Atif Mahammed

List of Publications by Year
in descending order

93 papers	5,269 citations	71102 41 h-index	88630 70 g-index
101 all docs	101 docs citations	101 times ranked	2848 citing authors

#	Article	IF	Citations
1	Hydrogen Evolution Catalyzed by Corrole-Chelated Nickel Complexes, Characterized in all Catalysis-Relevant Oxidation States. ACS Catalysis, 2022, 12, 4310-4317.	11.2	29
2	Orthogonal Design of Feâˆ’N₄ Active Sites and Hierarchical Porosity in Hydrazine Oxidation Electrocatalysts. ChemElectroChem, 2022, 9, .	3.4	4
3	Trifluoromethyl Hydrolysis En Route to Corroles with Increased Druglikeness. Angewandte Chemie - International Edition, 2021, 60, 12829-12834.	13.8	16
4	Dimeric Corrole Analogs of Chlorophyll Special Pairs. Journal of the American Chemical Society, 2021, 143, 9450-9460.	13.7	8
5	Trifluoromethyl Hydrolysis En Route to Corroles with Increased Druglikeness. Angewandte Chemie, 2021, 133, 12939-12944.	2.0	6
6	Solvent Effects on the Phosphorescence of Gold(III) Complexes Chelated by Î²-Multisubstituted Corroles. Inorganic Chemistry, 2021, 60, 8442-8446.	4.0	9
7	Hydrogen evolution catalysis by terminal molybdenum-oxo complexes. IScience, 2021, 24, 102924.	4.1	14
8	Corroles: The Hitherto Elusive Parent Macrocycle and its Metal Complexes. Angewandte Chemie - International Edition, 2021, 60, 25097-25103.	13.8	12
9	Ultrafast Electron Transfer in a Self-Assembling Sulfonated Aluminum Corroleâ€“Methylviologen Complex. Journal of Physical Chemistry B, 2021, 125, 10571-10577.	2.6	1
10	Controllable and stable organometallic redox mediators for lithium oxygen batteries. Materials Horizons, 2020, 7, 214-222.	12.2	15
11	Elucidation of Factors That Govern the 2e^{â€“}/2H⁺ vs 4e^{â€“}/4H⁺ Selectivity of Water Oxidation by a Cobalt Corrole. Journal of the American Chemical Society, 2020, 142, 21040-21049.	13.7	44
12	Water Oxidation Catalysis by Mono- and Binuclear Iron Corroles. ACS Catalysis, 2020, 10, 3764-3772.	11.2	49
13	Copper Complexes of CF₃-Substituted Corroles for Affecting Redox Potentials and Electrocatalysis. ACS Applied Energy Materials, 2020, 3, 2828-2836.	5.1	29
14	Enhanced Synthetic Access to Tris-CF₃-Substituted Corroles. Organic Letters, 2020, 22, 3119-3122.	4.6	15
15	Positive shift in corrole redox potentials leveraged by modest Î²-CF3-substitution helps achieve efficient photocatalytic Câ€“H bond functionalization by group 13 complexes. Dalton Transactions, 2019, 48, 12279-12286.	3.3	24
16	Superstructured metallocorroles for electrochemical CO₂reduction. Chemical Communications, 2019, 55, 11912-11915.	4.1	16
17	A catalytic antioxidant for limiting amyloid-beta peptide aggregation and reactive oxygen species generation. Chemical Science, 2019, 10, 1634-1643.	7.4	44
18	Phosphorus corrole complexes: from property tuning to applications in photocatalysis and tripletâ€“triplet annihilation upconversion. Chemical Science, 2019, 10, 7091-7103.	7.4	48

