Qiang Guo

List of Publications by Citations

118 papers	2,194 citations	24 h-index	42 g-index
125 ext. papers	2,725 ext. citations	4.4 avg, IF	5.32 L-index

#	Paper	IF	Citations
118	Towards Dynamic but Supertough Healable Polymers through Biomimetic Hierarchical Hydrogen-Bonding Interactions. *Angewandte Chemie - International Edition*, **2018**, 57, 13838-13842	16.4	252
117	Solid state reduction of Panzhihua titanomagnetite concentrates with pulverized coal. *Minerals Engineering*, **2011**, 24, 864-869	4.9	118
116	Decomposition kinetics of titanium slag in sodium hydroxide system. *Hydrometallurgy*, **2009**, 95, 22-27	4	83
115	A novel preparation of titanium dioxide from titanium slag. *Hydrometallurgy*, **2009**, 96, 52-56	4	77
114	Flexible composite-nanofiber based piezo-triboelectric nanogenerators for wearable electronics. *Journal of Materials Chemistry A*, **2019**, 7, 13347-13355	13	71
113	Different N-containing functional groups modified mesoporous adsorbents for Cr(VI) sequestration: Synthesis, characterization and comparison. *Microporous and Mesoporous Materials*, **2008**, 110, 442-450	5.3	71
112	A novel method to extract iron, titanium, vanadium, and chromium from high-chromium vanadium-bearing titanomagnetite concentrates. *Hydrometallurgy*, **2014**, 149, 106-109	4	66
111	Morphosynthesis route to large-pore SBA-15 microspheres. *Microporous and Mesoporous Materials*, **2006**, 91, 156-160	5.3	65
110	Extraction of vanadium from chloride solution with high concentration of iron by solvent extraction using D2EHPA. *Separation and Purification Technology*, **2014**, 125, 59-65	8.3	63
109	An extraction process to recover vanadium from low-grade vanadium-bearing titanomagnetite. *Journal of Hazardous Materials*, **2015**, 294, 35-40	12.8	53
108	Pd catalyst supported on a chitosan-functionalized large-area 3D reduced graphene oxide for formic acid electrooxidation reaction. *Journal of Materials Chemistry A*, **2013**, 1, 6839	13	44
107	Green manufacturing process of chromium compounds. *Environmental Progress*, **2005**, 24, 44-50		44
106	Novel Process for Titanium Dioxide Production from Titanium Slag: NaOH-KOH Binary Molten Salt Roasting and Water Leaching. *Industrial & Engineering Chemistry Research*, **2013**, 52, 15756-15762	3.9	43
105	Swelling behavior of iron ore pellet reduced by H2□O mixtures. *Powder Technology*, **2015**, 269, 290-295	5.2	38
104	A novel D2EHPA-based synergistic extraction system for the recovery of chromium (III). *Chemical Engineering Journal*, **2016**, 302, 233-238	14.7	35
103	Characterization and atmospheric hydrochloric acid leaching of a limonitic laterite from Indonesia. *Hydrometallurgy*, **2012**, 129-130, 7-13	4	34
102	A novel synergistic extraction method for recovering vanadium (V) from high-acidity chloride leaching liquor. *Separation and Purification Technology*, **2016**, 165, 166-172	8.3	31

