Albert C Fahrenbach

List of Publications by Year
in descending order

60 papers	3,574 citations	126907 33 h-index	133252 59 g-index
66 all docs	66 docs citations	66 times ranked	3556 citing authors

#	Article	IF	Citations
1	Radiolysis generates a complex organosynthetic chemical network. Scientific Reports, 2021, 11, 1743.	3.3	13
2	Selfâ€Assembly in Water with Nâ€Substituted Imines. Angewandte Chemie - International Edition, 2020, 59, 18350-18367.	13.8	55
3	Prebiotic metabolism gets a boost. Nature Chemistry, 2020, 12, 982-985.	13.6	2
4	Prebiotic Reaction Networks in Water. Life, 2020, 10, 352.	2.4	14
5	A continuous reaction network that produces RNA precursors. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13267-13274.	7.1	27
6	Selbstorganisation in Wasser mit Nâ€substituierten Aminen. Angewandte Chemie, 2020, 132, 18506-18524.	2.0	6
7	Ultraviolet-Driven Deamination of Cytidine Ribonucleotides Under Planetary Conditions. Astrobiology, 2020, 20, 878-888.	3.0	7
8	Radicals in prebiotic chemistry. Pure and Applied Chemistry, 2020, 92, 1971-1986.	1.9	6
9	Radiolytically Driven Chemical Evolution. Journal of Geography (Chigaku Zasshi), 2020, 129, 837-851.	0.3	2
10	Synthesis of a Nonhydrolyzable Nucleotide Phosphoroimidazolide Analogue That Catalyzes Nonenzymatic RNA Primer Extension. Journal of the American Chemical Society, 2018, 140, 783-792.	13.7	11
11	Synthesis of imidazole-activated ribonucleotides using cyanogen chloride. Chemical Communications, 2018, 54, 511-514.	4.1	22
12	Estimating the capacity for production of formamide by radioactive minerals on the prebiotic Earth. Scientific Reports, 2018, 8, 265.	3.3	43
13	Solvated-electron production using cyanocuprates is compatible with the UV-environment on a Hadeanâ€"Archaean Earth. Chemical Communications, 2018, 54, 1121-1124.	4.1	21
14	Radiolytic Synthesis of Cyanogen Chloride, Cyanamide and Simple Sugar Precursors. ChemistrySelect, 2018, 3, 10169-10174.	1.5	15
15	Prebiotic Geochemical Automata at the Intersection of Radiolytic Chemistry, Physical Complexity, and Systems Biology. Complexity, 2018, 2018, 1-21.	1.6	5
16	Downstream Oligonucleotides Strongly Enhance the Affinity of GMP to RNA Primerâ€"Template Complexes. Journal of the American Chemical Society, 2017, 139, 571-574.	13.7	22
17	Common and Potentially Prebiotic Origin for Precursors of Nucleotide Synthesis and Activation. Journal of the American Chemical Society, 2017, 139, 8780-8783.	13.7	81
18	Correction: Retraction: Oligoarginine peptides slow strand annealing and assist non-enzymatic RNA replication. Nature Chemistry, 2017, 9, 1286-1286.	13.6	4

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19	Tayi et al. reply. Nature, 2017, 547, E14-E15.	27.8	3
20	Insight into the mechanism of nonenzymatic RNA primer extension from the structure of an RNA-GpppG complex. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7659-7664.	7.1	32
21	Influence of Constitution and Charge on Radical Pairing Interactions in Tris-radical Tricationic Complexes. Journal of the American Chemical Society, 2016, 138, 8288-8300.	13.7	29
22	Oligoarginine peptides slow strand annealing and assist non-enzymatic RNA replication. Nature Chemistry, 2016, 8, 915-921.	13.6	40
23	Quantum Mechanical and Experimental Validation that Cyclobis(paraquatâ€<i>p</i>â€phenylene) Forms a 1:1 Inclusion Complex with Tetrathiafulvalene. Chemistry - A European Journal, 2016, 22, 2736-2745.	3.3	9
24	Uncovering the Thermodynamics of Monomer Binding for RNA Replication. Journal of the American Chemical Society, 2015, 137, 6373-6382.	13.7	28
25	Thermodynamic insights into 2-thiouridine-enhanced RNA hybridization. Nucleic Acids Research, 2015, 43, 7675-7687.	14.5	50
26	Template-directed nonenzymatic oligonucleotide synthesis: lessons from synthetic chemistry. Pure and Applied Chemistry, 2015, 87, 205-218.	1.9	8
27	Relative contractile motion of the rings in a switchable palindromic [3]rotaxane in aqueous solution driven by radical-pairing interactions. Organic and Biomolecular Chemistry, 2014, 12, 6089-6093.	2.8	25
28	Radicalâ€Cation Dimerization Overwhelms Inclusion in [<i>n</i>]Pseudorotaxanes. Chemistry - A European Journal, 2014, 20, 7334-7344.	3.3	26
29	Ground-State Kinetics of Bistable Redox-Active Donorâ€"Acceptor Mechanically Interlocked Molecules. Accounts of Chemical Research, 2014, 47, 482-493.	15.6	107
30	Intramolecular redox-induced dimerization in a viologen dendrimer. Journal of Materials Chemistry C, 2013, 1, 2302.	5.5	40
31	Mechanical Bond-Induced Radical Stabilization. Journal of the American Chemical Society, 2013, 135, 456-467.	13.7	89
32	A Radically Configurable Six-State Compound. Science, 2013, 339, 429-433.	12.6	158
33	Relative Unidirectional Translation in an Artificial Molecular Assembly Fueled by Light. Journal of the American Chemical Society, 2013, 135, 18609-18620.	13.7	112
34	Organic Switches for Surfaces and Devices. Advanced Materials, 2013, 25, 331-348.	21.0	142
35	Mechanically induced intramolecular electron transfer in a mixed-valence molecular shuttle. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11546-11551.	7.1	46
36	Radically Enhanced Molecular Switches. Journal of the American Chemical Society, 2012, 134, 16275-16288.	13.7	84

