Robert A Flowers

List of Publications by Year
in descending order

72 papers	3,989 citations	87843 38 h-index	118793 62 g-index
79 all docs	79 docs citations	79 times ranked	2229 citing authors

#	Article	IF	Citations
1	Ammonia Solvation vs Aqueous Solvation of Samarium Diiodide. A Theoretical and Experimental Approach to Understanding Bond Activation Upon Coordination to Sm(II). Journal of Organic Chemistry, 2022, 87, 1689-1697.	1.7	11
2	Proton donor effects on the reactivity of SmI₂. Experimental and theoretical studies on methanol solvation vs. aqueous solvation. Dalton Transactions, 2020, 49, 7897-7902.	1.6	14
3	Titanocenes as Photoredox Catalysts Using Greenâ€Light Irradiation. Angewandte Chemie - International Edition, 2020, 59, 9355-9359.	7.2	62
4	Titanocenes as Photoredox Catalysts Using Greenâ€Light Irradiation. Angewandte Chemie, 2020, 132, 9441-9445.	1.6	21
5	Coordination-induced Oâ€“H bond weakening in Sm(<scp>ii</scp>)-water complexes. Dalton Transactions, 2019, 48, 16142-16147.	1.6	21
6	Experimental and Theoretical Studies on the Aqueous Solvation and Reactivity of SmCl₂ and Comparison with SmBr₂ and SmI₂. Inorganic Chemistry, 2019, 58, 13927-13932.	1.9	10
7	Mechanistic Study and Development of Catalytic Reactions of Sm(II). Journal of the American Chemical Society, 2019, 141, 3207-3216.	6.6	24
8	Contrasting Effect of Additives on Photoinduced Reactions of SmI₂. Chemistry - A European Journal, 2019, 25, 10499-10504.	1.7	5
9	Cp2 TiX Complexes for Sustainable Catalysis in Single-Electron Steps. Chemistry - A European Journal, 2018, 24, 6286-6286.	1.7	0
10	Cp₂TiX Complexes for Sustainable Catalysis in Singleâ€Electron Steps. Chemistry - A European Journal, 2018, 24, 6371-6379.	1.7	42
11	Kinetic solvent effects in the reduction of alkyl halides by {Sm[N(SiMe3)2]2(THF)2}. Journal of Organometallic Chemistry, 2018, 857, 52-57.	0.8	5
12	Experimental and Theoretical Studies on the Implications of Halide-Dependent Aqueous Solvation of Sm(II). Journal of the American Chemical Society, 2018, 140, 16731-16739.	6.6	25
13	Interplay between Substrate and Proton Donor Coordination in Reductions of Carbonyls by SmI₂â€“Water Through Proton-Coupled Electron-Transfer. Journal of the American Chemical Society, 2018, 140, 15342-15352.	6.6	46
14	Secondary Amides as Hydrogen Atom Transfer Promoters for Reactions of Samarium Diiodide. Organic Letters, 2017, 19, 290-293.	2.4	21
15	Aza versus Oxophilicity of SmI 2 : A Break of a Paradigm. Chemistry - A European Journal, 2017, 23, 17070-17077.	1.7	18
16	Reversibility of Ketone Reduction by SmI₂â€“Water and Formation of Organosamarium Intermediates. Organometallics, 2017, 36, 4579-4583.	1.1	16
17	Catalytic carbonyl hydrosilylations via a titanocene borohydrideâ€“PMHS reagent system. Catalysis Science and Technology, 2017, 7, 3469-3473.	2.1	8
18	ADAM17 Inhibitors Attenuate Corneal Epithelial Detachment Induced by Mustard Exposure. , 2016, 57, 1687.		15

