

# Richard K Shoemaker

## List of Publications by Year in descending order

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75  
papers

4,928  
citations

109137

35  
h-index

91712

69  
g-index

78  
all docs

78  
docs citations

78  
times ranked

6418  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quorum Sensing in the Dimorphic Fungus <i>Candida albicans</i> Is Mediated by Farnesol. <i>Applied and Environmental Microbiology</i> , 2001, 67, 2982-2992.	1.4	863
2	Heat- or Water-Driven Malleability in a Highly Recyclable Covalent Network Polymer. <i>Advanced Materials</i> , 2014, 26, 3938-3942.	11.1	636
3	Nature of hydrogen interactions with Ni(II) complexes containing cyclic phosphine ligands with pendant nitrogen bases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 6951-6956.	3.3	321
4	Synthesis and Characterization of Photopolymerized Multifunctional Hydrogels: A Water-Soluble Poly(Vinyl Alcohol) and Chondroitin Sulfate Macromers for Chondrocyte Encapsulation. <i>Macromolecules</i> , 2004, 37, 6726-6733.	2.2	173
5	New Type of Li Ion Conductor with 3D Interconnected Nanopores via Polymerization of a Liquid Organic Electrolyte-Filled Lyotropic Liquid-Crystal Assembly. <i>Journal of the American Chemical Society</i> , 2009, 131, 15972-15973.	6.6	152
6	Ready Access to Fluorinated Phosphonate Mimics of Secondary Phosphates. Synthesis of the (1±,1±-Difluoroalkyl)phosphonate Analogues of l-Phosphoserine, l-Phosphoallothreonine, and l-Phosphothreonine. <i>Journal of Organic Chemistry</i> , 1996, 61, 4666-4675.	1.7	123
7	Pendant Bases as Proton Relays in Iron Hydride and Dihydrogen Complexes. <i>Journal of the American Chemical Society</i> , 2006, 128, 3002-3010.	6.6	120
8	Photochemistry of aqueous pyruvic acid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 11714-11719.	3.3	118
9	Re-healable polyimine thermosets: polymer composition and moisture sensitivity. <i>Polymer Chemistry</i> , 2016, 7, 7052-7056.	1.9	108
10	Three serendipitous pathways in <i>E. coli</i> can bypass a block in pyridoxal-5-phosphate synthesis. <i>Molecular Systems Biology</i> , 2010, 6, 436.	3.2	102
11	Coordination-Driven Face-Directed Self-Assembly of Trigonal Prisms. Face-Based Conformational Chirality. <i>Journal of the American Chemical Society</i> , 2008, 130, 7620-7628.	6.6	100
12	On-resin peptide macrocyclization using thiol-ene click chemistry. <i>Chemical Communications</i> , 2010, 46, 4061.	2.2	87
13	Inclusion Compound Based Approach to Arrays of Artificial Dipolar Molecular Rotors. A Surface Inclusion. <i>Journal of the American Chemical Society</i> , 2012, 134, 10122-10131.	6.6	84
14	On the Nature of the B4 Banana Phase: A Crystal or Not a Crystal?. <i>Crystal Growth and Design</i> , 2005, 5, 2091-2099.	1.4	80
15	Photochemical Kinetics of Pyruvic Acid in Aqueous Solution. <i>Journal of Physical Chemistry A</i> , 2014, 118, 8505-8516.	1.1	80
16	A user's guide to the thiol-thioester exchange in organic media: scope, limitations, and applications in material science. <i>Polymer Chemistry</i> , 2018, 9, 4523-4534.	1.9	78
17	Stereochemical Control of Iron(II) Complexes Containing a Diphosphine Ligand with a Pendant Nitrogen Base. <i>Organometallics</i> , 2005, 24, 2481-2491.	1.1	71
18	Structure and Transport Properties of a Novel, Heavily Fluorinated Carbohydrate Analogue. <i>Journal of the American Chemical Society</i> , 1998, 120, 9082-9083.	6.6	70

