

# Wei Jiang

## List of Publications by Year in descending order

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78  
papers

4,435  
citations

81839

39  
h-index

106281

65  
g-index

78  
all docs

78  
docs citations

78  
times ranked

2473  
citing authors

#	ARTICLE	IF	CITATIONS
1	One-pot extraction combined with metal-free photochemical aerobic oxidative desulfurization in deep eutectic solvent. <i>Green Chemistry</i> , 2015, 17, 2464-2472.	4.6	232
2	The selectivity for sulfur removal from oils: An insight from conceptual density functional theory. <i>AIChE Journal</i> , 2016, 62, 2087-2100.	1.8	192
3	Polyoxometalate-based ionic liquids as catalysts for deep desulfurization of fuels. <i>Fuel Processing Technology</i> , 2011, 92, 1842-1848.	3.7	178
4	Pyridinium-based temperature-responsive magnetic ionic liquid for oxidative desulfurization of fuels. <i>Chemical Engineering Journal</i> , 2013, 229, 250-256.	6.6	174
5	Boric acid-based ternary deep eutectic solvent for extraction and oxidative desulfurization of diesel fuel. <i>Green Chemistry</i> , 2019, 21, 3074-3080.	4.6	151
6	Carbon-doped porous boron nitride: metal-free adsorbents for sulfur removal from fuels. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12738-12747.	5.2	126
7	Synergistic effect of dual Brønsted acidic deep eutectic solvents for oxidative desulfurization of diesel fuel. <i>Chemical Engineering Journal</i> , 2020, 394, 124831.	6.6	123
8	Ionic liquid extraction and catalytic oxidative desulfurization of fuels using dialkylpiperidinium tetrachloroferrates catalysts. <i>Chemical Engineering Journal</i> , 2014, 250, 48-54.	6.6	116
9	Deep oxidative desulfurization of fuels by Fenton-like reagent in ionic liquids. <i>Green Chemistry</i> , 2009, 11, 1801.	4.6	115
10	Catalytic oxidative desulfurization with a hexatungstate/aqueous H <sub>2</sub> O <sub>2</sub> /ionic liquid emulsion system. <i>Green Chemistry</i> , 2011, 13, 1210.	4.6	115
11	Copper nanoparticles advance electron mobility of graphene-like boron nitride for enhanced aerobic oxidative desulfurization. <i>Chemical Engineering Journal</i> , 2016, 301, 123-131.	6.6	115
12	Synthesis of supported SiW <sub>12</sub> O <sub>40</sub> -based ionic liquid catalyst induced solvent-free oxidative deep-desulfurization of fuels. <i>Chemical Engineering Journal</i> , 2016, 288, 608-617.	6.6	113
13	Magnetic mesoporous nanospheres supported phosphomolybdate-based ionic liquid for aerobic oxidative desulfurization of fuel. <i>Journal of Colloid and Interface Science</i> , 2019, 534, 239-247.	5.0	106
14	Vibrational analysis and formation mechanism of typical deep eutectic solvents: An experimental and theoretical study. <i>Journal of Molecular Graphics and Modelling</i> , 2016, 68, 158-175.	1.3	105
15	Temperature-responsive ionic liquid extraction and separation of the aromatic sulfur compounds. <i>Fuel</i> , 2015, 140, 590-596.	3.4	100
16	Polyoxometalate-based ionic liquid supported on graphite carbon induced solvent-free ultra-deep oxidative desulfurization of model fuels. <i>Fuel</i> , 2017, 190, 1-9.	3.4	98
17	A DFT Study of the Extractive Desulfurization Mechanism by [BMIM] <sup>+</sup> [AlCl <sub>4</sub> ] <sup>-</sup> Ionic Liquid. <i>Journal of Physical Chemistry B</i> , 2015, 119, 5995-6009.	1.2	88
18	Tuning the Chemical Hardness of Boron Nitride Nanosheets by Doping Carbon for Enhanced Adsorption Capacity. <i>ACS Omega</i> , 2017, 2, 5385-5394.	1.6	86

