

JitKang Lim

List of Publications by Year in descending order

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95
papers

5,004
citations

87888

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96
all docs

96
docs citations

96
times ranked

6807
citing authors

#	ARTICLE	IF	CITATIONS
1	Microalgae as a sustainable energy source for biodiesel production: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 584-593.	16.4	857
2	Characterization of magnetic nanoparticle by dynamic light scattering. <i>Nanoscale Research Letters</i> , 2013, 8, 381.	5.7	446
3	Recent progress on biomass co-pyrolysis conversion into high-quality bio-oil. <i>Bioresource Technology</i> , 2016, 221, 645-655.	9.6	269
4	Optimization of microalgae coagulation process using chitosan. <i>Chemical Engineering Journal</i> , 2011, 173, 879-882.	12.7	189
5	Rapid Magnetophoretic Separation of Microalgae. <i>Small</i> , 2012, 8, 1683-1692.	10.0	154
6	Preparation and characterization of PVDF/TiO ₂ mixed matrix membrane via in situ colloidal precipitation method. <i>Desalination</i> , 2012, 295, 61-69.	8.2	130
7	Magnetophoresis of Nanoparticles. <i>ACS Nano</i> , 2011, 5, 217-226.	14.6	125
8	Stabilization of Superparamagnetic Iron Oxide Core-Gold Shell Nanoparticles in High Ionic Strength Media. <i>Langmuir</i> , 2009, 25, 13384-13393.	3.5	120
9	Synthesis and Single-Particle Optical Detection of Low-Polydispersity Plasmonic-Superparamagnetic Nanoparticles. <i>Advanced Materials</i> , 2008, 20, 1721-1726.	21.0	98
10	Pillared montmorillonite supported ferric oxalate as heterogeneous photo-Fenton catalyst for degradation of amoxicillin. <i>Applied Catalysis A: General</i> , 2012, 413-414, 301-309.	4.3	95
11	Composite magnetic-plasmonic nanoparticles for biomedicine: Manipulation and imaging. <i>Nano Today</i> , 2013, 8, 98-113.	11.9	93
12	Magnetophoretic removal of microalgae from fishpond water: Feasibility of high gradient and low gradient magnetic separation. <i>Chemical Engineering Journal</i> , 2012, 211-212, 22-30.	12.7	92
13	Crossflow microfiltration of microalgae biomass for biofuel production. <i>Desalination</i> , 2012, 302, 65-70.	8.2	92
14	Enhancing lipid productivity of <i>Chlorella vulgaris</i> using oxidative stress by TiO ₂ nanoparticles. <i>Korean Journal of Chemical Engineering</i> , 2014, 31, 861-867.	2.7	80
15	Degradation of phenol in photo-Fenton process by phosphoric acid modified kaolin supported ferric-oxalate catalyst: Optimization and kinetic modeling. <i>Chemical Engineering Journal</i> , 2012, 197, 181-192.	12.7	73
16	Agglomeration, colloidal stability, and magnetic separation of magnetic nanoparticles: collective influences on environmental engineering applications. <i>Journal of Nanoparticle Research</i> , 2017, 19, 1.	1.9	73
17	Magnetophoretic separation of microalgae: the role of nanoparticles and polymer binder in harvesting biofuel. <i>RSC Advances</i> , 2014, 4, 4114-4121.	3.6	71
18	Targeting dendritic cells through gold nanoparticles: A review on the cellular uptake and subsequent immunological properties. <i>Molecular Immunology</i> , 2017, 91, 123-133.	2.2	70