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19	Nanoscale Structure-Activity Relationships, Mode of Action, and Biocompatibility of Gold Nanoparticle Antibiotics. <i>Journal of the American Chemical Society</i> , 2014, 136, 5295-5300.	6.6	68
20	Induction of B-A transitions of deoxyoligonucleotides by multivalent cations in dilute aqueous solution. <i>Biophysical Journal</i> , 1993, 65, 1039-1049.	0.2	64
21	Polymerizable Vancomycin Derivatives for Bactericidal Biomaterial Surface Modification: Structure-Function Evaluation. <i>Biomacromolecules</i> , 2009, 10, 2221-2234.	2.6	64
22	Double Helical Octaphenylene. <i>Angewandte Chemie International Edition in English</i> , 1997, 36, 488-491.	4.4	61
23	Chemical Structure of Blepharismine, the Photosensor Pigment for <i>Blepharisma japonicum</i> . <i>Journal of the American Chemical Society</i> , 1997, 119, 5762-5763.	6.6	60
24	Hydration of pyruvic acid to its geminal-diol, 2,2-dihydroxypropanoic acid, in a water-restricted environment. <i>Chemical Physics Letters</i> , 2011, 513, 184-190.	1.2	50
25	Photoinitiated Synthesis of Self-Assembled Vesicles. <i>Journal of the American Chemical Society</i> , 2014, 136, 3784-3787.	6.6	47
26	Highly Active Multidentate Ligand-Based Alkyne Metathesis Catalysts. <i>Chemistry - A European Journal</i> , 2016, 22, 7959-7963.	1.7	47
27	Synthesis and Characterization of Binucleating Bis(amidinate) Ligands and Their Dialuminum Complexes. <i>Inorganic Chemistry</i> , 2004, 43, 1159-1166.	1.9	46
28	Design, Synthesis, and Preliminary Evaluation of Doxazolidine Carbamates as Prodrugs Activated by Carboxylesterases. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 7002-7012.	2.9	41
29	Pyridine Ligand Rotation in Self-Assembled Trigonal Prisms. Evidence for Intracage Solvent Vapor Bubbles. <i>Journal of the American Chemical Society</i> , 2008, 130, 7629-7638.	6.6	41
30	Characterization of Silkworm Chlorophyll Metabolites as an Active Photosensitizer for Photodynamic Therapy. <i>Journal of Natural Products</i> , 1992, 55, 1241-1251.	1.5	39
31	Dzirconium Complexes Supported by Preorganized Binucleating Bis(amidinate)s. <i>Organometallics</i> , 2003, 22, 4818-4824.	1.1	39
32	Toward Self-Assembled Surface-Mounted Prismatic Altitudinal Rotors. A Test Case: Molecular Rectangle. <i>Organic Letters</i> , 2004, 6, 2093-2096.	2.4	39
33	Synthesis and characterization of a fluxional Re(I) carbonyl complex fac-[Re(CO) <sub>3</sub> (dpopCl)] with the nominally tri-dentate ligand dipyrido(2,3-a:3â€²,2â€²-j)phenazine (dpop). <i>Inorganica Chimica Acta</i> , 2006, 359, 1478-1484.	1.2	39
34	The utility of the single-molecule magnet Fe <sub>8</sub> as a magnetic resonance imaging contrast agent over a broad range of concentration. <i>Polyhedron</i> , 2007, 26, 2413-2419.	1.0	39
35	Pyridoxal Phosphate Binding Sites Are Similar in Human Heme-dependent and Yeast Heme-independent Cystathionine <sup>12</sup> -Synthases. <i>Journal of Biological Chemistry</i> , 2001, 276, 19350-19355.	1.6	37
36	LiCB <sub>11</sub> (CH <sub>3</sub> ) <sub>12</sub> -Catalyzed Radical Polymerization of Isobutylene: Highly Branched Polyisobutylene and an Isobutylene-Ethyl Acrylate Copolymer. <i>Journal of the American Chemical Society</i> , 2009, 131, 3132-3133.	6.6	36