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19	Fenton-like ionic liquids/H <sub>2</sub> O <sub>2</sub> system: one-pot extraction combined with oxidation desulfurization of fuel. RSC Advances, 2012, 2, 658-664.	1.7	81
20	Synthesis of Ionic-Liquid-Based Deep Eutectic Solvents for Extractive Desulfurization of Fuel. Energy & Fuels, 2016, 30, 8164-8170.	2.5	79
21	Enhanced Oxygen Activation Achieved by Robust Single Chromium Atom-Derived Catalysts in Aerobic Oxidative Desulfurization. ACS Catalysis, 2022, 12, 8623-8631.	5.5	78
22	Taming Interfacial Oxygen Vacancies of Amphiphilic Tungsten Oxide for Enhanced Catalysis in Oxidative Desulfurization. ACS Sustainable Chemistry and Engineering, 2017, 5, 8930-8938.	3.2	75
23	Synthesis of mesoporous WO <sub>3</sub> /TiO <sub>2</sub> catalyst and its excellent catalytic performance for the oxidation of dibenzothiophene. New Journal of Chemistry, 2017, 41, 569-578.	1.4	72
24	Polyoxometalate-Based Poly(ionic liquid) as a Precursor for Superhydrophobic Magnetic Carbon Composite Catalysts toward Aerobic Oxidative Desulfurization. ACS Sustainable Chemistry and Engineering, 2019, 7, 15755-15761.	3.2	72
25	In situ fabrication of hollow silica confined defective molybdenum oxide for enhanced catalytic oxidative desulfurization of diesel fuels. Fuel, 2021, 305, 121470.	3.4	69
26	Deep oxidative desulfurization of dibenzothiophene using low-temperature-mediated titanium dioxide catalyst in ionic liquids. Fuel, 2015, 159, 446-453.	3.4	65
27	Oxidative desulfurization of fuels promoted by choline chloride-based deep eutectic solvents. Journal of Molecular Catalysis A, 2016, 424, 261-268.	4.8	63
28	Mechanism and optimization for oxidative desulfurization of fuels catalyzed by Fenton-like catalysts in hydrophobic ionic liquid. Journal of Molecular Catalysis A, 2014, 382, 8-14.	4.8	62
29	Biodegradable choline-like deep eutectic solvents for extractive desulfurization of fuel. Chemical Engineering and Processing: Process Intensification, 2017, 115, 34-38.	1.8	59
30	Immobilized fenton-like ionic liquid: Catalytic performance for oxidative desulfurization. AIChE Journal, 2013, 59, 4696-4704.	1.8	57
31	A comparative study of the extractive desulfurization mechanism by Cu(II) and Zn-based imidazolium ionic liquids. Green Energy and Environment, 2019, 4, 38-48.	4.7	53
32	Pt nanoparticles encapsulated on V <sub>2</sub> O <sub>5</sub> nanosheets carriers as efficient catalysts for promoted aerobic oxidative desulfurization performance. Chinese Journal of Catalysis, 2021, 42, 557-562.	6.9	53
33	Hydrophobic mesoporous silica-supported heteropolyacid induced by ionic liquid as a high efficiency catalyst for the oxidative desulfurization of fuel. RSC Advances, 2015, 5, 16847-16855.	1.7	52
34	Deep oxidative desulfurization with a microporous hexagonal boron nitride confining phosphotungstic acid catalyst. Journal of Molecular Catalysis A, 2016, 423, 207-215.	4.8	51
35	A simple and cost-effective extractive desulfurization process with novel deep eutectic solvents. RSC Advances, 2016, 6, 30345-30352.	1.7	51
36	Preparation of highly dispersed tungsten species within mesoporous silica by ionic liquid and their enhanced catalytic activity for oxidative desulfurization. Fuel, 2014, 117, 667-673.	3.4	46