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19	Maximizing Property Tuning of Phosphorus Corrole Photocatalysts through a Trifluoromethylation Approach. Inorganic Chemistry, 2019, 58, 6184-6198.	4.0	27
20	Trifluoromethylation for affecting the structural, electronic and redox properties of cobalt corroles. Dalton Transactions, 2019, 48, 4798-4810.	3.3	28
21	Corroles and corrole/transferrin nanoconjugates as candidates for sonodynamic therapy. Chemical Communications, 2019, 55, 12789-12792.	4.1	23
22	Corroles as triplet photosensitizers. Coordination Chemistry Reviews, 2019, 379, 121-132.	18.8	81
23	Reactive Intermediates Involved in Cobalt Corrole Catalyzed Water Oxidation (and Oxygen Reduction). Inorganic Chemistry, 2018, 57, 478-485.	4.0	44
24	Singlet oxygen luminescence kinetics under PDI relevant conditions of pathogenic dermatophytes and molds. Journal of Photochemistry and Photobiology B: Biology, 2018, 178, 606-613.	3.8	13
25	In vitro photodynamic inactivation (PDI) of pathogenic germs inducing onychomycosis. Photodiagnosis and Photodynamic Therapy, 2018, 24, 358-365.	2.6	20
26	Dioxygen bound cobalt corroles. Chemical Communications, 2017, 53, 877-880.	4.1	24
27	Switching Futile <i>para</i>â€Quinone to Efficient Reactive Oxygen Species Generator: Ubiquitinâ€Specific Proteaseâ€2 Inhibition, Electrocatalysis, and Quantification. ChemBioChem, 2017, 18, 1683-1687.	2.6	12
28	Iodinated cobalt corroles. Journal of Porphyrins and Phthalocyanines, 2017, 21, 900-907.	0.8	8
29	Ultrafast Dynamics of Sb-Corroles: A Combined Vis-Pump Supercontinuum Probe and Broadband Fluorescence Up-Conversion Study. Molecules, 2017, 22, 1174.	3.8	19
30	Development of Singlet Oxygen Luminescence Kinetics during the Photodynamic Inactivation of Green Algae. Molecules, 2016, 21, 485.	3.8	9
31	Photometric Detection of Nitric Oxide Using a Dissolved Iron(III) Corrole as a Sensitizer. ChemPlusChem, 2016, 81, 594-603.	2.8	12
32	Metallocorroles as Nonâ€Precious Metal Electrocatalysts for Highly Efficient Oxygen Reduction in Alkaline Media. ChemCatChem, 2016, 8, 2832-2837.	3.7	52
33	Understanding and predicting the potency of ROS-based enzyme inhibitors, exemplified by naphthoquinones and ubiquitin specific protease-2. Chemical Science, 2016, 7, 7079-7086.	7.4	28
34	Metallocorroles as Electrocatalysts for the Oxygen Reduction Reaction (ORR). Israel Journal of Chemistry, 2016, 56, 756-762.	2.3	38
35	Neurorescue by a ROS Decomposition Catalyst. ACS Chemical Neuroscience, 2016, 7, 1374-1382.	3.5	15
36	Oxidation catalysis via visible-light water activation of a [Ru(bpy)₃]²⁺ chromophore BSAâ€"metallocorrole couple. Dalton Transactions, 2016, 45, 706-710.	3.3	18

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37	Metallocorroles as Photocatalysts for Driving Endergonic Reactions, Exemplified by Bromide to Bromine Conversion. Angewandte Chemie, 2015, 127, 12547-12550.	2.0	10
38	Corroleâ€Decorated Porphyrin Dendrimer and Its Selective Metallation. European Journal of Organic Chemistry, 2015, 2015, 5079-5083.	2.4	10
39	Metallocorroles as Nonpreciousâ€Metal Catalysts for Oxygen Reduction. Angewandte Chemie - International Edition, 2015, 54, 14080-14084.	13.8	128
40	Metallocorroles as Photocatalysts for Driving Endergonic Reactions, Exemplified by Bromide to Bromine Conversion. Angewandte Chemie - International Edition, 2015, 54, 12370-12373.	13.8	43
41	The cobalt corrole catalyzed hydrogen evolution reaction: surprising electronic effects and characterization of key reaction intermediates. Chemical Communications, 2014, 50, 2725-2727.	4.1	134
42	Photodynamic inactivation of mold fungi spores by newly developed charged corroles. Journal of Photochemistry and Photobiology B: Biology, 2014, 133, 39-46.	3.8	85
43	Expected and Unexpected Transformations of Manganese(III) Tris(4-nitrophenyl)corrole. Inorganic Chemistry, 2013, 52, 9349-9355.	4.0	17
44	Combating diabetes complications by 1-Fe, a corrole-based catalytic antioxidant. Journal of Diabetes and Its Complications, 2013, 27, 316-321.	2.3	24
45	Cobalt Corrole Catalyst for Efficient Hydrogen Evolution Reaction from H₂O under Ambient Conditions: Reactivity, Spectroscopy, and Density Functional Theory Calculations. Inorganic Chemistry, 2013, 52, 3381-3387.	4.0	167
46	Investigating photoexcitation-induced mitochondrial damage by chemotherapeutic corroles using multimode optical imaging. Journal of Biomedical Optics, 2012, 17, 015003.	2.6	26
47	Iron complexes of tris(4-nitrophenyl)corrole, with emphasis on the (nitrosyl)iron complex. Journal of Porphyrins and Phthalocyanines, 2012, 16, 663-673.	0.8	24
48	Chlorinated corroles. Dalton Transactions, 2012, 41, 10938.	3.3	39
49	Assignment of Aluminum Corroles Absorption Bands to Electronic Transitions by Femtosecond Polarization Resolved VIS-Pump IR-Probe Spectroscopy. Journal of Physical Chemistry A, 2012, 116, 1023-1029.	2.5	21
50	Superoxide signaling and cell death in retinal ganglion cell axotomy: Effects of metallocorroles. Experimental Eye Research, 2012, 97, 31-35.	2.6	21
51	Differential Cytostatic and Cytotoxic Action of Metallocorroles against Human Cancer Cells: Potential Platforms for Anticancer Drug Development. Chemical Research in Toxicology, 2012, 25, 400-409.	3.3	63
52	Four-Electron Oxygen Reduction by Brominated Cobalt Corrole. Inorganic Chemistry, 2012, 51, 22-24.	4.0	105
53	The importance of developing metal complexes with pronounced catalase-like activity. Catalysis Science and Technology, 2011, 1, 535.	4.1	40
54	Effect of bromination on the electrochemistry, frontier orbitals, and spectroscopy of metallocorroles. Journal of Porphyrins and Phthalocyanines, 2011, 15, 1275-1286.	0.8	39

