

# Choonsoo Kim

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

3,228  
citations

172457

29  
h-index

189892

50  
g-index

51  
all docs

51  
docs citations

51  
times ranked

2400  
citing authors

#	ARTICLE	IF	CITATIONS
1	Redox-mediated electrochemical desalination for waste valorization in dairy production. <i>Chemical Engineering Journal</i> , 2022, 428, 131082.	12.7	30
2	Improvement in the desalination performance of membrane capacitive deionization with a bipolar electrode via an energy recovery process. <i>Chemical Engineering Journal</i> , 2022, 439, 135603.	12.7	9
3	Performance analysis of hydrated Zr(IV) oxide nanoparticle-impregnated anion exchange resin for selective phosphate removal. <i>Journal of Colloid and Interface Science</i> , 2021, 586, 741-747.	9.4	25
4	Electrochemical lithium recovery system through the simultaneous lithium enrichment via sustainable redox reaction. <i>Chemical Engineering Journal</i> , 2021, 420, 127715.	12.7	39
5	Effects of chloride and other anions on electrochemical chlorine evolution over self-doped TiO <sub>2</sub> nanotube array. <i>Korean Journal of Chemical Engineering</i> , 2021, 38, 756-762.	2.7	0
6	Parametric investigation of the desalination performance in multichannel membrane capacitive deionization (MC-MCDI). <i>Desalination</i> , 2021, 503, 114950.	8.2	24
7	Ir <sub>0.11</sub> Fe <sub>0.25</sub> O <sub>0.64</sub> as a highly efficient electrode for electrochlorination in dilute chloride solutions. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 102, 155-162.	5.8	9
8	Parametric study of multichannel desalination battery for low-energy electrochemical deionization of brackish water. <i>Desalination</i> , 2021, 515, 115188.	8.2	8
9	Enhanced desalination performance of nitrogen-doped porous carbon electrode in redox-mediated deionization. <i>Desalination</i> , 2021, 520, 115333.	8.2	12
10	High chlorine evolution performance of electrochemically reduced TiO <sub>2</sub> nanotube array coated with a thin RuO <sub>2</sub> layer by the self-synthetic method. <i>RSC Advances</i> , 2021, 11, 12107-12116.	3.6	4
11	Selective phosphate removal using layered double hydroxide/reduced graphene oxide (LDH/rGO) composite electrode in capacitive deionization. <i>Journal of Colloid and Interface Science</i> , 2020, 564, 1-7.	9.4	68
12	High performance electrochemical saline water desalination using silver and silver-chloride electrodes. <i>Desalination</i> , 2020, 476, 114216.	8.2	57
13	Enhancing the Desalination Performance of Capacitive Deionization Using a Layered Double Hydroxide Coated Activated Carbon Electrode. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 403.	2.5	10
14	Performance analysis of the multi-channel membrane capacitive deionization with porous carbon electrode stacks. <i>Desalination</i> , 2020, 479, 114315.	8.2	29
15	Short Review of Multichannel Membrane Capacitive Deionization: Principle, Current Status, and Future Prospect. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 683.	2.5	33
16	A short review on electrochemically self-doped TiO <sub>2</sub> nanotube arrays: Synthesis and applications. <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 1753-1766.	2.7	20
17	Novel Reuse Strategy in Flow-Electrode Capacitive Deionization with Switch Cycle Operation To Enhance Desalination Performance. <i>Environmental Science and Technology Letters</i> , 2019, 6, 739-744.	8.7	15
18	High-Desalination Performance via Redox Couple Reaction in the Multichannel Capacitive Deionization System. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16182-16189.	6.7	67

