Qinghhai Cai

List of Publications by Year
in descending order

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75 papers	2,195 citations	236925 25 h-index	243625 44 g-index
76 all docs	76 docs citations	76 times ranked	2663 citing authors

#	Article	IF	Citations
1	Efficient electrochemical reduction of CO to C2 products on the transition metal and boron co-doped black phosphorene. Chinese Chemical Letters, 2022, 33, 2183-2187.	9.0	26
2	Single Ir atom anchored in pyrrolic-N4 doped graphene as a promising bifunctional electrocatalyst for the ORR/OER: a computational study. Journal of Colloid and Interface Science, 2022, 607, 1005-1013.	9.4	78
3	Selective oxidation of methanol to dimethoxymethane over iron and vanadate modified phosphotungstate. Applied Surface Science, 2022, 574, 151516.	6.1	8
4	A metallic Cu₂N monolayer with planar tetracoordinated nitrogen as a promising catalyst for CO₂ electroreduction. Journal of Materials Chemistry A, 2022, 10, 1560-1568.	10.3	13
5	Iron and molybdenum modified phosphotungstates towards selective oxidation of styrene to benzaldehyde. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 642, 128736.	4.7	1
6	Tuning single metal atoms anchored on graphdiyne for highly efficient and selective nitrate electroreduction to ammonia under aqueous environments: A computational study. Applied Surface Science, 2022, 592, 153213.	6.1	27
7	Supported Cu₃ clusters on graphitic carbon nitride as an efficient catalyst for CO electroreduction to propene. Journal of Materials Chemistry A, 2022, 10, 14460-14469.	10.3	17
8	Enhanced catalytic activity of MXene for nitrogen electoreduction reaction by carbon doping. Journal of Colloid and Interface Science, 2021, 588, 1-8.	9.4	29
9	Coordination tunes the activity and selectivity of the nitrogen reduction reaction on single-atom iron catalysts: a computational study. Journal of Materials Chemistry A, 2021, 9, 1240-1251.	10.3	135
10	A Composite Feâ€“V/g-C3N4 for Liquid-Phase Selective Oxidation of Methanol with O2 Oxidant. Catalysis Letters, 2021, 151, 909-919.	2.6	2
11	Vacancy-induced high activity of MoS₂ monolayers for CO electroreduction: a computational study. Sustainable Energy and Fuels, 2021, 5, 4932-4943.	4.9	4
12	Tuneable oxidation of styrene to benzaldehyde and benzoic acid over Co/ZSM-5. New Journal of Chemistry, 2021, 45, 18192-18201.	2.8	11
13	Fe3O4/g-C3N4-CeOx fabricated by in situ-reduction towards solvent-free oxidation of styrene to benzaldehyde. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 616, 126309.	4.7	7
14	Copper vanadate nanowires on g-C3N4 toward highly selective oxidation of methanol to dimethoxymethane. Applied Surface Science, 2021, 548, 149180.	6.1	9
15	VOx-MoOy single molecular layer modified graphic carbon nitride polymer for enhanced selective styrene oxidation. Journal of Industrial and Engineering Chemistry, 2021, , .	5.8	3
16	Two-dimensional IrN2 monolayer: An efficient bifunctional electrocatalyst for oxygen reduction and oxygen evolution reactions. Journal of Colloid and Interface Science, 2021, 600, 711-718.	9.4	27
17	A Pt₃ cluster anchored on a C₂N monolayer as an efficient catalyst for electrochemical reduction of nitrobenzene to aniline: a computational study. New Journal of Chemistry, 2021, 45, 21270-21277.	2.8	3
18	Catalytic oxidation of styrene and its reaction mechanism consideration over bimetal modified phosphotungstates. Molecular Catalysis, 2021, 515, 111940.	2.0	5