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37	Supported ionic liquid [Bmim]FeCl <sub>4</sub> /Am TiO <sub>2</sub> as an efficient catalyst for the catalytic oxidative desulfurization of fuels. RSC Advances, 2015, 5, 43528-43536.	1.7	45
38	Oxidation of Aromatic Sulfur Compounds Catalyzed by Organic Hexacyanoferrates in Ionic Liquids with a Low Concentration of H <sub>2</sub> O <sub>2</sub> as an Oxidant. Energy & Fuels, 2014, 28, 2754-2760.	2.5	43
39	TiO <sub>2</sub> microspheres supported polyoxometalate-based ionic liquids induced catalytic oxidative deep-desulfurization. RSC Advances, 2016, 6, 42402-42412.	1.7	43
40	O <sub>2</sub> Activation and Oxidative Dehydrogenation of Propane on Hexagonal Boron Nitride: Mechanism Revisited. Journal of Physical Chemistry C, 2019, 123, 2256-2266.	1.5	42
41	One-pot extraction and aerobic oxidative desulfurization with highly dispersed V <sub>2</sub> O <sub>5</sub> /SBA-15 catalyst in ionic liquids. RSC Advances, 2017, 7, 39383-39390.	1.7	40
42	Design and synthesis of W-containing mesoporous material with excellent catalytic activity for the oxidation of 4,6-DMDBT in fuels. Chemical Engineering Journal, 2015, 280, 256-264.	6.6	39
43	Magnetic supported ionic liquid catalysts with tunable pore volume for enhanced deep oxidative desulfurization. Journal of Molecular Liquids, 2019, 274, 293-299.	2.3	36
44	One-Pot Extraction and Oxidative Desulfurization of Fuels with Molecular Oxygen in Low-Cost Metal-Based Ionic Liquids. Energy & Fuels, 2017, 31, 1376-1382.	2.5	35
45	Theoretical investigation of the interaction between aromatic sulfur compounds and [BMIM]+[FeCl <sub>4</sub> ] <sup>-</sup> ionic liquid in desulfurization: A novel charge transfer mechanism. Journal of Molecular Graphics and Modelling, 2015, 59, 40-49.	1.3	34
46	Ionic liquid immobilized on magnetic mesoporous microspheres with rough surface: Application as recyclable amphiphilic catalysts for oxidative desulfurization. Applied Surface Science, 2019, 484, 1027-1034.	3.1	34
47	Deep oxidative desulfurization of fuels catalyzed by magnetic Fenton-like hybrid catalysts in ionic liquids. RSC Advances, 2013, 3, 2355.	1.7	33
48	Designing multifunctional SO <sub>3</sub> H-based polyoxometalate catalysts for oxidative desulfurization in acid deep eutectic solvents. RSC Advances, 2017, 7, 55318-55325.	1.7	33
49	Extractive desulfurization of diesel fuel by amide-based type IV deep eutectic solvents. Journal of Molecular Liquids, 2021, 338, 116620.	2.3	33
50	Surpassing the Organic Cathode Performance for Lithium-Ion Batteries with Robust Fluorinated Covalent Quinazoline Networks. ACS Energy Letters, 2021, 6, 41-51.	8.8	32
51	Fast Oxidative Removal of Refractory Aromatic Sulfur Compounds by a Magnetic Ionic Liquid. Chemical Engineering and Technology, 2014, 37, 36-42.	0.9	29
52	Glucose dehydration to 5-hydroxymethylfurfural in ionic liquid over Cr <sup>3+</sup> -modified ion exchange resin. RSC Advances, 2015, 5, 9290-9297.	1.7	29
53	Superparamagnetic Mo-containing core-shell microspheres for catalytic oxidative desulfurization of fuel. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 537, 243-249.	2.3	29
54	Graphene-like boron nitride anchored Brønsted acid ionic liquids as metal-free catalyst for advanced oxidation process. Molecular Catalysis, 2017, 436, 53-59.	1.0	27