101	Mechanism and kinetics of titanium hydrolysis in concentrated titanyl sulfate solution based on infrared and Raman spectra. *Chemical Engineering Science*, **2015**, 134, 196-204	4.4	30
100	Adaptive Polymeric Coatings with Self-Reporting and Self-Healing Dual Functions from Porous Core–Shell Nanostructures. *Macromolecular Materials and Engineering*, **2018**, 303, 1700616	3.9	30
99	Efficient and Stable NiCo2O4/VN Nanoparticle Catalyst for Electrochemical Water Oxidation. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 11473-11479	8.3	25
98	Smart-Sensing Polymer Coatings with Autonomously Reporting Corrosion Dynamics of Self-Healing Systems. *Advanced Materials Interfaces*, **2019**, 6, 1900055	4.6	24
97	A machine learning approach for electrical capacitance tomography measurement of gas–solid fluidized beds. *AICHE Journal*, **2019**, 65, e16583	3.6	24
96	Extraction of iron (III) from chloride leaching liquor with high acidity using tri-n-butyl phosphate and synergistic extraction combined with methyl isobutyl ketone. *Separation and Purification Technology*, **2015**, 150, 132-138	8.3	24
95	Hierarchical Ni–Fe layered double hydroxide/MnO2 sphere architecture as an efficient noble metal-free electrocatalyst for ethanol electro-oxidation in alkaline solution. *RSC Advances*, **2015**, 5, 83314-83319	3.7	24
94	Decomposition of acid dissolved titanium slag from Australia by sodium hydroxide. *Rare Metals*, **2009**, 28, 564-569	5.5	24
93	A method for recovery of iron, titanium, and vanadium from vanadium-bearing titanomagnetite. *International Journal of Minerals, Metallurgy and Materials*, **2018**, 25, 131-144	3.1	23
92	Leaching metals from saprolitic laterite ore using a ferric chloride solution. *Journal of Cleaner Production*, **2016**, 112, 3531-3539	10.3	23
91	Mineralizer effects on the synthesis of amorphous chromium hydroxide and chromium oxide green pigment using hydrothermal reduction method. *Dyes and Pigments*, **2015**, 113, 487-495	4.6	22
90	Vertically Grown MoS2 Nanoplates on VN with an Enlarged Surface Area as an Efficient and Stable Electrocatalyst for HER. *ACS Applied Energy Materials*, **2019**, 2, 2854-2861	6.1	21
89	Activation pretreatment of limonitic laterite ores by alkali-roasting using NaOH. *International Journal of Minerals, Metallurgy and Materials*, **2012**, 19, 100-105	3.1	21
88	Measurement and Correlation of Solubility Data for CO2 in NaHCO3 Aqueous Solution. *Journal of Chemical & Engineering Data*, **2011**, 56, 1213-1219	2.8	21
87	Investigation of gas–solid bubbling fluidized beds using ECT with a modified Tikhonov regularization technique. *AICHE Journal*, **2018**, 64, 29-41	3.6	20
86	Influence and hydrolysis kinetics in titanyl sulfate solution from the sodium hydroxide molten salt method. *Journal of Crystal Growth*, **2013**, 381, 153-159	1.6	19
85	Pd nanoparticles supported on Mg–Al–CO3 layered double hydroxide as an effective catalyst for methanol electro-oxidation. *RSC Advances*, **2015**, 5, 62142-62148	3.7	18
84	Aqueous Carbonation of Steel Slag: A Kinetics Study. *ISIJ International*, **2015**, 55, 2509-2514	1.7	17

83	Preparation of titanium dioxide from titania-rich slag by molten NaOH method. *International Journal of Minerals, Metallurgy and Materials*, **2012**, 19, 205-211	3.1	17
82	Vertically aligned □MnO2 nanosheets on carbon nanotubes as cathodic materials for aqueous rechargeable magnesium ion battery. *Ionics*, **2018**, 24, 3483-3491	2.7	16
81	Electro-catalysis of carbon black or titanium sub-oxide supported Pd□d towards formic acid electro-oxidation. *RSC Advances*, **2016**, 6, 68989-68996	3.7	16
80	Effect of ZnCl2 impregnation concentration on the microstructure and electrical performance of ramie-based activated carbon hollow fiber. *Ionics*, **2016**, 22, 545-553	2.7	16
79	Thermally treated 3-D nanostructured graphene-supported Pd catalyst for significantly improved electrocatalytic performance towards ethanol electrooxidation. *RSC Advances*, **2013**, 3, 5196	3.7	16
78	Synthesis and characterization of rod-like periodic mesoporous organosilica with the 1,4-diureylenebenzene moieties. *Microporous and Mesoporous Materials*, **2007**, 103, 184-189	5.3	16
77	A novel process for the recovery of iron, titanium, and vanadium from vanadium-bearing titanomagnetite: sodium modification□direct reduction coupled process. *International Journal of Minerals, Metallurgy and Materials*, **2017**, 24, 504-511	3.1	15
76	Biomimetic Tough Self-Healing Polymers Enhanced by Crystallization Nanostructures. *ACS Applied Polymer Materials*, **2020**, 2, 879-886	4.3	15
75	Formation of Cr(VI) compounds during the thermal decomposition of amorphous chromium hydroxide. *Journal of Thermal Analysis and Calorimetry*, **2014**, 117, 741-745	4.1	15
74	Hydrous alumina/silica double-layer surface coating of TiO2 pigment. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2012**, 407, 77-84	5.1	15
73	Structures, formation mechanisms, and ion-exchange properties of □ □ and □Na2TiO3. *RSC Advances*, **2016**, 6, 112625-112633	3.7	14
72	Efficient Removal of Fluoride by Complexation Extraction: Mechanism and Thermodynamics. *Environmental Science & Technology*, **2019**, 53, 9102-9108	10.3	14
71	Extraction relationship of Li+ and H+ using tributyl phosphate in the presence of Fe(III). *Separation Science and Technology*, **2020**, 55, 1677-1685	2.5	14
70	Synthesis of Polyurethane/Poly(urea-formaldehyde) Double-shelled Microcapsules for Self-healing Anticorrosion Coatings. *Chinese Journal of Polymer Science (English Edition)*, **2020**, 38, 45-52	3.5	14
69	Extraction of metals from saprolitic laterite ore through pressure hydrochloric-acid selective leaching. *Hydrometallurgy*, **2015**, 157, 149-158	4	13
68	Towards Dynamic but Supertough Healable Polymers through Biomimetic Hierarchical Hydrogen-Bonding Interactions. *Angewandte Chemie*, **2018**, 130, 14034-14038	3.6	13
67	A novel way to synthesize potassium titanates. *Materials Letters*, **2006**, 60, 203-205	3.3	12
66	Production of TiO2 from CaTiO3 by alkaline roasting method. *Rare Metals*, **2010**, 29, 162-167	5.5	11