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55	Covalent versus non-covalent (biocatalytic) approaches for enantioselective sulfoxidation catalyzed by corrole metal complexes. Catalysis Science and Technology, 2011, 1, 578.	4.1	39
56	Nitrogen Insertion into a Corrole Ring: Iridium Monoazaporphyrins. Angewandte Chemie - International Edition, 2011, 50, 9433-9436.	13.8	27
57	Metallocorroles as cytoprotective agents against oxidative and nitrative stress in cellular models of neurodegeneration. Journal of Neurochemistry, 2010, 113, 363-373.	3.9	78
58	Neuroprotection against superoxide anion radical by metallocorroles in cellular and murine models of optic neuropathy. Journal of Neurochemistry, 2010, 114, 488-498.	3.9	72
59	Chlorosulfonated corrole: a versatile synthon for advanced materials. Journal of Porphyrins and Phthalocyanines, 2010, 14, 911-923.	0.8	15
60	Photoexcited Triplet State Properties of Brominated and Nonbrominated Ga(III)-Corroles as Studied by Time-Resolved Electron Paramagnetic Resonance. Journal of Physical Chemistry B, 2010, 114, 14303-14308.	2.6	29
61	Chemiluminescence enhancement and energy transfer by the aluminium(iii) complex of an amphiphilic/bipolar and cell-penetrating corrole. Dalton Transactions, 2010, 39, 2998-3000.	3.3	6
62	Highly efficient catalase activity of metallocorroles. Chemical Communications, 2010, 46, 7040.	4.1	55
63	Tumor detection and elimination by a targeted gallium corrole. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6105-6110.	7.1	162
64	Structures and Reactivity Patterns of Group 9 Metallocorroles. Inorganic Chemistry, 2009, 48, 9308-9315.	4.0	48
65	Ground- and Excited-State Dynamics of Aluminum and Gallium Corroles. Inorganic Chemistry, 2009, 48, 2670-2676.	4.0	59
66	Superoxide dismutase activity of corrole metal complexes. Dalton Transactions, 2009, , 7879.	3.3	59
67	Amphiphilic/Bipolar Metallocorroles That Catalyze the Decomposition of Reactive Oxygen and Nitrogen Species, Rescue Lipoproteins from Oxidative Damage, and Attenuate Atherosclerosis in Mice. Angewandte Chemie - International Edition, 2008, 47, 7896-7900.	13.8	72
68	Photophysics of Soret-excited tetrapyrroles in solution. III. Porphyrin analogues: Aluminum and gallium corroles. Chemical Physics Letters, 2008, 459, 113-118.	2.6	60
69	Amphiphilic aluminium(III) and gallium(III) corroles. Journal of Porphyrins and Phthalocyanines, 2007, 11, 189-197.	0.8	23
70	Corrole-sensitized TiO₂ solar cells. Journal of Porphyrins and Phthalocyanines, 2006, 10, 1259-1262.	0.8	84
71	Specific Delivery of Corroles to Cells via Noncovalent Conjugates with Viral Proteins. Pharmaceutical Research, 2006, 23, 367-377.	3.5	101
72	Iron and Manganese Corroles Are Potent Catalysts for the Decomposition of Peroxynitrite. Angewandte Chemie - International Edition, 2006, 45, 6544-6547.	13.8	91