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37	Tetrathiafulvalene Hetero Radical Cation Dimerization in a Redox-Active [2]Catenane. Journal of the American Chemical Society, 2012, 134, 19136-19145.	13.7	40
38	Room-temperature ferroelectricity in supramolecular networks of charge-transfer complexes. Nature, 2012, 488, 485-489.	27.8	446
39	Ground-State Thermodynamics of Bistable Redox-Active Donorâ€“Acceptor Mechanically Interlocked Molecules. Accounts of Chemical Research, 2012, 45, 1581-1592.	15.6	119
40	A Semiconducting Organic Radical Cationic Hostâ€“Guest Complex. ACS Nano, 2012, 6, 9964-9971.	14.6	47
41	Solventâ€dependent groundâ€state distributions in a donorâ€“acceptor redoxâ€active bistable [2]catenane. Journal of Physical Organic Chemistry, 2012, 25, 544-552.	1.9	15
42	Solution-Phase Mechanistic Study and Solid-State Structure of a Tris(bipyridinium radical cation) Inclusion Complex. Journal of the American Chemical Society, 2012, 134, 3061-3072.	13.7	123
43	Controlling Switching in Bistable [2]Catenanes by Combining Donorâ€“Acceptor and Radicalâ€“Radical Interactions. Journal of the American Chemical Society, 2012, 134, 11709-11720.	13.7	70
44	Rapid thermally assisted donorâ€“acceptor catenation. Chemical Communications, 2012, 48, 9141.	4.1	8
45	A redox-active reverse donorâ€“acceptor bistable [2]rotaxane. Chemical Science, 2011, 2, 1046-1053.	7.4	58
46	Syntheses and Dynamics of Donorâ^’Acceptor [2]Catenanes in Water. Journal of the American Chemical Society, 2011, 133, 396-399.	13.7	71
47	Degenerate [2]rotaxanes with electrostatic barriers. Organic and Biomolecular Chemistry, 2011, 9, 2240.	2.8	37
48	Mechanically Stabilized Tetrathiafulvalene Radical Dimers. Journal of the American Chemical Society, 2011, 133, 4538-4547.	13.7	114
49	Reactions under the Click Chemistry Philosophy Employed in Supramolecular and Mechanostereochemical Systems. Chemistry - an Asian Journal, 2011, 6, 2660-2669.	3.3	66
50	Innentitelbild: A Light-Stimulated Molecular Switch Driven by Radical-Radical Interactions in Water (Angew. Chem. 30/2011). Angewandte Chemie, 2011, 123, 6804-6804.	2.0	0
51	Dual Stimulus Switching of a [2]Catenane in Water. Angewandte Chemie - International Edition, 2011, 50, 1805-1809.	13.8	53
52	Inside Cover: A Light-Stimulated Molecular Switch Driven by Radical-Radical Interactions in Water (Angew. Chem. Int. Ed. 30/2011). Angewandte Chemie - International Edition, 2011, 50, 6674-6674.	13.8	3
53	Donorâ€“Acceptor Oligorotaxanes Made to Order. Chemistry - A European Journal, 2011, 17, 2107-2119.	3.3	53
54	Electrostatic Barriers in Rotaxanes and Pseudorotaxanes. Chemistry - A European Journal, 2011, 17, 6076-6087.	3.3	68

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55	Measurement of the ground-state distributions in bistable mechanically interlocked molecules using slow scan rate cyclic voltammetry. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20416-20421.	7.1	30
56	Mechanical Bond Formation by Radical Templation. Angewandte Chemie - International Edition, 2010, 49, 8260-8265.	13.8	90
57	Radically enhanced molecular recognition. Nature Chemistry, 2010, 2, 42-49.	13.6	280
58	Highly stable tetrathiafulvalene radical dimers in [3]catenanes. Nature Chemistry, 2010, 2, 870-879.	13.6	171
59	Enabling tetracationic cyclophane production by trading templates. Chemical Science, 2010, 1, 119.	7.4	75
60	Reduction of a Redox-Active Ligand Drives Switching in a Cu(I) Pseudorotaxane by a Bimolecular Mechanism. Journal of the American Chemical Society, 2009, 131, 1305-1313.	13.7	62