

# JitKang Lim

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

94  
papers

3,800  
citations

33  
h-index

60  
g-index

96  
ext. papers

4,370  
ext. citations

6.1  
avg, IF

5.73  
L-index

| #  | Paper   | IF  | Citations |
|----|---|-----|-----------|
| 94 | 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> , <b>2022</b> , 46, 100582 | 5.4 | 0         |
| 93 | Continuous Flow Low Gradient Magnetophoresis of Magnetic Nanoparticles: Separation Kinetic Modelling and Simulation. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2021</b> , 34, 2151-2165  | 1.5 | 2         |
| 92 | Design and operation of magnetophoretic systems at microscale: Device and particle approaches. <i>Electrophoresis</i> , <b>2021</b> , 42, 2303-2328   | 3.6 | 0         |
| 91 | Correlating the membrane surface energy to the organic fouling and wetting of membrane distillation at elevated temperature. <i>Journal of Environmental Chemical Engineering</i> , <b>2021</b> , 9, 104627   | 6.8 | 3         |
| 90 | Magnetophoresis of Magnetic Pickering Emulsions Under Low Field Gradient: Macroscopic and Microscopic Motion. <i>Langmuir</i> , <b>2021</b> , 37, 1811-1822   | 4   | 3         |
| 89 | Gold nanoparticles conjugated with anti-CD133 monoclonal antibody and 5-fluorouracil chemotherapeutic agent as nanocarriers for cancer cell targeting.. <i>RSC Advances</i> , <b>2021</b> , 11, 16131-16141   | 3.7 | 5         |
| 88 | The Transport Behavior of a Biflagellated Microswimmer before and after Cargo Loading. <i>Langmuir</i> , <b>2021</b> , 37, 9192-9201  | 4   | 0         |
| 87 | Desalinating microalgal-rich water via thermoresponsive membrane distillation. <i>Journal of Environmental Chemical Engineering</i> , <b>2021</b> , 9, 105897   | 6.8 | 1         |
| 86 | Harvesting of Microalgae from Synthetic Fertilizer Wastewater by Magnetic Particles Through Embedding Flocculation Strategy. <i>Arabian Journal for Science and Engineering</i> , <b>2021</b> , 46, 6619-6633   | 2.5 |           |
| 85 | Sedimentation Kinetics of Magnetic Nanoparticle Clusters: Iron Oxide Nanospheres vs Nanorods. <i>Langmuir</i> , <b>2020</b> , 36, 5085-5095   | 4   | 7         |
| 84 | Study on the enhancement of colloidal stable poly(sodium 4-styrene sulfonate) coated magnetite nanoparticles and regeneration capability for rapid magnetophoretic removal of organic dye. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2020</b> , 95, 3093-3104  | 3.5 | 3         |
| 83 | Unified View of Magnetic Nanoparticle Separation under Magnetophoresis. <i>Langmuir</i> , <b>2020</b> , 36, 8033-8045   | 4.5 | 26        |
| 82 | Colorectal cancer stem cells: a review of targeted drug delivery by gold nanoparticles. <i>RSC Advances</i> , <b>2020</b> , 10, 973-985   | 3.7 | 18        |
| 81 | Investigation of Anti-fouling and UV-Cleaning Properties of PVDF/TiO Mixed-Matrix Membrane for Humic Acid Removal. <i>Membranes</i> , <b>2020</b> , 11,   | 3.8 | 5         |
| 80 | 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> , <b>2020</b> , 22, 101004  | 6.7 | 18        |
| 79 | 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> , <b>2019</b> , 32, 100957  | 6.7 | 9         |
| 78 | A Perspective Review on the Role of Nanomedicine in the Modulation of TNF-TNFR2 Axis in Breast Cancer Immunotherapy. <i>Journal of Oncology</i> , <b>2019</b> , 2019, 6313242   | 4.5 | 16        |

