H Kim

List of Publications by Year in Descending Order

117 papers	3,441 citations	35 h-index	50 g-index
118 ext. papers	4,088 ext. citations	7.1 avg, IF	6.07 L-index

#	Paper	IF	Citations
117	Electrochemically engineered zinc(iron)oxyhydroxide/zinc ferrite heterostructure with interfacial microstructure and hydrophilicity ideal for supercapacitors. *Journal of Colloid and Interface Science*, **2022**, 606, 607-617	9.3	0
116	Transformation of waste onion peels into core-shell Fe3C@ N-doped carbon as a robust electrocatalyst for oxygen evolution reaction. *Electrochimica Acta*, **2022**, 140545	6.7	1
115	Critical Review, Recent Updates on Zeolitic Imidazolate Framework-67 (ZIF-67) and Its Derivatives for Electrochemical Water Splitting. *Advanced Materials*, **2021**, e2107072	24	12
114	Spinel type Fe3O4 polyhedron supported on nickel foam as an electrocatalyst for water oxidation reaction. *Journal of Alloys and Compounds*, **2021**, 863, 158742	5.7	6
113	Highly soluble electroactive ethylenedioxythiopene (EDOT)-based copolymer obtained via "click" copolymerization. *Polymer*, **2021**, 226, 123846	3.9	1
112	Removal of Cs+ in water by dibenzo-18-crown-6 ether tethered on mesoporous SBA-15 as a reusable and efficient adsorbent. *Journal of Water Process Engineering*, **2021**, 39, 101716	6.7	6
111	ZnO@Ni foam photoelectrode modified with heteroatom doped graphitic carbon for enhanced photoelectrochemical water splitting under solar light. *International Journal of Hydrogen Energy*, **2021**, 46, 2075-2085	6.7	2
110	Recent Trends in Electrochemical Sensors for Vital Biomedical Markers Using Hybrid Nanostructured Materials. *Advanced Science*, **2020**, 7, 1902980	13.6	29
109	Crown ethers "clicked" on fibrous polyglycidyl methacrylate for selective Li+ retrieval from aqueous sources. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 596, 124709	5.1	3
108	Synthesis of free-standing poly(ionic liquid) bearing 1,2,3-triazole group for the adsorptive elimination of Cr6+from aqueous solution. *Journal of Environmental Chemical Engineering*, **2020**, 8, 104084	6.8	3
107	Hierarchically assembled porous TiO2 nanoparticles with enhanced photocatalytic activity towards Rhodamine-B degradation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 586, 124199	5.1	8
106	Synergism of transition metal (Co, Ni, Fe, Mn) nanoparticles and "active support" FeO@C for catalytic reduction of 4-nitrophenol. *Science of the Total Environment*, **2020**, 712, 135492	10.2	25
105	Superior decontamination of toxic organic pollutants under solar light by reduced graphene oxide incorporated tetrapods-like AgPO/MnFeO hierarchical composites. *Journal of Environmental Management*, **2020**, 256, 109930	7.9	9
104	Graphene oxide interlayered Ga-doped FeSe2 nanorod: A robust nanocomposite with ideal electronic structure for electrochemical dopamine detection. *Electrochimica Acta*, **2020**, 363, 137245	6.7	5
103	In Situ Electrochemical Formation of a Core-Shell ZnFe2O4@Zn(Fe)OOH Heterostructural Catalyst for Efficient Water Oxidation in Alkaline Medium. *ChemElectroChem*, **2020**, 7, 3478-3486	4.3	2
102	Solvent-free synthesis of propargylamines via A3 coupling reaction and organic pollutant degradation in aqueous condition using Cu/C catalyst. *Applied Organometallic Chemistry*, **2020**, 34, e5986	3.1	3
101	Thermochromic transition analysis of elastomer prepared from azo dye-siloxane blend. *Materials Chemistry and Physics*, **2020**, 240, 122297	4.4	3

100	Carbon Transition-metal Oxide Electrodes: Understanding the Role of Surface Engineering for High Energy Density Supercapacitors. *Chemistry - an Asian Journal*, **2020**, 15, 1628-1647	4.5	16