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19	Highâ€Affinity Proton Donors Promote Protonâ€Coupled Electron Transfer by Samarium Diiodide. Angewandte Chemie - International Edition, 2016, 55, 6033-6036.	7.2	40
20	Proton-Coupled Electron Transfer in the Reduction of Carbonyls by Samarium Diiodideâ€“Water Complexes. Journal of the American Chemical Society, 2016, 138, 8738-8741.	6.6	69
21	Hochaktive Titanocenâ€Katalysatoren fÃ¼r Epoxidâ€Hydrosilylierungen â€“ Synthese, Theorie, Kinetik, EPRâ€Spektroskopie. Angewandte Chemie, 2016, 128, 7801-7805.	1.6	27
22	Reply to Varma: Elucidation of the signal origin for label-free, free-solution interactions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4931-2.	3.3	3
23	Highâ€Affinity Proton Donors Promote Protonâ€Coupled Electron Transfer by Samarium Diiodide. Angewandte Chemie, 2016, 128, 6137-6140.	1.6	30
24	Highly Active Titanocene Catalysts for Epoxide Hydrosilylation: Synthesis, Theory, Kinetics, EPR Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 7671-7675.	7.2	57
25	Origin and prediction of free-solution interaction studies performed label-free. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1595-604.	3.3	35
26	Kationische Titanocen(III)â€Komplexe fÃ¼r die Katalyse in Einâ€Elektronenâ€Schritten. Angewandte Chemie, 2015, 127, 7109-7112.	1.6	35
27	Mechanistic study of the samarium diiodideâ€"N,N-dimethyl-2-aminoethanol reducing system. Tetrahedron Letters, 2015, 56, 3212-3215.	0.7	7
28	Cationic Titanocene(III) Complexes for Catalysis in Singleâ€Electron Steps. Angewandte Chemie - International Edition, 2015, 54, 7003-7006.	7.2	85
29	Mechanistic Study of Silver-Catalyzed Decarboxylative Fluorination. Journal of Organic Chemistry, 2015, 80, 5834-5841.	1.7	92
30	Proton-Coupled Electron Transfer in the Reduction of Arenes by SmI₂â€“Water Complexes. Journal of the American Chemical Society, 2015, 137, 11526-11531.	6.6	72
31	Allylsamarium Bromide-Mediated Cascade Cyclization of Homoallylic Esters. Synthesis of 2-(2-Hydroxyalkyl)cyclopropanols and 2-(2-Hydroxyethyl)bicyclo[2.1.1]hexan-1-ols. Journal of Organic Chemistry, 2015, 80, 52-61.	1.7	18
32	Mechanistic Study of the Titanocene(III)â€Catalyzed Radical Arylation of Epoxides. Chemistry - A European Journal, 2015, 21, 280-289.	1.7	71
33	Ligand functionalization as a deactivation pathway in a fac-Ir(ppy)₃-mediated radical addition. Chemical Science, 2015, 6, 537-541.	3.7	98
34	Solvent-Dependent Substrate Reduction by {Sm[N(SiMe₃)₂]₂(THF)₂}. An Alternative Approach for Accelerating the Rate of Substrate Reduction by Sm(II). Journal of Organic Chemistry, 2014, 79, 9441-9443.	1.7	13
35	Substrate-Directable Electron Transfer Reactions. Dramatic Rate Enhancement in the Chemoselective Reduction of Cyclic Esters Using SmI₂â€“H₂O: Mechanism, Scope, and Synthetic Utility. Journal of the American Chemical Society, 2013, 135, 15702-15705.	6.6	42
36	Backâ€Scattering Interferometry: An Ultrasensitive Method for the Unperturbed Detection of Acetylcholinesteraseâ€“Inhibitor Interactions. Angewandte Chemie - International Edition, 2012, 51, 11126-11130.	7.2	12

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37	Study on the coupling of acyclic esters with alkenes â€“ the synthesis of 2-(2-hydroxyalkyl)cyclopropanols via cascade cyclization using allylsamarium bromide. Chemical Communications, 2012, 48, 11026.	2.2	17
38	Catalytic, Atomâ€Economical Radical Arylation of Epoxides. Angewandte Chemie - International Edition, 2012, 51, 4739-4742.	7.2	124
39	Investigation of anticholinergic and nonâ€steroidal antiâ€inflammatory prodrugs which reduce chemically induced skin inflammation. Journal of Applied Toxicology, 2012, 32, 135-141.	1.4	23
40	Catalytic Ni(II) in Reactions of SmI₂: Sm(II)- or Ni(0)-Based Chemistry?. Journal of the American Chemical Society, 2011, 133, 10655-10661.	6.6	33
41	Backâ€Scattering Interferometry: A Versatile Platform for the Study of Freeâ€Solution versus Surfaceâ€Immobilized Hybridization. Chemistry - an Asian Journal, 2011, 6, 70-73.	1.7	9
42	Uncovering the Mechanistic Role of HMPA in the Samarium Barbier Reaction. Journal of the American Chemical Society, 2010, 132, 17396-17398.	6.6	65
43	Dynamic Ligand Exchange in Reactions of Samarium Diiodide. Organic Letters, 2010, 12, 4140-4143.	2.4	68
44	Studies on the Mechanism, Selectivity, and Synthetic Utility of Lactone Reduction Using SmI₂ and H₂O. Journal of the American Chemical Society, 2009, 131, 15467-15473.	6.6	81
45	Generation of SmIIReductants Using High Intensity Ultrasound. European Journal of Inorganic Chemistry, 2008, 2008, 5015-5019.	1.0	20
46	Mechanistic Study of Samarium Diiodide-HMPA Initiated 5-exo-trig Ketylâ^'Olefin Coupling: The Role of HMPA in Post-Electron Transfer Steps. Journal of the American Chemical Society, 2008, 130, 7228-7229.	6.6	71
47	Mechanistic Studies on the Roles of Cosolvents and Additives in Samarium(II)-Based Reductions. Synlett, 2008, 2008, 1427-1439.	1.0	162
48	Solvation-Controlled Luminescence of SmII Complexes. Angewandte Chemie - International Edition, 2007, 46, 1145-1148.	7.2	25
49	Mechanistic Studies of Protonâ€Donor Coordination to Samarium Diiodide. Angewandte Chemie - International Edition, 2007, 46, 8160-8163.	7.2	41
50	Photoinduced Electron Transfer Reactions by SmI2 in THF: Luminescence Quenching Studies and Mechanistic Investigations. Chemistry - A European Journal, 2005, 11, 3105-3112.	1.7	33
51	Exploring SmBr2-, SmI2-, and YbI2-Mediated Reactions Assisted by Microwave Irradiation. Chemistry - A European Journal, 2005, 11, 3279-3284.	1.7	23
52	Mechanistic Impact of Water Addition to SmI2:â€‰ Consequences in the Ground and Transition State. Journal of the American Chemical Society, 2005, 127, 18093-18099.	6.6	88
53	Reduction of Î²-Hydroxyketones by SmI2/H2O/Et3N. Organic Letters, 2005, 7, 119-122.	2.4	47
54	The Role of Proton Donors in SmI2-Mediated Ketone Reduction:Â New Mechanistic Insights. Journal of the American Chemical Society, 2004, 126, 44-45.	6.6	129