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| 77 | Motion control of biohybrid microbots under low Reynolds number environment: Magnetotaxis. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2019</b> , 141, 107530   | 3.7 | 5  |
| 76 | Catalytic co-pyrolysis of sugarcane bagasse and waste high-density polyethylene over faujasite-type zeolite. <i>Bioresource Technology</i> , <b>2019</b> , 284, 406-414  | 11  | 29 |
| 75 | Fishpond water treatment: Removal of microalgae from fishpond wastewater through embedding-flocculation and sedimentation <b>2019</b> ,  |     | 1  |
| 74 | Feasibility and Practicability of Magnetophoretic-Augmented Composite Membrane in Treating Polluted River Water: Real Case Application. <i>Environmental Progress and Sustainable Energy</i> , <b>2019</b> , 38, 13185   | 2.5 | 2  |
| 73 | 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> , <b>2018</b> , 23, 14-20                | 5.4 | 6  |
| 72 | 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> , <b>2018</b> , 539, 209-220 | 5.1 | 8  |
| 71 | 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> , <b>2018</b> , 43, 2217-2225  | 2.5 | 6  |
| 70 | Role of Particle-Particle Interaction Towards Effective Interpretation of -Average and Particle Size Distributions from Dynamic Light Scattering (DLS) Analysis. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2018</b> , 18, 6957-6964                    | 1.3 | 12 |
| 69 | 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> , <b>2018</b> , 218, 39-50               | 4.4 | 4  |
| 68 | 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> , <b>2018</b> , 216, 393-401  | 4.4 | 22 |
| 67 | Artificial Magnetotaxis of Microbot: Magnetophoresis versus Self-Swimming. <i>Langmuir</i> , <b>2018</b> , 34, 7971-7980   | 4.8 | 13 |
| 66 | 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> , <b>2018</b> , 7, 101      | 0.8 |    |
| 65 | The Key Role of TNF-TNFR2 Interactions in the Modulation of Allergic Inflammation: A Review. <i>Frontiers in Immunology</i> , <b>2018</b> , 9, 2572  | 8.4 | 41 |
| 64 | Dynamic Light Scattering: Effective Sizing Technique for Characterization of Magnetic Nanoparticles <b>2018</b> , 77-111   |     | 6  |
| 63 | Kinetics of Low Field Gradient Magnetophoresis in the Presence of Magnetically Induced Convection. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 5389-5407   | 3.8 | 16 |
| 62 | Effect of the colloidal stability of SF-IONPs on the performance of magnetophoretic separation of microalgae <b>2017</b> ,   |     | 2  |
| 61 | 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> , <b>2017</b> , 121, 20777-20789 | 3.8 | 1  |
| 60 | Targeting dendritic cells through gold nanoparticles: A review on the cellular uptake and subsequent immunological properties. <i>Molecular Immunology</i> , <b>2017</b> , 91, 123-133   | 4.3 | 53 |

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|----|---|------|-----|
| 59 | Agglomeration, colloidal stability, and magnetic separation of magnetic nanoparticles: collective influences on environmental engineering applications. <i>Journal of Nanoparticle Research</i> , <b>2017</b> , 19, 1                                   | 2.3  | 40  |
| 58 | Chromiumungstenmanganese oxides for synthesis of fatty acid methyl ester via esterification of palm fatty acid distillate. <i>Energy</i> , <b>2017</b> , 141, 1989-1997   | 7.9  | 11  |
| 57 | Working principle and application of magnetic separation for biomedical diagnostic at high- and low-field gradients. <i>Interface Focus</i> , <b>2016</b> , 6, 20160048   | 3.9  | 48  |
| 56 | Toxicity of bare and surfaced functionalized iron oxide nanoparticles towards microalgae. <i>International Journal of Phytoremediation</i> , <b>2016</b> , 18, 643-50   | 3.9  | 10  |
| 55 | Fluorescent molecularly imprinted polymer based on Navicula sp. frustules for optical detection of lysozyme. <i>Analytical and Bioanalytical Chemistry</i> , <b>2016</b> , 408, 2083-93   | 4.4  | 16  |
| 54 | Stability and fouling mechanism of magnetophoretic-actuated PES composite membrane in pH-dependent aqueous medium. <i>Journal of Membrane Science</i> , <b>2016</b> , 508, 40-50  | 9.6  | 7   |
| 53 | Recent progress on biomass co-pyrolysis conversion into high-quality bio-oil. <i>Bioresource Technology</i> , <b>2016</b> , 221, 645-655  | 11   | 187 |
| 52 | Magnetic nanoparticles augmented composite membranes in removal of organic foulant through magnetic actuation. <i>Journal of Membrane Science</i> , <b>2015</b> , 493, 134-146  | 9.6  | 27  |
| 51 | Effects of dissolved organic matter and suspended solids on the magnetophoretic separation of microalgal cells from an aqueous environment. <i>Chemical Engineering Journal</i> , <b>2015</b> , 281, 523-530  | 14.7 | 10  |
| 50 | Magnetophoresis of superparamagnetic nanoparticles at low field gradient: hydrodynamic effect. <i>Soft Matter</i> , <b>2015</b> , 11, 6968-80   | 3.6  | 33  |
| 49 | Molecularly imprinted polymer layers using Navicula sp. frustule as core material for selective recognition of lysozyme. <i>Chemical Engineering Research and Design</i> , <b>2015</b> , 101, 2-14  | 5.5  | 6   |
| 48 | Chromiumungsten heterogeneous catalyst for esterification of palm fatty acid distillate to fatty acid methyl ester. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2015</b> , 54, 64-70  | 5.3  | 26  |
| 47 | Role of Temperature and pH on the Dye Degradation Using Magnetic Nanoparticles Augmented Polymeric Microcapsule. <i>Advanced Materials Research</i> , <b>2015</b> , 1113, 566-570   | 0.5  | 2   |
| 46 | Influences of diatom frustule morphologies on protein adsorption behavior. <i>Journal of Applied Phycology</i> , <b>2015</b> , 27, 763-775  | 3.2  | 18  |
| 45 | Hydroxyl functionalized PVDFTiO <sub>2</sub> ultrafiltration membrane and its antifouling properties. <i>Journal of Applied Polymer Science</i> , <b>2015</b> , 132, n/a-n/a  | 2.9  | 18  |
| 44 | Manipulating cluster size of polyanion-stabilized Fe <sub>3</sub> O <sub>4</sub> magnetic nanoparticle clusters via electrostatic-mediated assembly for tunable magnetophoresis behavior. <i>Journal of Nanoparticle Research</i> , <b>2015</b> , 17, 1 | 2.3  | 7   |
| 43 | Layer-by-layer assembly of iron oxide magnetic nanoparticles decorated silica colloid for water remediation. <i>Chemical Engineering Journal</i> , <b>2014</b> , 243, 68-78   | 14.7 | 42  |
| 42 | Magnetophoretic separation of microalgae: the role of nanoparticles and polymer binder in harvesting biofuel. <i>RSC Advances</i> , <b>2014</b> , 4, 4114-4121  | 3.7  | 62  |