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19	Boosting nitrogen reduction on single Mo atom by tuning its coordination environment. Sustainable Energy and Fuels, 2021, 5, 6488-6497.	4.9	7
20	Size-dependent electrocatalytic activity of ORR/OER on palladium nanoclusters anchored on defective MoS₂monolayers. New Journal of Chemistry, 2020, 44, 16135-16143.	2.8	15
21	Single transition metal atoms anchored on a C₂N monolayer as efficient catalysts for hydrazine electrooxidation. Physical Chemistry Chemical Physics, 2020, 22, 16691-16700.	2.8	12
22	SO42â€“â€“Feâ€“V/ZrO2 Composite for Selective Oxidation of Styrene to Benzaldehyde in H2O2 Aqueous Solution. Industrial & Engineering Chemistry Research, 2020, 59, 4411-4418.	3.7	6
23	Nitrogen electroreduction performance of transition metal dimers embedded into N-doped graphene: a theoretical prediction. Journal of Materials Chemistry A, 2020, 8, 4533-4543.	10.3	124
24	Highly Selective Oxidation of Styrene Over FeCl3-Imidazolium Ionic Liquid Grafted SBA-15. Catalysis Letters, 2019, 149, 2994-2999.	2.6	10
25	Comparison of PAH content, potential risk in vegetation, and bare soil near Daqing oil well and evaluating the effects of soil properties on PAHs. Environmental Science and Pollution Research, 2019, 26, 25071-25083.	5.3	17
26	Ionic Liquid Dispersed Ti/SBA-15 for Double-Bond Cleavage Oxidation of Î±-Methylstyrene into Acetophenone. Catalysis Letters, 2019, 149, 3491-3500.	2.6	6
27	VOx molecular level grafted g-C3N4 for highly selective oxidation of methanol to dimethoxymethane. Molecular Catalysis, 2019, 469, 48-56.	2.0	17
28	Photodegradation of naphthalene over Fe 3 O 4 under visible light irradiation. Royal Society Open Science, 2019, 6, 181779.	2.4	9
29	Single transition metal atom embedded into a MoS₂ nanosheet as a promising catalyst for electrochemical ammonia synthesis. Physical Chemistry Chemical Physics, 2018, 20, 9248-9255.	2.8	165
30	SiC2 siligraphene as a promising anchoring material for lithium-sulfur batteries: a computational study. Applied Surface Science, 2018, 440, 889-896.	6.1	32
31	Nano metal oxides as efficient catalysts for selective synthesis of 1-methoxy-2-propanol from methanol and propylene oxide. RSC Advances, 2018, 8, 4478-4482.	3.6	15
32	Highly selective oxidation of styrene to benzaldehyde over Fe3O4 using H2O2 aqueous solution as oxidant. Reaction Kinetics, Mechanisms and Catalysis, 2018, 125, 743-756.	1.7	18
33	Computational screening for high-activity MoS₂ monolayer-based catalysts for the oxygen reduction reaction via substitutional doping with transition metal. Journal of Materials Chemistry A, 2017, 5, 9842-9851.	10.3	81
34	Environmentally benign alcoholysis of urea and disubstituted urea to alkyl carbamates over alkali-treated zeolites. Microporous and Mesoporous Materials, 2017, 248, 108-114.	4.4	10
35	How to make inert boron nitride nanosheets active for the immobilization of polysulfides for lithiumâ€“sulfur batteries: a computational study. Physical Chemistry Chemical Physics, 2017, 19, 18208-18216.	2.8	35
36	An efficient strategy for formation of C-N bond by benzyl chloride over nano Î±-Fe2O3. Molecular Catalysis, 2017, 431, 27-31.	2.0	4

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37	Effect of acidic and red-ox sites over modified ZSM-5 surface on selectivity in oxidation of toluene. Molecular Catalysis, 2017, 442, 20-26.	2.0	12
38	Highly selective oxidation of methanol to dimethoxymethane over SO₄^{2â”}/V₂O₅â€“ZrO₂. New Journal of Chemistry, 2017, 41, 8370-8376.	2.8	11
39	CO₂electroreduction performance of a single transition metal atom supported on porphyrin-like graphene: a computational study. Physical Chemistry Chemical Physics, 2017, 19, 23113-23121.	2.8	117
40	An Efficient Route for Electrooxidation of Methanol to Dimethoxymethane Using Ionic Liquid as Electrolyte. Journal of the Electrochemical Society, 2017, 164, H5074-H5077.	2.9	5
41	An organic polymer-grafted ionic liquid as a catalyst for the cycloaddition of CO₂ to epoxides. New Journal of Chemistry, 2017, 41, 387-392.	2.8	15
42	Ionothermal Synthesis in an Ionic Liquid and Crystal Structure of [C₄H₁₂N₂] [CoCl₄]. Journal of Chemical Research, 2016, 40, 475-477.	1.3	1
43	A novel strategy for conversion of methanol and CO2 into dimethoxymethane in a basic ionic liquid. Journal of Molecular Catalysis A, 2016, 421, 117-121.	4.8	17
44	Two-dimensional ironâ€“tetracyanoquinodimethane (Feâ€“TCNQ) monolayer: an efficient electrocatalyst for the oxygen reduction reaction. RSC Advances, 2016, 6, 72952-72958.	3.6	22
45	DFT-based study on the mechanisms of the oxygen reduction reaction on Co(acetylacetonate)₂supported by N-doped graphene nanoribbon. RSC Advances, 2016, 6, 79662-79667.	3.6	5
46	Pyridine derivative/graphene nanoribbon composites as molecularly tunable heterogeneous electrocatalysts for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2016, 18, 5040-5047.	2.8	11
47	Pyrrolic-nitrogen doped graphene: a metal-free electrocatalyst with high efficiency and selectivity for the reduction of carbon dioxide to formic acid: a computational study. Physical Chemistry Chemical Physics, 2016, 18, 5491-5498.	2.8	114
48	Ionothermal synthesis and structural characterization of [Cu(C4H6N2)4]Br2 and [Ni(C4H6N2)4]Br2. Journal of Chemical Sciences, 2015, 127, 1261-1265.	1.5	1
49	Mixed Oxides FeVO_x for Selective Oxidation of Octanol to Octanal under Solventâ€free Condition. Journal of the Chinese Chemical Society, 2015, 62, 722-727.	1.4	1
50	Reclamation of acid pickling waste: A facile route for preparation of single-phase Fe3O4 nanoparticle. Journal of Magnetism and Magnetic Materials, 2015, 381, 401-404.	2.3	17
51	Iron-chloride ionic liquid immobilized on SBA-15 for solvent-free oxidation of benzyl alcohol to benzaldehyde with H2O2. Chemical Engineering Science, 2015, 137, 268-275.	3.8	53
52	Hydroxyl-functionalized ionic liquid for activation and conversion of CO2 and methanol into dimethyl carbonate. Journal of CO2 Utilization, 2015, 12, 49-53.	6.8	25
53	Reclamation of Acid Pickling Waste: Preparation of Nano Î±-Fe₂O₃ and Its Catalytic Performance. Industrial & Engineering Chemistry Research, 2014, 53, 20085-20091.	3.7	8
54	A Magnetically Separable Catalyst for Synthesis of 1â€Phenoxyâ€2â€propanol Via Atomâ€economic Reaction. Journal of the Chinese Chemical Society, 2014, 61, 1084-1088.	1.4	3