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19	Working principle and application of magnetic separation for biomedical diagnostic at high- and low-field gradients. <i>Interface Focus</i> , 2016, 6, 20160048.	3.0	66
20	Challenges associated to magnetic separation of nanomaterials at low field gradient. <i>Separation and Purification Technology</i> , 2014, 123, 171-174.	7.9	64
21	Comparison of harvesting methods for microalgae <i>Chlorella</i> sp. and its potential use as a biodiesel feedstock. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 2244-2253.	2.2	63
22	Unified View of Magnetic Nanoparticle Separation under Magnetophoresis. <i>Langmuir</i> , 2020, 36, 8033-8055.	3.5	63
23	The Key Role of TNF-TNFR2 Interactions in the Modulation of Allergic Inflammation: A Review. <i>Frontiers in Immunology</i> , 2018, 9, 2572.	4.8	60
24	Catalytic co-pyrolysis of sugarcane bagasse and waste high-density polyethylene over faujasite-type zeolite. <i>Bioresource Technology</i> , 2019, 284, 406-414.	9.6	58
25	Electrosteric Stabilization and Its Role in Cooperative Magnetophoresis of Colloidal Magnetic Nanoparticles. <i>Langmuir</i> , 2012, 28, 14878-14891.	3.5	55
26	Synthesis and size control of zeolitic imidazolate framework-8 (ZIF-8): From the perspective of reaction kinetics and thermodynamics of nucleation. <i>Materials Chemistry and Physics</i> , 2018, 216, 393-401.	4.0	55
27	Characterization of single-core magnetite nanoparticles for magnetic imaging by SQUID relaxometry. <i>Physics in Medicine and Biology</i> , 2010, 55, 5985-6003.	3.0	53
28	Design and synthesis of magnetic nanoparticles augmented microcapsule with catalytic and magnetic bifunctionalities for dye removal. <i>Chemical Engineering Journal</i> , 2012, 197, 350-358.	12.7	50
29	The role of particle-to-cell interactions in dictating nanoparticle aided magnetophoretic separation of microalgal cells. <i>Nanoscale</i> , 2014, 6, 12838-12848.	5.6	49
30	Magnetophoresis of superparamagnetic nanoparticles at low field gradient: hydrodynamic effect. <i>Soft Matter</i> , 2015, 11, 6968-6980.	2.7	49
31	Layer-by-layer assembly of iron oxide magnetic nanoparticles decorated silica colloid for water remediation. <i>Chemical Engineering Journal</i> , 2014, 243, 68-78.	12.7	46
32	Design and synthesis of plasmonic magnetic nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 311, 78-83.	2.3	43
33	Comparative exergy analyses of <i>Jatropha curcas</i> oil extraction methods: Solvent and mechanical extraction processes. <i>Energy Conversion and Management</i> , 2012, 55, 164-171.	9.2	43
34	Magnetophoresis of iron oxide nanoparticles at low field gradient: The role of shape anisotropy. <i>Journal of Colloid and Interface Science</i> , 2014, 421, 170-177.	9.4	43
35	Colloidal Stability and Magnetophoresis of Gold-Coated Iron Oxide Nanorods in Biological Media. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22561-22569.	3.1	41
36	Electrophoretic interactions between nitrocellulose membranes and proteins: Biointerface analysis and protein adhesion properties. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 110, 248-253.	5.0	40

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37	Harvesting of microalgal biomass using MF membrane: Kinetic model, CDE model and extended DLVO theory. <i>Journal of Membrane Science</i> , 2013, 446, 341-349.	8.2	40
38	On Size Fractionation of Iron Oxide Nanoclusters by Low Magnetic Field Gradient. <i>Journal of Physical Chemistry C</i> , 2014, 118, 24042-24054.	3.1	40
39	Chemical cleaning of a cross-flow microfiltration membrane fouled by microalgal biomass. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2014, 45, 233-241.	5.3	40
40	Magnetophoretic separation of <i>Chlorella</i> sp.: Role of cationic polymer binder. <i>Chemical Engineering Research and Design</i> , 2014, 92, 515-521.	5.6	39
41	Magnetic nanoparticles augmented composite membranes in removal of organic foulant through magnetic actuation. <i>Journal of Membrane Science</i> , 2015, 493, 134-146.	8.2	39
42	Colorectal cancer stem cells: a review of targeted drug delivery by gold nanoparticles. <i>RSC Advances</i> , 2020, 10, 973-985.	3.6	34
43	Optical imaging and magnetophoresis of nanorods. <i>Journal of Magnetism and Magnetic Materials</i> , 2009, 321, 1557-1562.	2.3	33
44	Studies on the surface properties of mixed matrix membrane and its antifouling properties for humic acid removal. <i>Journal of Applied Polymer Science</i> , 2013, 128, 3184-3192.	2.6	33
45	Kinetic studies and thermodynamics of oil extraction and transesterification of <i>Chlorella</i> sp. for biodiesel production. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 891-897.	2.2	29
46	Role of Particle-Particle Interaction Towards Effective Interpretation of Z-Average and Particle Size Distributions from Dynamic Light Scattering (DLS) Analysis. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 6957-6964.	0.9	29
47	Chromium-tungsten heterogeneous catalyst for esterification of palm fatty acid distillate to fatty acid methyl ester. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2015, 54, 64-70.	5.3	27
48	A Perspective Review on the Role of Nanomedicine in the Modulation of TNF-TNFR2 Axis in Breast Cancer Immunotherapy. <i>Journal of Oncology</i> , 2019, 2019, 1-13.	1.3	27
49	Hydroxyl functionalized PVDF/TiO ₂ ultrafiltration membrane and its antifouling properties. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	2.6	26
50	Development of high water permeability and chemically stable thin film nanocomposite (TFN) forward osmosis (FO) membrane with poly(sodium 4-styrenesulfonate) (PSS)-coated zeolitic imidazolate framework-8 (ZIF-8) for produced water treatment. <i>Journal of Water Process Engineering</i> , 2020, 33, 101031.	5.6	26
51	Influences of diatom frustule morphologies on protein adsorption behavior. <i>Journal of Applied Phycology</i> , 2015, 27, 763-775.	2.8	25
52	Kinetics of Low Field Gradient Magnetophoresis in the Presence of Magnetically Induced Convection. <i>Journal of Physical Chemistry C</i> , 2017, 121, 5389-5407.	3.1	25
53	Artificial Magnetotaxis of Microbot: Magnetophoresis versus Self-Swimming. <i>Langmuir</i> , 2018, 34, 7971-7980.	3.5	25
54	Investigation of Anti-fouling and UV-Cleaning Properties of PVDF/TiO ₂ Mixed-Matrix Membrane for Humic Acid Removal. <i>Membranes</i> , 2021, 11, 16.	3.0	21