99	A switchable single-molecule electrochromic device derived from a viologen-tethered triazolium-based poly(ionic liquid). *Journal of Materials Chemistry A*, **2019**, 7, 21668-21673	13	25
98	Efficient Dehydration of Glucose, Sucrose, and Fructose to 5-Hydroxymethylfurfural Using Tri-cationic Ionic Liquids. *Catalysis Letters*, **2019**, 149, 672-687	2.8	16
97	Amorphous iron sulfide nanowires as an efficient adsorbent for toxic dye effluents remediation. *Environmental Science and Pollution Research*, **2019**, 26, 2734-2746	5.1	9
96	In-situ derived hierarchical ZnO/Zn-C nanofiber with high photocatalytic activity and recyclability under solar light. *Applied Surface Science*, **2019**, 491, 350-359	6.7	18
95	Derivation of both EDLC and pseudocapacitance characteristics based on synergistic mixture of NiCo2O4 and hollow carbon nanofiber: An efficient electrode towards high energy density supercapacitor. *Electrochimica Acta*, **2019**, 318, 392-404	6.7	29
94	Efficient decontamination of toxic phenol pollutant using LaCOOH nanowires decorated AgPO hierarchical composites mediated by metallic Ag. *Science of the Total Environment*, **2019**, 675, 325-336	10.2	12
93	Highly porous NiMoO4 tailored onto amine functionalized CNT as advanced nanocomposite electrocatalyst for supercapacitor application. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 9558-9571	2.1	4
92	Utilization of the superior properties of highly mesoporous PVP modified NiCo2O4 with accessible 3D nanostructure and flower-like morphology towards electrochemical methanol oxidation reaction. *Journal of Energy Chemistry*, **2019**, 29, 136-146	12	25
91	Ionic Liquid-Derived Co3O4-N/S-Doped Carbon Catalysts for the Enhanced Water Oxidation. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 14889-14898	8.3	13
90	Water-insoluble hydrophilic polysulfides as microfibrous composites towards highly effective and practical Hg2+ capture. *Chemical Engineering Journal*, **2019**, 378, 122216	14.7	10
89	Engineered iron-carbon-cobalt (FeO@C-Co) core-shell composite with synergistic catalytic properties towards hydrogen generation via NaBH hydrolysis. *Journal of Colloid and Interface Science*, **2019**, 543, 273-284	9.3	36
88	Ternary NiCoP urchin like 3D nanostructure supported on nickel foam as a catalyst for hydrogen generation of alkaline NaBH4. *Chemical Physics*, **2019**, 516, 152-159	2.3	32
87	Development of high capacity Li+ adsorbents from H2TiO3/polymer nanofiber composites: Systematic polymer screening, characterization and evaluation. *Journal of Industrial and Engineering Chemistry*, **2019**, 70, 124-135	6.3	22
86	Facile synthesis of Ag3PO4/g-C3N4 composites in various solvent systems with tuned morphologies and their efficient photocatalytic activity for multi-dye degradation. *Journal of Photochemistry and Photobiology A: Chemistry*, **2019**, 368, 168-181	4.7	31
85	Cobalt nanoparticles supported on magnetic core-shell structured carbon as a highly efficient catalyst for hydrogen generation from NaBH4 hydrolysis. *International Journal of Hydrogen Energy*, **2018**, 43, 9296-9306	6.7	56
84	Improved electrocatalytic oxygen evolution reaction properties using PVP modified direct growth Co-based metal oxides electrocatalysts on nickel foam. *Electrochimica Acta*, **2018**, 263, 362-372	6.7	20
83	Synthesis of cerium and nickel doped titanium nanofibers for hydrolysis of sodium borohydride. *Chemosphere*, **2018**, 202, 669-676	8.4	11

82	Facile synthesis of polypyrrole/ionic liquid nanoparticles and use as an electrocatalyst for oxygen evolution reaction. *Chemical Engineering Journal*, **2018**, 335, 215-220	14.7	16
81	Electrospun carbon nanofiber-carbon nanotubes coated polyaniline composites with improved electrochemical properties for supercapacitors. *Electrochimica Acta*, **2018**, 259, 1110-1119	6.7	42