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37	Coordination Complexes of Molybdenum with 3,6-Di-tert-butylcatechol. Addition Products of DMSO, PyridineN-oxide, and Triphenylarsine Oxide to the Putative [MoVIO(3,6-DBCat) <sub>2</sub> ] Monomer and Self-Assembly of the Chiral [MoVIO(3,6-DBCat) <sub>2</sub> ] <sub>4</sub> Square. <i>Inorganic Chemistry</i> , 2004, 43, 2114-2124.	1.9	32
38	Syntheses and Structural Characterizations of Iron(II) Complexes Containing Cyclic Diphosphine Ligands with Positioned Pendant Nitrogen Bases. <i>Organometallics</i> , 2007, 26, 5003-5009.	1.1	32
39	Main-Chain Chiral Smectic Polymers Showing a Large Electroclinic Effect in the SmA* Phase. <i>Chemistry of Materials</i> , 2006, 18, 4576-4584.	3.2	31
40	Catalytic Iron-Mediated Ene-diene Carbocyclizations: Investigations into the Stereoselective Formation of Bicyclic Ring Systems. <i>Journal of Organic Chemistry</i> , 1995, 60, 3473-3486.	1.7	30
41	Pretransitional Orientational Ordering of a Calamitic Liquid Crystal by Helical Nanofilaments of a Bent-Core Mesogen. <i>Langmuir</i> , 2010, 26, 15541-15545.	1.6	30
42	Chemical Equilibria and Kinetics in Aqueous Solutions of Zymonic Acid. <i>Journal of Physical Chemistry A</i> , 2016, 120, 10096-10107.	1.1	30
43	Mineralization dynamics of metakaolin-based alkali-activated cements. <i>Cement and Concrete Research</i> , 2017, 94, 1-12.	4.6	28
44	Syntheses and Reactions of Iron(II) Complexes Containing Diphosphine Ligands with Pendant Nitrogen Bases. <i>Organometallics</i> , 2007, 26, 4964-4971.	1.1	27
45	Oxidative Substitution of Boranephosphonate Diesters as a Route to Post-synthetically Modified DNA. <i>Journal of the American Chemical Society</i> , 2015, 137, 3253-3264.	6.6	27
46	Improved synthesis of [closo-1-CB9H10] <sup>-</sup> anion and new C-substituted derivatives. <i>Collection of Czechoslovak Chemical Communications</i> , 2009, 74, 419-431.	1.0	26
47	Sunlight-initiated Chemistry of Aqueous Pyruvic Acid: Building Complexity in the Origin of Life. <i>Origins of Life and Evolution of Biospheres</i> , 2013, 43, 341-352.	0.8	26
48	Aldehydes in grain sorghum wax. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 2002, 79, 529-533.	0.8	25
49	Inclusion Compound Based Approach to Arrays of Artificial Dipolar Molecular Rotors: Bulk Inclusions. <i>Journal of Organic Chemistry</i> , 2013, 78, 1768-1777.	1.7	24
50	Binding of (6R,S)-Methyltetrahydrofolate to Methyltransferase from <i>Clostridium thermoaceticum</i> : Role of Protonation of Methyltetrahydrofolate in the Mechanism of Methyl Transfer. <i>Biochemistry</i> , 1999, 38, 5736-5745.	1.2	22
51	Synthesis, Characterization, Crystal Structures, and Reactions of Trigonal Bipyramidal Tin(IV) Complexes Containing a Tetradentate Tripodal Trithiolatophosphine Ligand. Use in the One-Step Synthesis of an Iron(IV) Complex. <i>Inorganic Chemistry</i> , 2000, 39, 2252-2253.	1.9	21
52	Novel Reverse Kahne-Type Glycosylation: Access to O-, N-, and C-Linked Epipodophyllotoxin Conjugates. <i>Organic Letters</i> , 2000, 2, 1149-1152.	2.4	21
53	Bulk Inclusions of Pyridazine-Based Molecular Rotors in Tris(o-phenylenedioxy)cyclotriphosphazene (TPP). <i>Advanced Functional Materials</i> , 2016, 26, 5718-5732.	7.8	21
54	Spectroscopic Comparisons of MoW(porphyrin) <sub>2</sub> Heterodimers with Homologous Mo <sub>2</sub> and W <sub>2</sub> Quadruple Bonds: A Dynamic NMR and Resonance Raman Study. <i>Journal of the American Chemical Society</i> , 1998, 120, 1456-1465.	6.6	20