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55	Chromiumâ€“tungstenâ€“manganese oxides for synthesis of fatty acid methyl ester via esterification of palm fatty acid distillate. <i>Energy</i> , 2017, 141, 1989-1997.	8.8	19
56	Efficacy evaluation of the antifouling magnetiteâ€“PES composite membrane through QCM-D and magnetophoretic filtration performances. <i>Separation and Purification Technology</i> , 2014, 132, 138-148.	7.9	18
57	Fluorescent molecularly imprinted polymer based on <i>Navicula</i> sp. frustules for optical detection of lysozyme. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 2083-2093.	3.7	18
58	Gold nanoparticles conjugated with anti-CD133 monoclonal antibody and 5-fluorouracil chemotherapeutic agent as nanocarriers for cancer cell targeting. <i>RSC Advances</i> , 2021, 11, 16131-16141.	3.6	17
59	Sustainability assessment of microalgal biodiesel production processes: an exergetic analysis approach with Aspen Plus. <i>International Journal of Exergy</i> , 2012, 10, 400.	0.4	16
60	Adsorption-desorption characteristic of thermo-magneto-responsive poly(N-isopropylacrylamide)-co-acrylic acid composite hydrogel towards chromium (III) ions. <i>Journal of Water Process Engineering</i> , 2019, 32, 100957.	5.6	15
61	Sedimentation Kinetics of Magnetic Nanoparticle Clusters: Iron Oxide Nanospheres vs Nanorods. <i>Langmuir</i> , 2020, 36, 5085-5095.	3.5	15
62	Directed Assembly of Bifunctional Silicaâ€“Iron Oxide Nanocomposite with Open Shell Structure. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 16508-16518.	8.0	14
63	Effects of dissolved organic matter and suspended solids on the magnetophoretic separation of microalgal cells from an aqueous environment. <i>Chemical Engineering Journal</i> , 2015, 281, 523-530.	12.7	14
64	Toxicity of bare and surfaced functionalized iron oxide nanoparticles towards microalgae. <i>International Journal of Phytoremediation</i> , 2016, 18, 643-650.	3.1	14
65	Microfiltration of <i>Chlorella</i> sp.: Influence of material and membrane pore size. <i>Membrane Water Treatment</i> , 2013, 4, 143-155.	0.5	14
66	Complex interplay between colloidal stability, transport, chemical reactivity and magnetic separability of polyelectrolyte-functionalized nanoscale zero-valent iron particles (nZVI) toward their environmental engineering application. <i>Colloids and Interface Science Communications</i> , 2022, 46, 100582.	4.1	14
67	Desalinating microalgal-rich water via thermoresponsive membrane distillation. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105897.	6.7	12
68	Optical and electron microscopy studies of Schiller layer formation and structure. <i>Journal of Colloid and Interface Science</i> , 2009, 331, 394-400.	9.4	11
69	Liposome rupture and contents release over coplanar microelectrode arrays. <i>Journal of Colloid and Interface Science</i> , 2009, 332, 113-121.	9.4	11
70	Design of core-shell magnetic nanocomposite by using linear and branched polycation as an ad-layer: Influences of the structural and viscoelastic properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 539, 209-220.	4.7	10
71	Study on the enhancement of colloidal stable poly(sodium 4â€“styrene sulfonate) coated magnetite nanoparticles and regeneration capability for rapid magnetophoretic removal of organic dye. <i>Journal of Chemical Technology and Biotechnology</i> , 2020, 95, 3093-3104.	3.2	10
72	Continuous Flow Low Gradient Magnetophoresis of Magnetic Nanoparticles: Separation Kinetic Modelling and Simulation. <i>Journal of Superconductivity and Novel Magnetism</i> , 2021, 34, 2151-2165.	1.8	10