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73	Albumin-Conjugated Corrole Metal Complexes:Â Extremely Simple Yet Very Efficient Biomimetic Oxidation Systems. Journal of the American Chemical Society, 2005, 127, 2883-2887.	13.7	279
74	High-resolution NMR spectroscopic trends and assignment rules of metal-free, metallated and substituted corroles. Magnetic Resonance in Chemistry, 2004, 42, 624-635.	1.9	72
75	Amphiphilic Corroles Bind Tightly to Human Serum Albumin. Bioconjugate Chemistry, 2004, 15, 738-746.	3.6	157
76	Electron Spin Dynamics in Photoexcited Diamagnetic and Paramagnetic Corroles. Journal of the American Chemical Society, 2004, 126, 6886-6890.	13.7	29
77	How acidic are corroles and why?. Tetrahedron Letters, 2003, 44, 2077-2079.	1.4	69
78	Aerobic Oxidations Catalyzed by Chromium Corroles. Journal of the American Chemical Society, 2003, 125, 1162-1163.	13.7	120
79	Selective sulfonation and deuteration of free-base corroles. Journal of Porphyrins and Phthalocyanines, 2002, 06, 553-555.	0.8	30
80	Reduction of Cobalt and Iron Corroles and Catalyzed Reduction of CO2. Journal of Physical Chemistry A, 2002, 106, 4772-4778.	2.5	207
81	Selective Substitution of Corroles:â€‰ Nitration, Hydroformylation, and Chlorosulfonation. Journal of the American Chemical Society, 2002, 124, 7411-7420.	13.7	156
82	Aluminum corrolin, a novel chlorophyll analogue. Journal of Inorganic Biochemistry, 2002, 88, 305-309.	3.5	87
83	Highly Selective Chlorosulfonation of Tris(pentafluorophenyl)corrole as a Synthetic Tool for the Preparation of Amphiphilic Corroles and Metal Complexes of Planar Chirality. Organic Letters, 2001, 3, 3443-3446.	4.6	98
84	Chromium Corroles in Four Oxidation States. Inorganic Chemistry, 2001, 40, 6788-6793.	4.0	94
85	Synthesis and Characterization of Germanium, Tin, Phosphorus, Iron, and Rhodium Complexes of Tris(pentafluorophenyl)corrole, and the Utilization of the Iron and Rhodium Corroles as Cyclopropanation Catalysts. Chemistry - A European Journal, 2001, 7, 1041-1055.	3.3	268
86	Synthesis and Structural Characterization of a Novel Covalently-Bound Corrole Dimer. Chemistry - A European Journal, 2001, 7, 4259-4265.	3.3	124
87	High-Valent Manganese Corroles and the First Perhalogenated Metallocorrole Catalyst. Angewandte Chemie - International Edition, 2001, 40, 2132-2134.	13.8	194
88	High-Valent Manganese Corroles and the First Perhalogenated Metallocorrole Catalyst This research (No. 368/00) was supported by the Israel Science Foundation (Z.G.), the US National Science Foundation (H.B.G.), and the Fund for the Promotion of Research at the Technion (Z.G.).. Angewandte Chemie - International Edition, 2001, 40, 2132-2134.	13.8	8
89	Structural, Electrochemical, and Photophysical Properties of Gallium(III) 5,10,15-Tris(pentafluorophenyl)corrole. Angewandte Chemie - International Edition, 2000, 39, 4048-4051.	13.8	165
90	Novel reactivities of iodosylbenzene in the catalytic oxygenation of olefins. Journal of Molecular Catalysis A, 1999, 142, 367-372.	4.8	23

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91	One-Pot Synthesis of Dihalo(porphyrinato)osmium(IV) Complexes. Evidence for Monohalo(carbonyl)osmium(III) Intermediatesâ€. Inorganic Chemistry, 1996, 35, 7260-7263.	4.0	11
92	Molecular complexes between octaethyltetrathiaporphyrin dication and electron donors: A spectroscopic and electrochemical study. Journal of Physical Organic Chemistry, 1995, 8, 647-658.	1.9	4
93	Corroles: The Hitherto Elusive Parent Macrocycle and its Metal Complexes. Angewandte Chemie, 0, , .	2.0	1