80	Ce Zr1□O2 solid solutions for catalytic synthesis of dimethyl carbonate from CO2: Reaction mechanism and the effect of catalyst morphology on catalytic activity. *Fuel*, **2018**, 216, 245-254	7.1	32
79	Iron-based heterogeneous catalysts for oxygen evolution reaction; change in perspective from activity promoter to active catalyst. *Journal of Power Sources*, **2018**, 395, 106-127	8.9	44
78	Synthesis of Co3O4 macrocubes catalyst using novel chitosan/urea template for hydrogen generation from sodium borohydride. *Energy*, **2017**, 121, 238-245	7.9	48
77	Cobalt impregnated magnetite-multiwalled carbon nanotube nanocomposite as magnetically separable efficient catalyst for hydrogen generation by NaBH4 hydrolysis. *Journal of Alloys and Compounds*, **2017**, 699, 1057-1067	5.7	54
76	Cobalt oxide synthesized using urea precipitation method as catalyst for the hydrolysis of sodium borohydride. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2017**, 520, 355-360	5.1	31
75	Carbon nanotube ensembled hybrid nanocomposite electrode for direct electrochemical detection of epinephrine in pharmaceutical tablets and urine. *Materials Science and Engineering C*, **2017**, 79, 93-99	8.3	37
74	Diethylenetriamine assisted synthesis of mesoporous Co and Ni-Co spinel oxides as an electrocatalysts for methanol and water oxidation. *Electrochimica Acta*, **2017**, 240, 277-287	6.7	24
73	Ionic liquid as a catalyst for utilization of carbon dioxide to production of linear and cyclic carbonate. *Fuel*, **2017**, 200, 316-332	7.1	88
72	NiCo 2 O 4 hollow sphere as an efficient catalyst for hydrogen generation by NaBH 4 hydrolysis. *Materials Letters*, **2017**, 198, 50-53	3.3	35
71	Environment friendly hydrothermal synthesis of carbon□Co3O4 nanorods composite as an efficient catalyst for oxygen evolution reaction. *Journal of Energy Chemistry*, **2017**, 26, 695-702	12	22
70	Microwave-Assisted Synthesis of a Stainless Steel Mesh-Supported Co3O4 Microrod Array As a Highly Efficient Catalyst for Electrochemical Water Oxidation. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 11069-11079	8.3	28
69	CuCl2@Poly-IL catalyzed carboxylation of terminal alkynes through CO2 utilization. *Chemical Engineering Journal*, **2017**, 326, 1009-1019	14.7	12
68	Bimetallic iron cobalt oxide self-supported on Ni-Foam: An efficient bifunctional electrocatalyst for oxygen and hydrogen evolution reaction. *Electrochimica Acta*, **2017**, 249, 253-262	6.7	90
67	Facile synthesis of bicontinuous Ni3Fe alloy for efficient electrocatalytic oxygen evolution reaction. *Journal of Alloys and Compounds*, **2017**, 726, 875-884	5.7	34
66	Solvent free synthesis of cyclic ureas and urethanes by carbonylation method in the basic dicationic ionic liquid catalysts. *Chemical Engineering Journal*, **2016**, 306, 826-831	14.7	14
65	Fe2O3 hollow nanorods/CNT composites as an efficient electrocatalyst for oxygen evolution reaction. *Electrochimica Acta*, **2016**, 222, 1316-1325	6.7	62

64	Electrospun ZnFe 2 O 4 -based nanofiber composites with enhanced supercapacitive properties. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2016**, 211, 141-148	3.1	30
63	Effect of poly(ethylene oxide) and water on electrospun poly(vinylidene fluoride) nanofibers with enhanced mechanical properties as pre-filter for oil-in-water filtration. *Materials Chemistry and Physics*, **2016**, 182, 208-218	4.4	16
62	Liquid-liquid extraction of lithium using lipophilic dibenzo-14-crown-4 ether carboxylic acid in hydrophobic room temperature ionic liquid. *Hydrometallurgy*, **2016**, 164, 362-371	4	36
61	Biomass into chemicals: green chemical conversion of carbohydrates into 5-hydroxymethylfurfural in ionic liquids. *RSC Advances*, **2016**, 6, 63991-64002	3.7	49