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19	Enhancement in Desalination Performance of Battery Electrodes via Improved Mass Transport Using a Multichannel Flow System. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 36580-36588.	8.0	30
20	Sodium ion removal by hydrated vanadyl phosphate for electrochemical water desalination. <i>Journal of Materials Chemistry A</i> , 2019, 7, 4175-4184.	10.3	46
21	Hybrid Electrochemical Desalination System Combined with an Oxidation Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 1620-1626.	6.7	34
22	Potential-Dependent, Switchable Ion Selectivity in Aqueous Media Using Titanium Disulfide. <i>ChemSusChem</i> , 2018, 11, 2091-2100.	6.8	33
23	Semi-continuous capacitive deionization using multi-channel flow stream and ion exchange membranes. <i>Desalination</i> , 2018, 425, 104-110.	8.2	51
24	RuO <sub>2</sub> coated blue TiO <sub>2</sub> nanotube array (blue TNA-RuO <sub>2</sub> ) as an effective anode material in electrochemical chlorine generation. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 66, 478-483.	5.8	28
25	Confined Redox Reactions of Iodide in Carbon Nanopores for Fast and Energy-Efficient Desalination of Brackish Water and Seawater. <i>ChemSusChem</i> , 2018, 11, 3460-3472.	6.8	46
26	Enhanced desalination via cell voltage extension of membrane capacitive deionization using an aqueous/organic bi-electrolyte. <i>Desalination</i> , 2018, 443, 56-61.	8.2	39
27	Effective adsorbent for arsenic removal: core/shell structural nano zero-valent iron/manganese oxide. <i>Environmental Science and Pollution Research</i> , 2017, 24, 24235-24242.	5.3	35
28	Concentration-Gradient Multichannel Flow-Stream Membrane Capacitive Deionization Cell for High Desalination Capacity of Carbon Electrodes. <i>ChemSusChem</i> , 2017, 10, 4914-4920.	6.8	69
29	Pseudocapacitive Desalination of Brackish Water and Seawater with Vanadium-Pentoxide-Decorated Multiwalled Carbon Nanotubes. <i>ChemSusChem</i> , 2017, 10, 3611-3623.	6.8	89
30	Titanium Disulfide: A Promising Low-Dimensional Electrode Material for Sodium Ion Intercalation for Seawater Desalination. <i>Chemistry of Materials</i> , 2017, 29, 9964-9973.	6.7	112
31	Influence of pore structure and cell voltage of activated carbon cloth as a versatile electrode material for capacitive deionization. <i>Carbon</i> , 2017, 122, 329-335.	10.3	149
32	Faradaic deionization of brackish and sea water via pseudocapacitive cation and anion intercalation into few-layered molybdenum disulfide. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15640-15649.	10.3	167
33	Sonoelectrodeposition of RuO <sub>2</sub> electrodes for high chlorine evolution efficiencies. <i>Journal of the Korean Society of Water and Wastewater</i> , 2017, 31, 397-407.	0.3	1
34	Development of templated RuO <sub>2</sub> nanorod and nanosheet electrodes to improve the electrocatalytic activities for chlorine evolution. <i>Journal of the Korean Society of Water and Wastewater</i> , 2017, 31, 373-381.	0.3	1
35	Hydrogen peroxide generation in flow-mode capacitive deionization. <i>Journal of Electroanalytical Chemistry</i> , 2016, 776, 101-104.	3.8	60
36	Electrochemical softening using capacitive deionization (CDI) with zeolite modified carbon electrode (ZMCE). <i>Desalination and Water Treatment</i> , 2016, 57, 24682-24687.	1.0	5

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37	Na <sub>2</sub> FeP <sub>2</sub> O <sub>7</sub> as a Novel Material for Hybrid Capacitive Deionization. <i>Electrochimica Acta</i> , 2016, 203, 265-271.	5.2	217
38	Capacitive deionization with Ca-alginate coated-carbon electrode for hardness control. <i>Desalination</i> , 2016, 392, 46-53.	8.2	89
39	Effect of doping level of colored TiO <sub>2</sub> nanotube arrays fabricated by electrochemical self-doping on electrochemical properties. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 14370-14375.	2.8	51
40	Effect of Annealing Temperature on the Capacitive and Oxidant-generating Properties of an Electrochemically Reduced TiO <sub>2</sub> Nanotube Array. <i>Electrochimica Acta</i> , 2016, 222, 1578-1584.	5.2	18
41	Evaluation of thin-film nanocomposite RO membranes using TiO <sub>2</sub> nanotubes and TiO <sub>2</sub> nanoparticles: a comparative study. <i>Desalination and Water Treatment</i> , 2016, 57, 24674-24681.	1.0	6
42	Electrochemical ozone production in inert supporting electrolytes on a boron-doped diamond electrode with a solid polymer electrolyte electrolyzer. <i>Desalination and Water Treatment</i> , 2016, 57, 10152-10158.	1.0	15
43	The Effect of Preparation Parameters in Thermal Decomposition of Ruthenium Dioxide Electrodes on Chlorine Electro-catalytic Activity. <i>Bulletin of the Korean Chemical Society</i> , 2015, 36, 1411-1417.	1.9	5
44	Capacitive and Oxidant Generating Properties of Black-Colored TiO <sub>2</sub> Nanotube Array Fabricated by Electrochemical Self-Doping. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7486-7491.	8.0	98
45	A Review of Chlorine Evolution Mechanism on Dimensionally Stable Anode (DSA <sup>®</sup> ). <i>Korean Chemical Engineering Research</i> , 2015, 53, 531-539.	0.2	19
46	TiO <sub>2</sub> sol-gel spray method for carbon electrode fabrication to enhance desalination efficiency of capacitive deionization. <i>Desalination</i> , 2014, 342, 70-74.	8.2	106
47	Blue TiO <sub>2</sub> Nanotube Array as an Oxidant Generating Novel Anode Material Fabricated by Simple Cathodic Polarization. <i>Electrochimica Acta</i> , 2014, 141, 113-119.	5.2	98
48	Hybrid capacitive deionization to enhance the desalination performance of capacitive techniques. <i>Energy and Environmental Science</i> , 2014, 7, 3683-3689.	30.8	517
49	Facile detection of photogenerated reactive oxygen species in TiO <sub>2</sub> nanoparticles suspension using colorimetric probe-assisted spectrometric method. <i>Chemosphere</i> , 2013, 93, 2011-2015.	8.2	26
50	Highly selective lithium recovery from brine using a MnO <sub>2</sub> -Ag battery. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 7690.	2.8	164
51	The effect of electrode material on the generation of oxidants and microbial inactivation in the electrochemical disinfection processes. <i>Water Research</i> , 2009, 43, 895-901.	11.3	345