Markus D KÃ¤rkÃ¤s

List of Publications by Year
in descending order

65 papers	5,775 citations	172207 29 h-index	91712 69 g-index
76 all docs	76 docs citations	76 times ranked	6259 citing authors

#	Article	IF	Citations
1	Photoredox-Enabled Decarboxylative Synthesis of Unnatural Î±-Amino Acids. Synlett, 2022, 33, 109-115.	1.0	9
2	Chemodivergent difunctionalization of alkenes through base-controlled radical relay. CheM, 2022, 8, 12-14.	5.8	5
3	Ruthenium containing molecular electrocatalyst on glassy carbon for electrochemical water splitting. Dalton Transactions, 2022, 51, 7957-7965.	1.6	6
4	Copper-assisted Wittig-type olefination of aldehydes with <i>p</i>-toluenesulfonylmethyl isocyanide. Organic Chemistry Frontiers, 2022, 9, 4158-4163.	2.3	4
5	Depolymerization of Lignin by Homogeneous Photocatalysis. Springer Handbooks, 2022, , 1537-1562.	0.3	1
6	Silver-Catalyzed Controlled Intermolecular Cross-Coupling of Silyl Enol Ethers: Scalable Access to 1,4-Diketones. Organic Letters, 2022, 24, 4513-4518.	2.4	18
7	Synthesis of Sulfonylated Heterocycles via Copperâ€Catalyzed Heteroaromatization/Sulfonyl Transfer of Propargylic Alcohols. Chemistry - an Asian Journal, 2021, 16, 30-33.	1.7	9
8	Silverâ€Catalyzed [3+1+1] Annulation of Nitrones with Isocyanoacetates as an Approach to 1,4,5â€Trisubstituted Imidazoles. European Journal of Organic Chemistry, 2021, 2021, 964-968.	1.2	7
9	Stereoselective synthesis of unnatural Î±-amino acid derivatives through photoredox catalysis. Chemical Science, 2021, 12, 5430-5437.	3.7	33
10	Controlling Radical Relay Processes with Visible Light. CheM, 2021, 7, 283-285.	5.8	4
11	Electrifying catalytic aerobic oxidation. Nature Catalysis, 2021, 4, 96-97.	16.1	4
12	The Impact of Ligand Carboxylates on Electrocatalyzed Water Oxidation. Accounts of Chemical Research, 2021, 54, 3326-3337.	7.6	35
13	Silver-Promoted (4 + 1) Annulation of Isocyanoacetates with Alkylpyridinium Salts: Divergent Regioselective Synthesis of 1,2-Disubstituted Indolizines. Organic Letters, 2021, 23, 7555-7560.	2.4	14
14	Modular synthesis of 3-substituted isocoumarins <i>via</i> silver-catalyzed aerobic oxidation/<i>6-endo</i> heterocyclization of <i>ortho</i>-alkynylbenzaldehydes. Organic and Biomolecular Chemistry, 2021, 19, 6657-6664.	1.5	8
15	Divergent Synthesis of Natural Benzyl Salicylate and Benzyl Gentisate Glucosides. Journal of Natural Products, 2020, 83, 3173-3180.	1.5	3
16	Organocatalytic Approach to Photochemical Lignin Fragmentation. Organic Letters, 2020, 22, 8082-8085.	2.4	33
17	Closing the radical gap in chemical synthesis. Science, 2020, 368, 1312-1313.	6.0	5
18	Silver-Assisted [3 + 2] Annulation of Nitrones with Isocyanides: Synthesis of 2,3,4-Trisubstituted 1,2,4-Oxadiazolidin-5-ones. Journal of Organic Chemistry, 2020, 85, 3560-3567.	1.7	15