60	Highly efficient synthesis of dimethyl carbonate from methanol and carbon dioxide using IL/DBU/SmOCl as a novel ternary catalytic system. *Catalysis Communications*, **2016**, 75, 87-91	3.2	19
59	Highly selective and multifunctional chitosan/ionic liquids catalyst for conversion of CO2 and methanol to dimethyl carbonates at mild reaction conditions. *Fuel*, **2016**, 166, 495-501	7.1	29
58	Synthesis of substituted amines: Catalytic reductive amination of carbonyl compounds using Lewis acid Zn□o-double metal cyanide/polymethylhydrosiloxane. *Chemical Engineering Journal*, **2016**, 295, 376-383	14.7	9
57	Adsorptive Li+ mining from liquid resources by H2TiO3: Equilibrium, kinetics, thermodynamics, and mechanisms. *Journal of Industrial and Engineering Chemistry*, **2016**, 35, 347-356	6.3	60
56	One-pot synthesis of 2,5-diformylfuran from fructose using a magnetic bi-functional catalyst. *RSC Advances*, **2016**, 6, 25678-25688	3.7	32
55	Ion-conductive and transparent PVdF-HFP/silane-functionalized ZrO2 nanocomposite electrolyte for electrochromic applications. *Electrochimica Acta*, **2016**, 196, 236-244	6.7	23
54	Green synthesis, characterization and catalytic efficiency of hypercross-linked porous polymeric ionic liquid networks towards 4-nitrophenol reduction. *Chemical Engineering Journal*, **2016**, 285, 554-561	14.7	33
53	Ionic liquid functionalized graphene oxide decorated with copper oxide nanostructures towards H2 generation from sodium borohydride. *International Journal of Hydrogen Energy*, **2016**, 41, 14491-14497	6.7	14
52	H2TiO3 composite adsorbent foam for efficient and continuous recovery of Li+ from liquid resources. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 504, 267-279	5.1	47
51	A super hydrophilic modification of poly(vinylidene fluoride) (PVDF) nanofibers: By in situ hydrothermal approach. *Applied Surface Science*, **2016**, 385, 417-425	6.7	23
50	Mixed matrix nanofiber as a flow-through membrane adsorber for continuous Li+ recovery from seawater. *Journal of Membrane Science*, **2016**, 510, 141-154	9.6	55
49	Carbon nanotube hybrid nanostructures: future generation conducting materials. *Journal of Materials Chemistry A*, **2016**, 4, 9347-9361	13	40
48	Chitosan grafted polymer matrix/ZnCl2/1,8-diazabicycloundec-7-ene catalytic system for efficient catalytic fixation of CO2 into valuable fuel additives. *Fuel*, **2016**, 184, 233-241	7.1	13
47	Conversion of sugars (sucrose and glucose) into 5-hydroxymethylfurfural in pyridinium based dicationic ionic liquid ([C10(EPy)2]2Br□with chromium chloride as a catalyst. *Industrial Crops and Products*, **2015**, 76, 12-17	5.9	27

46	A Simple Method of Electrospun Tungsten Trioxide Nanofibers with Enhanced Visible-Light Photocatalytic Activity. *Nano-Micro Letters*, **2015**, 7, 291-297	19.5	34
45	Synthesis and application of CeO2 NiO loaded TiO2 nanofiber as novel catalyst for hydrogen production from sodium borohydride hydrolysis. *Energy*, **2015**, 89, 568-575	7.9	24
44	Synthesis, characterization, and application of silica supported ionic liquid as catalyst for reductive amination of cyclohexanone with formic acid and triethyl amine as hydrogen source. *Chinese Journal of Catalysis*, **2015**, 36, 1365-1371	11.3	15
43	Synthesis of 1-amidoalkyl 2-naphthols using ionic liquid with metal complex as an efficient and reusable catalyst under solvent free conditions. *Journal of Molecular Liquids*, **2015**, 212, 413-417	6	14
42	Imaging, spectroscopy, mechanical, alignment and biocompatibility studies of electrospun medical grade polyurethane (Carbothane 3575A) nanofibers and composite nanofibers containing multiwalled carbon nanotubes. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 41, 189-98	4.1	41
