

Jeyong Yoon

List of Publications by Year in descending order

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198
papers

16,973
citations

11651

70
h-index

15732

125
g-index

198
all docs

198
docs citations

198
times ranked

15909
citing authors

#	ARTICLE	IF	CITATIONS
1	Water desalination via capacitive deionization: what is it and what can we expect from it?. Energy and Environmental Science, 2015, 8, 2296-2319.	30.8	1,273
2	Linear correlation between inactivation of E. coli and OH radical concentration in TiO ₂ photocatalytic disinfection. Water Research, 2004, 38, 1069-1077.	11.3	704
3	Bactericidal Effect of Zero-Valent Iron Nanoparticles on Escherichia coli. Environmental Science & Technology, 2008, 42, 4927-4933.	10.0	667
4	Hybrid capacitive deionization to enhance the desalination performance of capacitive techniques. Energy and Environmental Science, 2014, 7, 3683-3689.	30.8	517
5	Silver-ion-mediated reactive oxygen species generation affecting bactericidal activity. Water Research, 2009, 43, 1027-1032.	11.3	483
6	Different Inactivation Behaviors of MS-2 Phage and Escherichia coli in TiO ₂ Photocatalytic Disinfection. Applied and Environmental Microbiology, 2005, 71, 270-275.	3.1	466
7	Large-Scale Synthesis of TiO ₂ Nanorods via Nonhydrolytic Sol-Gel Ester Elimination Reaction and Their Application to Photocatalytic Inactivation of E. coli. Journal of Physical Chemistry B, 2005, 109, 15297-15302.	2.6	379
8	Charge-transfer materials for electrochemical water desalination, ion separation and the recovery of elements. Nature Reviews Materials, 2020, 5, 517-538.	48.7	360
9	The effect of electrode material on the generation of oxidants and microbial inactivation in the electrochemical disinfection processes. Water Research, 2009, 43, 895-901.	11.3	345
10	Kinetic modeling of Fenton oxidation of phenol and monochlorophenols. Chemosphere, 2002, 47, 915-924.	8.2	292
11	Kinetics of the Oxidation of Phenols and Phenolic Endocrine Disruptors during Water Treatment with Ferrate (Fe(VI)). Environmental Science & Technology, 2005, 39, 8978-8984.	10.0	265
12	High-Performance Reverse Osmosis CNT/Polyamide Nanocomposite Membrane by Controlled Interfacial Interactions. ACS Applied Materials & Interfaces, 2014, 6, 2819-2829.	8.0	261
13	Recent advances in ion selectivity with capacitive deionization. Energy and Environmental Science, 2021, 14, 1095-1120.	30.8	226
14	Oxidation of N-Nitrosodimethylamine (NDMA) Precursors with Ozone and Chlorine Dioxide: Kinetics and Effect on NDMA Formation Potential. Environmental Science & Technology, 2007, 41, 2056-2063.	10.0	223
15	CDI Ragone plot as a functional tool to evaluate desalination performance in capacitive deionization. RSC Advances, 2015, 5, 1456-1461.	3.6	219
16	Na ₂ FeP ₂ O ₇ as a Novel Material for Hybrid Capacitive Deionization. Electrochimica Acta, 2016, 203, 265-271.	5.2	217
17	Oxidative degradation of N-nitrosodimethylamine by conventional ozonation and the advanced oxidation process ozone/hydrogen peroxide. Water Research, 2007, 41, 581-590.	11.3	216
18	Rocking Chair Desalination Battery Based on Prussian Blue Electrodes. ACS Omega, 2017, 2, 1653-1659.	3.5	216