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55	Solvent-Dependent Diastereoselectivities in Reductions of Î²-Hydroxyketones by SmI2. Organic Letters, 2004, 6, 2685-2688.	2.4	47
56	The Role of Ligand Displacement in Sm(II)â^'HMPA-Based Reductions. Journal of the American Chemical Society, 2004, 126, 6891-6894.	6.6	46
57	Rapid SmI2-Mediated Reductions of Alkyl Halides and Electrochemical Properties of SmI2/H2O/Amine. Journal of Organic Chemistry, 2003, 68, 4870-4875.	1.7	71
58	Investigation of the [Sm{N(SiMe3)2}2] Reducing System in THF. Rate and Mechanistic Studies1. Journal of the American Chemical Society, 2002, 124, 14663-14667.	6.6	43
59	Mechanistic Study of Î²-Substituent Effects on the Mechanism of Ketone Reduction by SmI2. Journal of the American Chemical Society, 2002, 124, 6357-6361.	6.6	55
60	Reduction of Ketones and Alkyl Iodides by SmI2and Sm(II)-HMPA Complexes. Rate and Mechanistic Studies. Journal of the American Chemical Society, 2002, 124, 6895-6899.	6.6	99
61	Influence of HMPA on Reducing Power and Reactivity of SmBr2. Organic Letters, 2001, 3, 2321-2324.	2.4	59
62	Human RAD52 Protein Has Extreme Thermal Stability. Biochemistry, 2001, 40, 8557-8562.	1.2	15
63	Protein renaturation by the liquid organic salt ethylammonium nitrate. Protein Science, 2000, 9, 2001-2008.	3.1	233
64	Reactions of SmI2with Alkyl Halides and Ketones:Â Inner-Sphere vs Outer-Sphere Electron Transfer in Reactions of Sm(II) Reductants. Journal of the American Chemical Society, 2000, 122, 7718-7722.	6.6	170
65	A Highly Stable, Six-Hydrogen-Bonded Molecular Duplex. Journal of the American Chemical Society, 2000, 122, 2635-2644.	6.6	206
66	Guest and Subunit Exchange in Self-Assembled Ionophores. Organic Letters, 2000, 2, 1665-1668.	2.4	23
67	Structure and Energetics of the Samarium Diiodideâ^'HMPA Complex in Tetrahydrofuran. Journal of Organic Chemistry, 1999, 64, 5251-5255.	1.7	67
68	Mechanism of Reduction of Primary Alkyl Radicals by SmI2â^'HMPA. Organic Letters, 1999, 1, 2133-2135.	2.4	63
69	The effect of cosolvent on the reducing power of SmI2 in tetrahydrofuran. Tetrahedron Letters, 1998, 39, 4429-4432.	0.7	103
70	Structural Rearrangement of Strained Coals. Energy & Fuels, 1997, 11, 998-1002.	2.5	130
71	The effect of lithium bromide and lithium chloride on the reactivity of SmI2 in THF. Tetrahedron Letters, 1997, 38, 8157-8158.	0.7	88
72	Electrochemical investigation of the reducing power of SmI2 in THF and the effect of HMPA cosolvent. Tetrahedron Letters, 1997, 38, 1137-1140.	0.7	180