65	Structural control of Na2TiO3 in pre-treating natural rutile ore by alkali roasting for TiO2 production. *Canadian Journal of Chemical Engineering*, **2014**, 92, 1346-1352	2.3	10
64	Water-Induced Structural Dynamic Process in Molecular Sieves under Mild Hydrothermal Conditions: Ship-in-a-Bottle Strategy for Acidity Identification and Catalyst Modification. *Angewandte Chemie - International Edition*, **2020**, 59, 20672-20681	16.4	10
63	Carbothermic Reduction of Vanadium-Titanium Magnetite in Molten NaOH. *ISIJ International*, **2018**, 58, 627-632	1.7	10
62	Mixed-Surfactant-Assisted Synthesis of Dual-Phase Li Ti O -TiO Hierarchical Microspheres as High-Performance Anode Materials for Li-Ion Batteries. *ChemSusChem*, **2019**, 12, 4412-4420	8.3	9
61	pH-Responsive Polymer Coatings for Reporting Early Stages of Metal Corrosion. *Macromolecular Materials and Engineering*, **2017**, 302, 1700128	3.9	8
60	Experimental Verification of Solid-like and Fluid-like States in the Homogeneous Fluidization Regime of Geldart A Particles. *Industrial & Engineering Chemistry Research*, **2018**, 57, 2670-2686	3.9	8
59	Study the liquid-phase Beckmann rearrangement on the surface of SBA-15-SO3H catalyst. *Journal of Porous Materials*, **2010**, 17, 335-340	2.4	8
58	Drop size correlation and population balance model for an agitated-pulsed solvent extraction column. *AICHE Journal*, **2020**, 66, e16279	3.6	8
57	Application of a Sustainable Bioderived Solvent (Biodiesel) for Phenol Extraction. *ACS Omega*, **2019** , 4, 10431-10437	3.9	7
56	Recovery of titanium and vanadium from titanium□anadium slag obtained by direct reduction of titanomagnetite concentrates. *Rare Metals*, **2015**, 1	5.5	7
55	Application of mathematical models for ion-exchange removal of calcium ions from potassium chromate solutions by Amberlite IRC 748 resin in a continuous fixed bed column. *Hydrometallurgy*, **2015**, 158, 165-171	4	7
54	Extraction behaviours of titanium and other impurities in the decomposition process of ilmenite by highly concentrated KOH solution. *International Journal of Minerals, Metallurgy and Materials*, **2012**, 19, 9-14	3.1	7
53	Precipitation of □Fe2O3 and recovery of Ni and Co from synthetic laterite-leaching solutions. *Hydrometallurgy*, **2015**, 153, 21-29	4	7
52	Removal of iron from ilmenite by KOH leaching-oxalate leaching method. *Rare Metals*, **2010**, 29, 9-15	5.5	7
51	Preparation and film-growing mechanism of hydrous zirconia coated on TiO2. *International Journal of Minerals, Metallurgy and Materials*, **2010**, 17, 660-667	3.1	7
50	Nanogap and Environmentally Stable Triboelectric Nanogenerators Based on Surface Self-Modified Sustainable Films. *ACS Applied Materials & Interfaces*, **2020**, 12, 55444-55452	9.5	7
49	Hierarchical porous nitrogen doped reduced graphene oxide prepared by surface decoration□hermal treatment method as high-activity oxygen reduction reaction catalyst and high-performance supercapacitor electrodes. *RSC Advances*, **2016**, 6, 49497-49504	3.7	7
48	Using highly concentrated chloride solutions to leach valuable metals from cathode-active materials in spent lithium-ion batteries. *Rare Metals*, **2021**, 40, 1971-1978	5.5	7

