for Protein Backbone and Side-Chain Flexibility: Time Scales and Effects of Ligand Binding. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 851-860.	5.3	24
134	Chlorophyll-Derived Yellow Phyllobilins of Higher Plants as Medium-Responsive Chiral Photoswitches. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15760-15765.	13.8	24
135	A Light-Triggerable Nanoparticle Library for the Controlled Release of Non-Coding RNAs. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1985-1991.	13.8	24
136	Dynamics Govern Specificity of a Protein-Protein Interface: Substrate Recognition by Thrombin. <i>PLoS ONE</i> , 2015, 10, e0140713.	2.5	24
137	Comparative docking studies on ligand binding to the multispecific antibodies IgE-La2 and IgE-Lb4. <i>Journal of Computer-Aided Molecular Design</i> , 1996, 10, 305-320.	2.9	23
138	Nonoriented d(CGCGAATTCGCG) <sub>2</sub> Dodecamer Persists in the B-Form Even at Low Water Activity. <i>Journal of the American Chemical Society</i> , 2000, 122, 716-717.	13.7	23
139	A QM-MM interface between CHARMM and TURBOMOLE: Implementation and application to systems in bulk phase and biologically active systems. <i>Journal of Computational Chemistry</i> , 2003, 24, 1240-1249.	3.3	23
140	Entropy from State Probabilities: Hydration Entropy of Cations. <i>Journal of Physical Chemistry B</i> , 2013, 117, 6466-6472.	2.6	23
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