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|----|---|------|-----|
| 41 | Magnetophoresis of iron oxide nanoparticles at low field gradient: the role of shape anisotropy. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 421, 170-7                                   | 9.3  | 34  |
| 40 | Challenges associated to magnetic separation of nanomaterials at low field gradient. <i>Separation and Purification Technology</i> , <b>2014</b> , 123, 171-174   | 8.3  | 49  |
| 39 | Magnetophoretic separation of <i>Chlorella</i> sp.: Role of cationic polymer binder. <i>Chemical Engineering Research and Design</i> , <b>2014</b> , 92, 515-521  | 5.5  | 32  |
| 38 | Kinetic studies and thermodynamics of oil extraction and transesterification of <i>Chlorella</i> sp. for biodiesel production. <i>Environmental Technology (United Kingdom)</i> , <b>2014</b> , 35, 891-7     | 2.6  | 21  |
| 37 | On Size Fractionation of Iron Oxide Nanoclusters by Low Magnetic Field Gradient. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 24042-24054  | 3.8  | 32  |
| 36 | The role of particle-to-cell interactions in dictating nanoparticle aided magnetophoretic separation of microalgal cells. <i>Nanoscale</i> , <b>2014</b> , 6, 12838-48  | 7.7  | 43  |
| 35 | Directed assembly of bifunctional silica-iron oxide nanocomposite with open shell structure. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 16508-18  | 9.5  | 12  |
| 34 | Comparison of harvesting methods for microalgae <i>Chlorella</i> sp. and its potential use as a biodiesel feedstock. <i>Environmental Technology (United Kingdom)</i> , <b>2014</b> , 35, 2244-53             | 2.6  | 49  |
| 33 | Chemical cleaning of a cross-flow microfiltration membrane fouled by microalgal biomass. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2014</b> , 45, 233-241                             | 5.3  | 34  |
| 32 | Enhancing lipid productivity of <i>Chlorella vulgaris</i> using oxidative stress by TiO <sub>2</sub> nanoparticles. <i>Korean Journal of Chemical Engineering</i> , <b>2014</b> , 31, 861-867                 | 2.8  | 64  |
| 31 | Efficacy evaluation of the antifouling magnetite/PES composite membrane through QCM-D and magnetophoretic filtration performances. <i>Separation and Purification Technology</i> , <b>2014</b> , 132, 138-148 | 8.3  | 16  |
| 30 | Design and Synthesis Silica-Polyelectrolyte-Iron Oxide Nanocomposite with Magnetic-Catalytic Bifunctionalities for Dye Removal. <i>Advanced Materials Research</i> , <b>2014</b> , 1024, 3-6                  | 0.5  | 2   |
| 29 | Enhance the Colloidal Stability of Magnetite Nanoparticles Using Poly(sodium 4-styrene sulfonate) Stabilizers. <i>Applied Mechanics and Materials</i> , <b>2014</b> , 625, 168-171                            | 0.3  | 6   |
| 28 | Electrophoretic interactions between nitrocellulose membranes and proteins: Biointerface analysis and protein adhesion properties. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2013</b> , 110, 248-53  | 6    | 29  |
| 27 | Characterization of magnetic nanoparticle by dynamic light scattering. <i>Nanoscale Research Letters</i> , <b>2013</b> , 8, 381   | 5    | 306 |
| 26 | Harvesting of microalgal biomass using MF membrane: Kinetic model, CDE model and extended DLVO theory. <i>Journal of Membrane Science</i> , <b>2013</b> , 446, 341-349  | 9.6  | 32  |
| 25 | Composite magnetic/plasmonic nanoparticles for biomedicine: Manipulation and imaging. <i>Nano Today</i> , <b>2013</b> , 8, 98-113   | 17.9 | 76  |
| 24 | Studies on the surface properties of mixed-matrix membrane and its antifouling properties for humic acid removal. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 128, 3184-3192                    | 2.9  | 26  |