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19	Cooperative Silverâ€•and Baseâ€Catalyzed Diastereoselective Cycloaddition of Nitrones with Methylene Isocyanides: Access to 2â€Imidazolinones. European Journal of Organic Chemistry, 2020, 2020, 3475-3479.	1.2	10
20	Switchable Copper-Catalyzed Approach to Benzodithiole, Benzothiaselenole, and Dibenzodithiocine Skeletons. Organic Letters, 2020, 22, 3454-3459.	2.4	20
21	Organic Electrosynthesis: Applications in Complex Molecule Synthesis. ChemElectroChem, 2019, 6, 4067-4092.	1.7	143
22	Recent Advances in Photoredox Catalysis Enabled Functionalization of Î±-Amino Acids and Peptides: Concepts, Strategies and Mechanisms. Synthesis, 2019, 51, 2759-2791.	1.2	61
23	Silverâ€Induced [3+2] Cycloaddition of Isocyanides with Acyl Chlorides: Regioselective Synthesis of 2,5â€Disubstituted Oxazoles. ChemCatChem, 2019, 11, 4272-4275.	1.8	16
24	Silver-Mediated Synthesis of Substituted Benzofuran- and Indole-Pyrroles via Sequential Reaction of <i>ortho</i>-Alkynylaromatics with Methylene Isocyanides. Journal of Organic Chemistry, 2019, 84, 8998-9006.	1.7	17
25	The Art of Splitting Water: Storing Energy in a Readily Available and Convenient Form. European Journal of Inorganic Chemistry, 2019, 2019, 2020-2024.	1.0	8
26	Selective Câ€"O Bond Cleavage of Lignin Systems and Polymers Enabled by Sequential Palladium-Catalyzed Aerobic Oxidation and Visible-Light Photoredox Catalysis. ACS Catalysis, 2019, 9, 2252-2260.	5.5	95
27	Electrochemically Driven Water Oxidation by a Highly Active Rutheniumâ€Based Catalyst. ChemSusChem, 2019, 12, 2251-2262.	3.6	20
28	Metalâ€"Ligand Cooperation in Single-Site Ruthenium Water Oxidation Catalysts: A Combined Experimental and Quantum Chemical Approach. Inorganic Chemistry, 2018, 57, 10881-10895.	1.9	15
29	Electrochemical strategies for Câ€"H functionalization and Câ€"N bond formation. Chemical Society Reviews, 2018, 47, 5786-5865.	18.7	736
30	Lignin Hydrogenolysis: Improving Lignin Disassembly through Formaldehyde Stabilization. ChemSusChem, 2017, 10, 2111-2115.	3.6	36
31	Water oxidation mediated by ruthenium oxide nanoparticles supported on siliceous mesocellular foam. Catalysis Science and Technology, 2017, 7, 293-299.	2.1	13
32	Photochemical Generation of Nitrogen-Centered Amidyl, Hydrazonyl, and Imidyl Radicals: Methodology Developments and Catalytic Applications. ACS Catalysis, 2017, 7, 4999-5022.	5.5	334
33	Redox Catalysis Facilitates Lignin Depolymerization. ACS Central Science, 2017, 3, 621-628.	5.3	216
34	Substituent Effects in Molecular Ruthenium Water Oxidation Catalysts Based on Amide Ligands. ChemCatChem, 2017, 9, 1583-1587.	1.8	14
35	Mesoporous Ruthenium Oxide: A Heterogeneous Catalyst for Water Oxidation. ACS Sustainable Chemistry and Engineering, 2017, 5, 9651-9656.	3.2	42
36	Chemical and Photochemical Water Oxidation Mediated by an Efficient Singleâ€Site Ruthenium Catalyst. ChemSusChem, 2016, 9, 3448-3456.	3.6	15