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55	Dizinc Alkoxides and Amides Supported by Binucleating Bis(amidoamine) Ligands. <i>Inorganic Chemistry</i> , 2006, 45, 1815-1822.	1.9	19
56	Tris(o-phenylenedioxy)cyclotriphosphazene (TPP) Inclusion Compounds Containing a Dipolar Molecular Rotor. <i>Crystal Growth and Design</i> , 2014, 14, 559-568.	1.4	19
57	Inclusion Compound Based Approach to Forming Arrays of Artificial Dipolar Molecular Rotors: A Search for Optimal Rotor Structures. <i>Advanced Materials</i> , 2013, 25, 443-448.	11.1	18
58	Time-Resolved Fluorescence Anisotropy of Bicyclo[1.1.1]pentane/Tolane-Based Molecular Rods Included in Tris(o-phenylenedioxy)cyclotriphosphazene (TPP). <i>Journal of Physical Chemistry C</i> , 2015, 119, 8805-8820.	1.5	18
59	The Partitioning of Small Aromatic Molecules to Air-Water and Phospholipid Interfaces Mediated by Non-Hydrophobic Interactions. <i>Journal of Physical Chemistry B</i> , 2016, 120, 7408-7422.	1.2	17
60	Highly Branched Polyisobutylene by Radical Polymerization under $\text{Li}[\text{CB}_{11}(\text{CH}_3)_{12}]$ Catalysis. <i>Macromolecules</i> , 2012, 45, 9250-9257.	2.2	16
61	Solid- and Solution-Phase Structures of Zinc Enolates of Amides and Ketones. <i>Organometallics</i> , 2008, 27, 1948-1953.	1.1	14
62	Influence of 5-N-carboxamide modifications on the thermodynamic stability of oligonucleotides. <i>Nucleic Acids Research</i> , 2015, 43, 9107-9122.	6.5	14
63	Effect of Conformational Chirality on Optical Activity Observed in a Smectic of Achiral, Bent-Core Molecules. <i>Journal of Physical Chemistry B</i> , 2017, 121, 6944-6950.	1.2	12
64	Reply to Eugene et al.: Photochemistry of aqueous pyruvic acid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E4276.	3.3	11
65	Synthesis of the first 11-vertex arachno-dicarbathiaborane anion, $[\text{1,6,7-C}_2\text{SB}_8\text{H}_{11}]^{\ominus}$ . <i>Polyhedron</i> , 2003, 22, 3541-3545.	1.0	10
66	Layered Phosphonates in Colloidal Synthesis of Anisotropic ZnO Nanocrystals. <i>Chemistry of Materials</i> , 2013, 25, 4321-4329.	3.2	10
67	A magic-angle spinner for sealed samples for use in narrow-gap electromagnets. <i>Journal of Magnetic Resonance</i> , 1986, 67, 367-370.	0.5	7
68	A novel stereoselective synthesis of the ring AB podocarpate system. <i>Tetrahedron Letters</i> , 1989, 30, 6993-6996.	0.7	7
69	A Dimethyl Ketal-Protected Benzoin-Based Linker Suitable for Photolytic Release of Unprotected Peptides. <i>Journal of Organic Chemistry</i> , 2011, 76, 9409-9416.	1.7	7
70	Catalytic palladium-mediated tetraene carbocyclizations: diastereoselective deuteration and its convenient analysis by a difference spin polarization transfer (DSPT) NMR experiment. <i>Tetrahedron Letters</i> , 1994, 35, 9161-9164.	0.7	6
71	Synthesis and characterization of arene, mono- and dihydrido-arene, monohydrido-cyclopentadienyl, and phosphite complexes of molybdenum containing the tridentate ligand $\text{PhP}(\text{CH}_2\text{CH}_2\text{PPh}_2)_2$ . <i>Inorganica Chimica Acta</i> , 1998, 281, 153-159.	1.2	6
72	Origin of the second harmonic generation in a supramolecular inclusion complex between p-nitroaniline and $\beta$ -cyclodextrin. <i>Journal of Molecular Structure</i> , 2006, 785, 1-6.	1.8	6

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73	Main-Chain Ferroelectric Liquid Crystal Polymers for Electronic Nonlinear Optics Applications 1. <i>Ferroelectrics</i> , 2004, 309, 77-82.	0.3	5
74	A novel method for conjugating the terminal amine of peptide ligands to cholesterol: synthesis iRGD-cholesterol. <i>Therapeutic Delivery</i> , 2019, 10, 11-20.	1.2	3
75	Magnetic spectroscopy and characterization of La <sub>0.65</sub> Pb <sub>0.35</sub> MnO <sub>3</sub> . <i>Journal of Applied Physics</i> , 2000, 87, 7124-7126.	1.1	1