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| 23 | Microfiltration of <i>Chlorella</i> sp.: Influence of material and membrane pore size. <i>Membrane Water Treatment</i> , <b>2013</b> , 4, 143-155  |      | 10  |
| 22 | Preparation and characterization of PVDF/TiO <sub>2</sub> mixed matrix membrane via in situ colloidal precipitation method. <i>Desalination</i> , <b>2012</b> , 295, 61-69   | 10.3 | 108 |
| 21 | Comparative exergy analyses of <i>Jatropha curcas</i> oil extraction methods: Solvent and mechanical extraction processes. <i>Energy Conversion and Management</i> , <b>2012</b> , 55, 164-171   | 10.6 | 34  |
| 20 | Electrosteric stabilization and its role in cooperative magnetophoresis of colloidal magnetic nanoparticles. <i>Langmuir</i> , <b>2012</b> , 28, 14878-91  | 4    | 41  |
| 19 | Magnetophoretic removal of microalgae from fishpond water: Feasibility of high gradient and low gradient magnetic separation. <i>Chemical Engineering Journal</i> , <b>2012</b> , 211-212, 22-30   | 14.7 | 75  |
| 18 | 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> , <b>2012</b> , 197, 181-192  | 14.7 | 62  |
| 17 | Design and synthesis of magnetic nanoparticles augmented microcapsule with catalytic and magnetic bifunctionalities for dye removal. <i>Chemical Engineering Journal</i> , <b>2012</b> , 197, 350-358  | 14.7 | 44  |
| 16 | Colloidal Stability and Magnetophoresis of Gold-Coated Iron Oxide Nanorods in Biological Media. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 22561-22569  | 3.8  | 35  |
| 15 | Crossflow microfiltration of microalgae biomass for biofuel production. <i>Desalination</i> , <b>2012</b> , 302, 65-70   | 10.3 | 75  |
| 14 | Rapid magnetophoretic separation of microalgae. <i>Small</i> , <b>2012</b> , 8, 1683-92  | 11   | 136 |
| 13 | Pillared montmorillonite supported ferric oxalate as heterogeneous photo-Fenton catalyst for degradation of amoxicillin. <i>Applied Catalysis A: General</i> , <b>2012</b> , 413-414, 301-309  | 5.1  | 80  |
| 12 | Sustainability assessment of microalgal biodiesel production processes: an exergetic analysis approach with Aspen Plus. <i>International Journal of Exergy</i> , <b>2012</b> , 10, 400   | 1.2  | 13  |
| 11 | Magnetophoresis of nanoparticles. <i>ACS Nano</i> , <b>2011</b> , 5, 217-26  | 16.7 | 109 |
| 10 | Optimization of microalgae coagulation process using chitosan. <i>Chemical Engineering Journal</i> , <b>2011</b> , 173, 879-882  | 14.7 | 160 |
| 9  | Microalgae as a sustainable energy source for biodiesel production: A review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2011</b> , 15, 584-593  | 16.2 | 702 |
| 8  | Characterization of single-core magnetite nanoparticles for magnetic imaging by SQUID relaxometry. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 5985-6003  | 3.8  | 43  |
| 7  | Plasmonic magnetic nanoparticles for biomedicine. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 4477-8 | 0.9  | 1   |
| 6  | Optical and electron microscopy studies of Schiller layer formation and structure. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 331, 394-400  | 9.3  | 9   |

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|---|--|-----|-----|
| 5 | Liposome rupture and contents release over coplanar microelectrode arrays. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 332, 113-21                   | 9.3 | 10  |
| 4 | Optical imaging and magnetophoresis of nanorods. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2009</b> , 321, 1557-1562                                       | 2.8 | 30  |
| 3 | Stabilization of superparamagnetic iron oxide core-gold shell nanoparticles in high ionic strength media. <i>Langmuir</i> , <b>2009</b> , 25, 13384-93                   | 4   | 111 |
| 2 | Synthesis and Single-Particle Optical Detection of Low-Polydispersity Plasmonic-Superparamagnetic Nanoparticles. <i>Advanced Materials</i> , <b>2008</b> , 20, 1721-1726 | 24  | 94  |
| 1 | Design and synthesis of plasmonic magnetic nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 311, 78-83                                  | 2.8 | 40  |