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55	An accurate empirical method to predict the adsorption strength for $\pi$ -orbital contained molecules on two dimensional materials. <i>Journal of Molecular Graphics and Modelling</i> , 2018, 82, 93-100.	1.3	25
56	Catalytic oxidative desulfurization of fuels in acidic deep eutectic solvents with [(C <sub>6</sub> H <sub>13</sub> ) <sub>3</sub> P(C <sub>14</sub> H <sub>29</sub> )] <sub>3</sub> PMo <sub>12</sub> O <sub>40</sub> as a catalyst. <i>Petroleum Science</i> , 2018, 15, 841-848.	2.4	25
57	Gas-exfoliated porous monolayer boron nitride for enhanced aerobic oxidative desulfurization performance. <i>Nanotechnology</i> , 2018, 29, 025604.	1.3	23
58	Heterogenization of homogenous oxidative desulfurization reaction on graphene-like boron nitride with a peroxomolybdate ionic liquid. <i>RSC Advances</i> , 2016, 6, 140-147.	1.7	22
59	H <sub>2</sub> O <sub>2</sub> decomposition mechanism and its oxidative desulfurization activity on hexagonal boron nitride monolayer: A density functional theory study. <i>Journal of Molecular Graphics and Modelling</i> , 2018, 84, 166-173.	1.3	22
60	Theoretical insights into CO <sub>2</sub> /N <sub>2</sub> selectivity of the porous ionic liquids constructed by ion-dipole interactions. <i>Journal of Molecular Liquids</i> , 2021, 344, 117676.	2.3	21
61	Amorphous TiO <sub>2</sub> -supported Keggin-type ionic liquid catalyst catalytic oxidation of dibenzothiophene in diesel. <i>Petroleum Science</i> , 2018, 15, 870-881.	2.4	18
62	Efficient and remarkable SO <sub>2</sub> capture: A discovery of imidazole-based ternary deep eutectic solvents. <i>Journal of Molecular Liquids</i> , 2021, 330, 115595.	2.3	18
63	Rational Design of Caprolactam-Based Deep Eutectic Solvents for Extractive Desulfurization of Diesel Fuel and Mechanism Study. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 4551-4560.	3.2	18
64	Unraveling the effects of O-doping into h-BN on the adsorptive desulfurization performance by DFT calculations. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106463.	3.3	17
65	Hexacyanoferrate <sup>4-</sup> -based ionic liquids as Fenton <sup>+</sup> -like catalysts for deep oxidative desulfurization of fuels. <i>Applied Organometallic Chemistry</i> , 2016, 30, 753-758.	1.7	15
66	Aerobic oxidative desulfurization via magnetic mesoporous silica-supported tungsten oxide catalysts. <i>Petroleum Science</i> , 2020, 17, 1422-1431.	2.4	15
67	Engineering hollow mesoporous silica supported cobalt molybdate catalyst by dissolution-regrowth strategy for efficiently aerobic oxidative desulfurization. <i>Fuel</i> , 2022, 325, 124755.	3.4	15
68	Ag Atom Anchored on Defective Hexagonal Boron Nitride Nanosheets As Single Atom Adsorbents for Enhanced Adsorptive Desulfurization via S-Ag Bonds. <i>Nanomaterials</i> , 2022, 12, 2046.	1.9	11
69	Synthesis of amphiphilic peroxophosphomolybdates for oxidative desulfurization of fuels in ionic liquids. <i>Petroleum Science</i> , 2018, 15, 890-897.	2.4	10
70	Light irradiation induced aerobic oxidative deep-desulfurization of fuel in ionic liquid. <i>RSC Advances</i> , 2015, 5, 99927-99934.	1.7	9
71	Comparative study of halogen-doped (X Cl, Br, I) hexagonal boron nitride: A promising strategy to enhance the capacity of adsorptive desulfurization. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105886.	3.3	9
72	Synthesis of task-specific ternary deep eutectic solvents for deep desulfurization via reactive extraction. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 171, 108754.	1.8	8

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73	The synthesis of Fe-containing ionic liquid and its catalytic performance for the dehydration of fructose. <i>Chemical Papers</i> , 2017, 71, 1541-1549.	1.0	7
74	N-hydroxyphthalimide anchored on hexagonal boron nitride as a metal-free heterogeneous catalyst for deep oxidative desulfurization. <i>Petroleum Science</i> , 2022, 19, 1382-1389.	2.4	6
75	Fabrication of dual-mesoporous silica by triblock copolymers and metal-based ionic liquid: efficient and durable catalyst for oxidative desulfurization in fuel. <i>RSC Advances</i> , 2015, 5, 104322-104329.	1.7	5
76	Controllable preparation of highly dispersed TiO <sub>2</sub> nanoparticles for enhanced catalytic oxidation of dibenzothiophene in fuels. <i>Applied Organometallic Chemistry</i> , 2018, 32, e4351.	1.7	5
77	The electronic structure and physicochemical property of boron nitridene. <i>Journal of Molecular Graphics and Modelling</i> , 2020, 94, 107475.	1.3	2
78	Aerobic ultra-deep desulfurization of diesel oil triggered by porous carbon supported organic molecular N-hydroxyphthalimide catalyst. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 641, 128455.	2.3	2