41	Zirconium dioxide nanofilled poly(vinylidene fluoride-hexafluoropropylene) complexed with lithium trifluoromethanesulfonate as composite polymer electrolyte for electrochromic devices. *Materials Research Bulletin*, **2015**, 69, 104-111	5.1	5
40	Hydrogen generation from the hydrolysis of sodium borohydride using chemically modified multiwalled carbon nanotubes with pyridinium based ionic liquid and decorated with highly dispersed Mn nanoparticles. *Journal of Power Sources*, **2015**, 293, 429-436	8.9	39
39	Structurally modified cerium doped hydrotalcite-like precursor as efficient catalysts for hydrogen production from sodium borohydride hydrolysis. *Energy*, **2015**, 93, 955-962	7.9	15
38	Preparation and application of Sm Ni oxide doped TiO2 nanofiber as catalyst in hydrogen production from sodium borohydride hydrolysis. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2015**, 484, 242-252	5.1	22
37	Fabrication of ionic liquid/polymer nanoscale networks by electrospinning and chemical cross-linking and their application in hydrogen generation from the hydrolysis of NaBH 4. *Energy*, **2015**, 79, 482-488	7.9	21
36	Diffusion characteristics of different molecular weight solutes in Ca alginate gel beads. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2015**, 469, 158-165	5.1	25
35	Synthesis and characterization of poly (vinylidene fluoride) calcium phosphate composite for potential tissue engineering applications. *Ceramics International*, **2015**, 41, 7066-7072	5.1	20
34	Microstructural control of catalyst-loaded PVDF microcapsule membrane for hydrogen generation by NaBH4 hydrolysis. *International Journal of Hydrogen Energy*, **2014**, 39, 15656-15664	6.7	6
33	Catalytic hydrolysis of ammonia borane for hydrogen generation using cobalt nanocluster catalyst supported on polydopamine functionalized multiwalled carbon nanotube. *Energy*, **2014**, 76, 822-829	7.9	31
32	Characterization of structure, physico-chemical properties and diffusion behavior of Ca-Alginate gel beads prepared by different gelation methods. *Journal of Colloid and Interface Science*, **2014**, 432, 109-16	9.3	37
31	Low internal concentration polarization in forward osmosis membranes with hydrophilic crosslinked PVA nanofibers as porous support layer. *Desalination*, **2014**, 336, 24-31	10.3	104
30	Immobilization of CoCl2 (cobalt chloride) on PAN (polyacrylonitrile) composite nanofiber mesh filled with carbon nanotubes for hydrogen production from hydrolysis of NaBH4 (sodium borohydride). *Energy*, **2014**, 71, 32-39	7.9	36
29	Effect of different solvents in the synthesis of LaCoO3 nanopowders prepared by the co-precipitation method. *Advanced Powder Technology*, **2014**, 25, 1834-1838	4.6	18

28	Solvent free synthesis of 1,5-benzodiazepine derivatives over the heterogeneous silver salt of silicotungstic acid under ambient conditions. *RSC Advances*, **2013**, 3, 5131	3.7	20
27	Transition metal based ionic liquid (bulk and nanofiber composites) used as catalyst for reduction of aromatic nitro compounds under mild conditions. *RSC Advances*, **2013**, 3, 3399	3.7	24
26	Synthesis of ultrafine MgFe2O4 nanofibers via electrospining using sol□gel precursor. *Journal of Sol-Gel Science and Technology*, **2013**, 65, 189-194	2.3	15
25	Spray deposition of electrospun TiO2 nanoparticles with self-cleaning and transparent properties onto glass. *Applied Surface Science*, **2013**, 276, 390-396	6.7	42
24	Preparation of Y-zeolite/CoCl2 doped PVDF composite nanofiber and its application in hydrogen production. *Energy*, **2012**, 38, 144-150	7.9	30
23	Preparation of sol□gel modified electrospun TiO2 nanofibers for improved photocatalytic decomposition of ethylene. *Materials Letters*, **2012**, 76, 169-172	3.3	24