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37	Water oxidation using earth-abundant transition metal catalysts: opportunities and challenges. Dalton Transactions, 2016, 45, 14421-14461.	1.6	211
38	Water oxidation catalyzed by molecular di- and nonanuclear Fe complexes: importance of a proper ligand framework. Dalton Transactions, 2016, 45, 13289-13293.	1.6	39
39	Photochemical Approaches to Complex Chemotypes: Applications in Natural Product Synthesis. Chemical Reviews, 2016, 116, 9683-9747.	23.0	792
40	Photocatalytic Oxidation of Lignin Model Systems by Merging Visible-Light Photoredox and Palladium Catalysis. Organic Letters, 2016, 18, 5166-5169.	2.4	107
41	Catalystâ€“solvent interactions in a dinuclear Ru-based water oxidation catalyst. Dalton Transactions, 2016, 45, 19024-19033.	1.6	9
42	Catalytic Water Oxidation by Ruthenium Complexes Containing Negatively Charged Ligand Frameworks. Chemical Record, 2016, 16, 940-963.	2.9	14
43	A ruthenium water oxidation catalyst based on a carboxamide ligand. Dalton Transactions, 2016, 45, 3272-3276.	1.6	21
44	On the mechanism of water oxidation catalyzed by a dinuclear ruthenium complex: a quantum chemical study. Catalysis Science and Technology, 2016, 6, 5031-5041.	2.1	15
45	Transition-metal catalyzed valorization of lignin: the key to a sustainable carbon-neutral future. Organic and Biomolecular Chemistry, 2016, 14, 1853-1914.	1.5	145
46	Molecular ruthenium water oxidation catalysts carrying non-innocent ligands: mechanistic insight through structureâ€“activity relationships and quantum chemical calculations. Catalysis Science and Technology, 2016, 6, 1306-1319.	2.1	28
47	Wellâ€Defined Palladium Nanoparticles Supported on Siliceous Mesocellular Foam as Heterogeneous Catalysts for the Oxidation of Water. Chemistry - A European Journal, 2015, 21, 5909-5915.	1.7	15
48	A Dinuclear Rutheniumâ€Based Water Oxidation Catalyst: Use of Nonâ€Innocent Ligand Frameworks for Promoting Multiâ€Electron Reactions. Chemistry - A European Journal, 2015, 21, 10039-10048.	1.7	22
49	Catalytic Water Oxidation by a Molecular Ruthenium Complex: Unexpected Generation of a Single-Site Water Oxidation Catalyst. Inorganic Chemistry, 2015, 54, 4611-4620.	1.9	37
50	Enchained by visible lightâ€“mediated photoredox catalysis. Science, 2015, 349, 1285-1286.	6.0	101
51	Photosystem II Like Water Oxidation Mechanism in a Bioinspired Tetranuclear Manganese Complex. Inorganic Chemistry, 2015, 54, 342-351.	1.9	56
52	Efficient photochemical water oxidation by a dinuclear molecular ruthenium complex. Chemical Communications, 2015, 51, 1862-1865.	2.2	33
53	Synthesis and Electronâ€Transfer Processes in a New Family of Ligands for Coupled Ruâˆ’Mn₂ Complexes. ChemPlusChem, 2014, 79, 936-950.	1.3	33
54	Artificial Photosynthesis: From Nanosecond Electron Transfer to Catalytic Water Oxidation. Accounts of Chemical Research, 2014, 47, 100-111.	7.6	182

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55	Artificial Photosynthesis: Molecular Systems for Catalytic Water Oxidation. Chemical Reviews, 2014, 114, 11863-12001.	23.0	1,161
56	Dinuclear manganese complexes for water oxidation: evaluation of electronic effects and catalytic activity. Physical Chemistry Chemical Physics, 2014, 16, 11950.	1.3	64
57	A Tailorâ€Made Molecular Ruthenium Catalyst for the Oxidation of Water and Its Deactivation through Poisoning by Carbon Monoxide. Angewandte Chemie - International Edition, 2013, 52, 4189-4193.	7.2	69
58	RÃ¼cktitelbild: A Tailor-Made Molecular Ruthenium Catalyst for the Oxidation of Water and Its Deactivation through Poisoning by Carbon Monoxide (Angew. Chem. 15/2013). Angewandte Chemie, 2013, 125, 4370-4370.	1.6	0
59	Water Oxidation by Singleâ€Site Ruthenium Complexes: Using Ligands as Redox and Proton Transfer Mediators. Angewandte Chemie - International Edition, 2012, 51, 11589-11593.	7.2	94
60	Application and Mechanistic Studies of a Waterâ€Oxidation Catalyst in Alcohol Oxidation by Employing Oxygenâ€Transfer Reagents. Chemistry - A European Journal, 2012, 18, 16947-16954.	1.7	8
61	Highly Dispersed Palladium Nanoparticles on Mesocellular Foam: An Efficient and Recyclable Heterogeneous Catalyst for Alcohol Oxidation. Chemistry - A European Journal, 2012, 18, 12202-12206.	1.7	80
62	Photosensitized Water Oxidation by Use of a Bioinspired Manganese Catalyst. Angewandte Chemie - International Edition, 2011, 50, 11715-11718.	7.2	214
63	Lightâ€Induced Water Oxidation by a Ru complex Containing a Bioâ€Inspired Ligand. Chemistry - A European Journal, 2011, 17, 7953-7959.	1.7	37
64	Synthesis and Characterization of Oligonuclear Ru, Co and Cu Oxidation Catalysts. European Journal of Inorganic Chemistry, 2010, 2010, 5462-5470.	1.0	25
65	Visible Light-Driven Water Oxidation Catalyzed by Ruthenium Complexes. , 0, , .		0