47	Preparation of Highly Pure Vanadyl Sulfate from Sulfate Solutions Containing Impurities of Iron and Aluminum by Solvent Extraction Using EHEHPA. *Metals*, **2017**, 7, 106	2.3	6
46	Selective removal of iron(III) from highly salted chloride acidic solutions by solvent extraction using di(2-ethylhexyl) phosphate. *Frontiers of Chemical Science and Engineering*, **2021**, 15, 528-537	4.5	6
45	Glucose-Based Activated Carbon Spheres as Electrode Material for Electrochemical Capacitor. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 3835-3841	1.3	5
44	Doping effects on the electro-degradation of phenol on doped titanium suboxide anodes. *Chinese Journal of Chemical Engineering*, **2018**, 26, 830-837	3.2	5
43	Preparation of Cr2O3 precursors by hydrothermal reduction in the abundant Na2CO3 and Na2CrO4 solution. *International Journal of Minerals, Metallurgy and Materials*, **2012**, 19, 978-985	3.1	5
42	Nitrogen-doped carbon-modified titanium oxides supported Pd catalyst for the electrooxidation of formic acid. *Journal of Solid State Electrochemistry*, **2018**, 22, 2623-2628	2.6	4
41	Treatment of tionite residue from titanium oxide industry for recovery of TiO2 and removal of silica. *Hydrometallurgy*, **2016**, 161, 112-116	4	4
40	Influence of Na2CO3 as Additive on Direct Reduction of Boron-Bearing Magnetite Concentrate. *Journal of Iron and Steel Research International*, **2016**, 23, 103-108	1.2	4
39	Study on Lithium Insertion in Lepidocrocite and □MnO2 Type TiO2: A First-Principles Prediction. *Chinese Journal of Chemistry*, **2013**, 31, 1257-1262	4.9	4
38	Novel palladium□yttrium (Pd□Y/C) catalysts for methanol electrooxidation in alkaline media. *Journal of Solid State Electrochemistry*, **2015**, 19, 923-927	2.6	4
37	Solubility Data in the System KCl + K2CrO4 + H2O. *Journal of Chemical & Engineering Data*, **2009**, 54, 1811-1813	2.8	4
36	Bioinspired Healable Mechanochromic Function from Fluorescent Polyurethane Composite Film. *ChemistryOpen*, **2020**, 9, 272-276	2.3	4
35	Nano-channel-based physical and chemical synergic regulation for dendrite-free lithium plating. *Nano Research*, **2021**, 14, 3585-3597	10	4
34	Activation pretreatment of low-grade Ti-slag by alkali roasting: anticaking technique and kinetics of decomposition. *Asia-Pacific Journal of Chemical Engineering*, **2016**, 11, 14-23	1.3	4
33	Modeling of the Competition between Uranyl Nitrate and Nitric Acid upon Extraction with Tri--butyl Phosphate. *ACS Omega*, **2020**, 5, 12174-12183	3.9	3
32	Crystallization of Ammonium Persulfate in the Presence of an Additive: Experimental and Molecular Dynamics Simulation Studies. *Crystal Research and Technology*, **2018**, 53, 1700280	1.3	3
31	Decomposition Kinetics of Titania Slag in Eutectic NaOH-NaNO3 System. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2016**, 47, 666-674	2.5	3
30	High-performance aqueous rechargeable batteries based on zinc anode and NiCo2O4 cathode. *Bulletin of Materials Science*, **2015**, 38, 1435-1438	1.7	3