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55	A functionalized basic ionic liquid for synthesis of dimethyl carbonate from methanol and CO2. Fuel Processing Technology, 2013, 115, 233-237.	7.2	38
56	Electrochemical conversion of CO2 into dimethyl carbonate in a functionalized ionic liquid. Journal of CO2 Utilization, 2013, 3-4, 98-101.	6.8	30
57	Solvent-free oxidation of toluene in an ionic liquid with H2O2 as oxidant. Chemical Engineering Journal, 2013, 225, 266-270.	12.7	45
58	Selective solvent-free oxidation of toluene to benzaldehyde over zeolite supported iron. Catalysis Communications, 2013, 39, 115-118.	3.3	28
59	Electrochemical Conversion of Methanol and Carbon Dioxide to Dimethyl Carbonate at Graphite-Pt Electrode System. Journal of the Electrochemical Society, 2012, 159, E183-E186.	2.9	25
60	Selective synthesis of dimethyl carbonate from urea and methanol over Fe₂O₃/HMCM-49. Catalysis Science and Technology, 2012, 2, 305-309.	4.1	34
61	A Simple Polyoxometallate for Selective Oxidation of Benzyl Alcohol to Benzaldehyde with Hydrogen Peroxide. Chinese Journal of Chemistry, 2012, 30, 433-437.	4.9	11
62	Tunable synthesis of propylene glycol ether from methanol and propylene oxide under ambient pressure. Kinetics and Catalysis, 2011, 52, 386-390.	1.0	5
63	An atom-economic reaction for synthesis of 1-phenoxy-2-propanol over Al2O3/MgO. Applied Catalysis A: General, 2011, 408, 125-129.	4.3	9
64	Highly selective synthesis of propylene glycol ether from methanol and propylene oxide catalyzed by basic ionic liquid. Journal of Chemical Technology and Biotechnology, 2011, 86, 105-108.	3.2	17
65	Removal of methylene blue from coloured effluents by adsorption onto SBAâ€15. Journal of Chemical Technology and Biotechnology, 2011, 86, 616-619.	3.2	96
66	Electrochemical synthesis of dimethyl carbonate from methanol, CO₂ and propylene oxide in an ionic liquid. Journal of Chemical Technology and Biotechnology, 2011, 86, 1413-1417.	3.2	19
67	Deoximation Reaction in Room Temperature Ionic Liquids under Mild Conditions. Chinese Journal of Chemistry, 2011, 29, 1846-1850.	4.9	5
68	Highly selective oxidation of benzyl alcohol to benzaldehyde with hydrogen peroxide by biphasic catalysis. Chemical Engineering Journal, 2010, 162, 738-742.	12.7	82
69	Precursor template synthesis of three-dimensional mesoporous ZnO hierarchical structures and their photocatalytic properties. CrystEngComm, 2010, 12, 2166.	2.6	67
70	One-Pot Synthesis of Dimethyl Carbonate from Methanol, Propylene Oxide and Carbon Dioxide Over Supported Choline hydroxide/MgO. Catalysis Letters, 2009, 128, 459-464.	2.6	33
71	Electrochemical activation of carbon dioxide for synthesis of dimethyl carbonate in an ionic liquid. Electrochimica Acta, 2009, 54, 2912-2915.	5.2	61
72	Studies on synthesis of dimethyl carbonate from methanol and carbon dioxide. Catalysis Communications, 2009, 10, 605-609.	3.3	79

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73	Synthesis, Structure and Properties of (H2NCH2CH2NH3)3 {(VO)6 [B10O16 (OH)6]2}ÂÂ·Â11H2O. Journal of Chemical Crystallography, 2008, 38, 321-325.	1.1	15
74	Tunable dimerization of Î±-methylstyrene catalyzed by acidic ionic liquids. Applied Catalysis A: General, 2005, 279, 139-143.	4.3	34
75	Synthesis of Dimethyl Carbonate from Methanol and Carbon dioxide using Potassium Methoxide as Catalyst under Mild Conditions. Catalysis Letters, 2005, 103, 225-228.	2.6	36