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73	Design and operation of magnetophoretic systems at microscale: Device and particle approaches. <i>Electrophoresis</i> , 2021, 42, 2303-2328.	2.4	10
74	Manipulating cluster size of polyanion-stabilized Fe ₃ O ₄ magnetic nanoparticle clusters via electrostatic-mediated assembly for tunable magnetophoresis behavior. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	1.9	9
75	Stability and fouling mechanism of magnetophoretic-actuated PES composite membrane in pH-dependent aqueous medium. <i>Journal of Membrane Science</i> , 2016, 508, 40-50.	8.2	9
76	Facile synthesis and characterization of thermo-magneto-responsive poly(N-isopropylacrylamide)-magnetite composite hydrogel and its adsorption-desorption study on chromium (III). <i>Materials Chemistry and Physics</i> , 2018, 218, 39-50.	4.0	9
77	Enhance the Colloidal Stability of Magnetite Nanoparticles Using Poly(sodium 4-styrene sulfonate) Stabilizers. <i>Applied Mechanics and Materials</i> , 0, 625, 168-171.	0.2	8
78	Feasibility of Electrostatic-Mediated Post-Functionalization to Induce Long Term Colloidal Stability and Stability After Freeze Drying of Amphoteric Nanoparticles. <i>Colloids and Interface Science Communications</i> , 2018, 23, 14-20.	4.1	8
79	Dynamic Light Scattering: Effective Sizing Technique for Characterization of Magnetic Nanoparticles. , 2018, , 77-111.		8
80	Correlating the membrane surface energy to the organic fouling and wetting of membrane distillation at elevated temperature. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104627.	6.7	8
81	Magnetophoresis of Magnetic Pickering Emulsions Under Low Field Gradient: Macroscopic and Microscopic Motion. <i>Langmuir</i> , 2021, 37, 1811-1822.	3.5	8
82	The Role of Cationic Coagulant-to-Cell Interaction in Dictating the Flocculation-Aided Sedimentation of Freshwater Microalgae. <i>Arabian Journal for Science and Engineering</i> , 2018, 43, 2217-2225.	3.0	7
83	Molecularly imprinted polymer layers using <i>Navicula sp. frustule</i> as core material for selective recognition of lysozyme. <i>Chemical Engineering Research and Design</i> , 2015, 101, 2-14.	5.6	6
84	Role of Temperature and pH on the Dye Degradation Using Magnetic Nanoparticles Augmented Polymeric Microcapsule. <i>Advanced Materials Research</i> , 0, 1113, 566-570.	0.3	6
85	Motion control of biohybrid microbots under low Reynolds number environment: Magnetotaxis. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 141, 107530.	3.6	6
86	Feasibility and Practicability of Magnetophoretic-Augmented Composite Membrane in Treating Polluted River Water: Real Case Application. <i>Environmental Progress and Sustainable Energy</i> , 2019, 38, 13185.	2.3	5
87	Deposition Kinetics of Iron Oxide Nanoparticles on a Poly(diallyldimethylammonium Chloride)-Coated Silica Surface: Influences on the Formation of a Softer Particle-Polyelectrolyte Layer. <i>Journal of Physical Chemistry C</i> , 2017, 121, 20777-20789.	3.1	3
88	The Transport Behavior of a Biflagellated Microswimmer before and after Cargo Loading. <i>Langmuir</i> , 2021, 37, 9192-9201.	3.5	3
89	Environmental monitoring of trace metal pollutants using cellulosic-paper incorporating color change of azo-chromophore. <i>Environmental Science and Pollution Research</i> , 2022, 29, 71614-71631.	5.3	3
90	Plasmonic magnetic nanoparticles for biomedicine. , 2009, 2009, 4477-8.		2

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91	Design and Synthesis Silica-Polyelectrolyte-Iron Oxide Nanocomposite with Magnetic-Catalytic Bifunctionalities for Dye Removal. <i>Advanced Materials Research</i> , 0, 1024, 3-6.	0.3	2
92	Effect of the colloidal stability of SF-IONPs on the performance of magnetophoretic separation of microalgae. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	2
93	Plantain Peel Mediated Green Synthesis Iron Oxide Nanoparticles, Surface Functionalization, and Them Performance towards Methylene Blue and Methyl Orange Dye Removal. <i>International Journal of Engineering and Technology(UAE)</i> , 2018, 7, 101.	0.3	1
94	Fishpond water treatment: Removal of microalgae from fishpond wastewater through embedding-flocculation and sedimentation. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	1
95	Harvesting of Microalgae from Synthetic Fertilizer Wastewater by Magnetic Particles Through Embeddingâ€Flocculation Strategy. <i>Arabian Journal for Science and Engineering</i> , 2021, 46, 6619-6633.	3.0	0