29	Crystallization behaviors of bayerite from sodium chromate alkali solutions. *Transactions of Nonferrous Metals Society of China*, **2014**, 24, 3356-3365	3.3	3
28	Removing of Si in the NaOH Molten Salt Reaction of Titanium Slag to Produce TiO2. *Advanced Materials Research*, **2011**, 418-420, 387-392	0.5	3
27	Phase Diagram for the System KOH + K2CrO4 + KCl + H2O. *Journal of Chemical & Engineering Data*, **2009**, 54, 1963-1966	2.8	3
26	Effect of atmosphere on the synthesis of potassium titanate. *Rare Metals*, **2010**, 29, 280-285	5.5	3
25	Leaching of vanadium, sodium, and silicon from molten V-Ti-bearing slag obtained from low-grade vanadium-bearing titanomagnetite. *International Journal of Minerals, Metallurgy and Materials*, **2016**, 23, 898-905	3.1	3
24	Effect of Electrode Length of an Electrical Capacitance Tomography Sensor on Gas−Solid Fluidized Bed Measurements. *Industrial & Engineering Chemistry Research*, **2019**, 58, 21827-21841	3.9	3
23	Dispersed-Phase Holdup and Characteristic Velocity in an Agitated-Pulsed Solvent Extraction Column. *Chemical Engineering and Technology*, **2021**, 44, 600-613	2	3
22	Water-Induced Structural Dynamic Process in Molecular Sieves under Mild Hydrothermal Conditions: Ship-in-a-Bottle Strategy for Acidity Identification and Catalyst Modification. *Angewandte Chemie*, **2020**, 132, 20853-20862	3.6	2
21	Study on Dispersed-Phase Axial Dispersion in an Agitated−Pulsed Solvent Extraction Column with a Step Tracer Injection Technique. *Industrial & Engineering Chemistry Research*, **2021**, 60, 7454-7463	3.9	2
20	Competitive Binding-Modulated Metal−Phenolic Assemblies for Adaptable Nanofilm Engineering. *Chemistry of Materials*, **2021**, 33, 4733-4744	9.6	2
19	Antibacterial self-healing anticorrosion coatings from single capsule system. *Journal of Applied Polymer Science*, **2021**, 138, 51214	2.9	2
18	Recovery of boron from brines with high magnesium content by solvent extraction using aliphatic alcohol.. *RSC Advances*, **2021**, 11, 16096-16105	3.7	2
17	Novel palladium-gadolinium (Pd-Gd/C) bimetallic catalysts for electrooxidation of methanol in alkaline media. *Ionics*, **2018**, 24, 2421-2426	2.7	2
16	Electrocatalysis of Pd−Er bimetallic catalysts for methanol oxidation in alkaline media. *Ionics*, **2020**, 26, 3459-3464	2.7	1
15	Synthesis and characterization of Co3O4 prepared from atmospheric pressure acid leach liquors of nickel laterite ores. *International Journal of Minerals, Metallurgy and Materials*, **2018**, 25, 20-27	3.1	1
14	Removal of zirconium from hydrous titanium dioxide. *International Journal of Minerals, Metallurgy and Materials*, **2013**, 20, 1-8	3.1	1
13	Mechano-Chemically Reduced Macro−Mesoporous Hierarchical Graphene for High-Performance Electric Double-Layer Capacitor Applications. *Advanced Electronic Materials*, **2015**, 1, 1500123	6.4	1
12	Coupling Pd nanoparticles on fine Ti4O7 with oxygen vacanciesas a high-activity, long-life ORR electrocatalyst. *Ionics*, **2021**, 27, 2571-2582	2.7	1

11	Leaching of Titanium and Silicon from Low-Grade Titanium Slag Using Hydrochloric Acid Leaching. *Jom*, **2018**, 70, 1985-1990	2.1	1
10	Design and Simulation of a Green Chromate Compound Production Process. *Chemical Engineering and Technology*, **2014**, 37, 1729-1735	2	0
9	Kinetics on the Desiliconization during Alkaline Leaching of Titanium Slag. *Advanced Materials Research*, **2011**, 233-235, 1322-1327	0.5	0
8	Reliable, environmentally friendly method for the recycling of spent Ag/□Al2O3 catalysts using (NH4)2Ce(NO3)6. *Chinese Journal of Chemical Engineering*, **2018**, 26, 2169-2175	3.2	0
7	Polar NiFe layered double hydroxide nanosheets for enhancing the performance of lithium□sulfur batteries. *Materials Chemistry Frontiers*, **2021**, 5, 5780-5789	7.8	0
6	Palladium-ytterbium bimetallic electrocatalysts supported on carbon black, titanium suboxide, or poly(diallyldimethylammonium chloride)-functionalized titanium suboxide towards methanol oxidation in alkaline media. *Ionics*, **2018**, 24, 3085-3094	2.7	
5	Study on Thickness Control and Quantitative of Converter Lining. *Applied Mechanics and Materials*, **2013**, 433-435, 2156-2163	0.3	
4	Molecular Design of Solvents for Extractive Distillation. *Advanced Materials Research*, **2011**, 233-235, 2938-2944	0.5	
3	Preparing Metatitanic Acid from Perovskite-Type Titanium Slag Using a Sulfuric□hloric Mixture Acid. *Jom*, **2022**, 74, 1070	2.1	
2	Purification of specularite by centrifugation instead of flotation to produce iron oxide red pigment. *International Journal of Minerals, Metallurgy and Materials*, **2021**, 28, 56-65	3.1	
1	Hydrodynamic Behavior Analysis of Agitated-Pulsed Column by CFD-PBM. *Solvent Extraction and Ion Exchange*,1-22	2.5	