22	A mild, efficient, and selective deprotection of tert-butyldimethylsilyl (TBDMS) ethers using dicationic ionic liquid as a catalyst. *Tetrahedron Letters*, **2012**, 53, 5338-5342	2	22
21	Surfactant modified MgFe2O4 nanopowders by reverse micelle processing: Effect of water to surfactant ratio (R) on the particle size and magnetic property. *Applied Surface Science*, **2012**, 258, 3315-3320	6.7	17
20	Influence of processing methodology on the structural and magnetic behavior of MgFe2O4 nanopowders. *Journal of Alloys and Compounds*, **2012**, 517, 164-169	5.7	52
19	Nanocatalyst: Electrospun nanofibers of PVDF □Dicationic tetrachloronickelate (II) anion and their effect on hydrogen generation from the hydrolysis of sodium borohydride. *International Journal of Hydrogen Energy*, **2012**, 37, 18851-18859	6.7	26
18	Preparation of Ni-MOF-74 membrane for CO2 separation by layer-by-layer seeding technique. *Microporous and Mesoporous Materials*, **2012**, 163, 169-177	5.3	97
17	Efficient selective dehydration of fructose and sucrose into 5-hydroxymethylfurfural (HMF) using dicationic room temperature ionic liquids as a catalyst. *Catalysis Communications*, **2012**, 21, 96-103	3.2	79
16	Hydrogen production from NaBH4 hydrolysis via Co-ZIF-9 catalyst. *Fuel Processing Technology*, **2012** , 100, 43-48	7.2	80
15	Fabrication of porous TiO2 nanofiber and its photocatalytic activity. *Materials Research Bulletin*, **2011**, 46, 2094-2099	5.1	42
14	Preparation of PVDF nanofiber composites for hydrogen generation from sodium borohydride. *Energy*, **2011**, 36, 755-759	7.9	57
13	Polyurethane nanofibers containing copper nanoparticles as future materials. *Applied Surface Science*, **2011**, 257, 3020-3026	6.7	81
12	Preparation of porous PVDF-NiB capsules as catalytic adsorbents for hydrogen generation from sodium borohydride. *Fuel Processing Technology*, **2011**, 92, 1368-1373	7.2	25
11	Triazole-forming waterborne polyurethane composites fabricated with silane coupling agent functionalized nano-silica. *Journal of Colloid and Interface Science*, **2011**, 361, 483-90	9.3	39

10	Preparation and application of sodium borohydride composites for portable hydrogen production. *Energy*, **2010**, 35, 960-963	7.9	38
9	Electrospun titanium dioxide nanofibers containing hydroxyapatite and silver nanoparticles as future implant materials. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 2551-9	4.5	22
8	Preparation of superhydrophobic membranes by electrospinning of fluorinated silane functionalized poly(vinylidene fluoride). *Applied Surface Science*, **2009**, 255, 7073-7077	6.7	63
7	Ni/Ag/silica nanocomposite catalysts for hydrogen generation from hydrolysis of NaBH4 solution. *Materials Letters*, **2008**, 62, 1451-1454	3.3	33
6	Thermal degradation and kinetic analysis of PVDF/modified MMT nanocomposite membranes. *Desalination*, **2008**, 234, 9-15	10.3	39
5	Use of a nickel-boride□ilica nanocomposite catalyst prepared by in-situ reduction for hydrogen production from hydrolysis of sodium borohydride. *Fuel Processing Technology*, **2008**, 89, 966-972	7.2	44
4	Imidazolium zinc tetrahalide-catalyzed coupling reaction of CO2 and ethylene oxide or propylene oxide. *Journal of Catalysis*, **2003**, 220, 44-46	7.3	142
3	A simple computer simulation method for the analysis of phase behavior of particle suspension. *Journal of Materials Science Letters*, **2001**, 20, 1545-1547		1
2	Microstructural analysis of sintering behavior of intra-grain pores. *Korean Journal of Chemical Engineering*, **1998**, 15, 663-666	2.8	
1	A lattice model for solid-state sintering simple particle arrays. *Computational Materials Science*, **1995**, 4, 181-190	3.2	9