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19	Spectrophotometric determination of ferrate (Fe(VI)) in water by ABTS. <i>Water Research</i> , 2005, 39, 1946-1953.	11.3	211
20	The Role of Reactive Oxygen Species in the Electrochemical Inactivation of Microorganisms. <i>Environmental Science & Technology</i> , 2006, 40, 6117-6122.	10.0	211
21	Enhanced charge efficiency and reduced energy use in capacitive deionization by increasing the discharge voltage. <i>Journal of Colloid and Interface Science</i> , 2015, 446, 317-326.	9.4	184
22	A carbon nanotube wall membrane for water treatment. <i>Nature Communications</i> , 2015, 6, 7109.	12.8	178
23	Comparison of the Antimicrobial Effects of Chlorine, Silver Ion, and Tobramycin on Biofilm. <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 1446-1453.	3.2	174
24	pH effect on OH radical production in photo/ferrioxalate system. <i>Water Research</i> , 2005, 39, 2893-2900.	11.3	172
25	Disinfection of Water Containing Natural Organic Matter by Using Ozone-Initiated Radical Reactions. <i>Applied and Environmental Microbiology</i> , 2003, 69, 2284-2291.	3.1	170
26	Carbon nanotube-based membranes: Fabrication and application to desalination. <i>Journal of Industrial and Engineering Chemistry</i> , 2012, 18, 1551-1559.	5.8	165
27	Investigation of the reaction pathway of OH radicals produced by Fenton oxidation in the conditions of wastewater treatment. <i>Water Science and Technology</i> , 2001, 44, 15-15.	2.5	164
28	Highly selective lithium recovery from brine using a MnO_2/Ag battery. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 7690.	2.8	164
29	Enhanced inactivation of <i>E. coli</i> and MS-2 phage by silver ions combined with UV-A and visible light irradiation. <i>Water Research</i> , 2008, 42, 356-362.	11.3	155
30	Lithium recovery from brine using a $\text{MnO}_2/\text{activated carbon}$ hybrid supercapacitor system. <i>Chemosphere</i> , 2015, 125, 50-56.	8.2	154
31	One pot synthesis of environmentally friendly lignin nanoparticles with compressed liquid carbon dioxide as an antisolvent. <i>Green Chemistry</i> , 2016, 18, 2129-2146.	9.0	149
32	High performance and antifouling vertically aligned carbon nanotube membrane for water purification. <i>Journal of Membrane Science</i> , 2014, 460, 171-177.	8.2	142
33	Effect of electric currents on bacterial detachment and inactivation. <i>Biotechnology and Bioengineering</i> , 2008, 100, 379-386.	3.3	140
34	Measuring hydrophilicity of RO membranes by contact angles via sessile drop and captive bubble method: A comparative study. <i>Desalination</i> , 2012, 303, 23-28.	8.2	132
35	Photoelectrochemical Degradation of Organic Compounds Coupled with Molecular Hydrogen Generation Using Electrochromic TiO_2 Nanotube Arrays. <i>Environmental Science & Technology</i> , 2017, 51, 6590-6598.	10.0	130
36	Inactivation of <i>Escherichia coli</i> by Nanoparticulate Zerovalent Iron and Ferrous Ion. <i>Applied and Environmental Microbiology</i> , 2010, 76, 7668-7670.	3.1	125

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37	Photocatalytic Degradation of N-Nitrosodimethylamine: A Mechanism, Product Distribution, and TiO ₂ Surface Modification. <i>Environmental Science & Technology</i> , 2005, 39, 6800-6807.	10.0	118
38	Low-Temperature Synthesis of Highly Crystalline TiO ₂ Nanocrystals and their Application to Photocatalysis. <i>Small</i> , 2005, 1, 812-816.	10.0	117
39	Inactivation of <i>Escherichia coli</i> in the electrochemical disinfection process using a Pt anode. <i>Chemosphere</i> , 2007, 67, 652-659.	8.2	117
40	Battery Electrode Materials with Omnivalent Cation Storage for Fast and Charge-Efficient Ion Removal of Asymmetric Capacitive Deionization. <i>Advanced Functional Materials</i> , 2018, 28, 1802665.	14.9	117
41	Comparison of salt adsorption capacity and energy consumption between constant current and constant voltage operation in capacitive deionization. <i>Desalination</i> , 2014, 352, 52-57.	8.2	116
42	Bacterial cytotoxicity of the silver nanoparticle related to physicochemical metrics and agglomeration properties. <i>Environmental Toxicology and Chemistry</i> , 2010, 29, 2154-2160.	4.3	113
43	Evaluation of surface properties of reverse osmosis membranes on the initial biofouling stages under no filtration condition. <i>Journal of Membrane Science</i> , 2010, 351, 112-122.	8.2	112
44	UV Photolytic Mechanism of N-Nitrosodimethylamine in Water: A Dual Pathways to Methylamine versus Dimethylamine. <i>Environmental Science & Technology</i> , 2005, 39, 2101-2106.	10.0	110
45	Hybrid capacitive deionization with Ag coated carbon composite electrode. <i>Desalination</i> , 2017, 422, 42-48.	8.2	110
46	TiO ₂ 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	Polyphenol/Fe ^{III} Complex Coated Membranes Having Multifunctional Properties Prepared by a One-Step Fast Assembly. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500298.	3.7	102
48	Furanone derivatives as quorum-sensing antagonists of <i>Pseudomonas aeruginosa</i> . <i>Applied Microbiology and Biotechnology</i> , 2008, 80, 37-47.	3.6	101
49	Inactivation of <i>Pseudomonas aeruginosa</i> PA01 biofilms by hyperthermia using superparamagnetic nanoparticles. <i>Journal of Microbiological Methods</i> , 2011, 84, 41-45.	1.6	101
50	Biofouling occurrence process and its control in the forward osmosis. <i>Desalination</i> , 2013, 325, 30-36.	8.2	101
51	Influence of attached bacteria and biofilm on double-layer capacitance during biofilm monitoring by electrochemical impedance spectroscopy. <i>Water Research</i> , 2011, 45, 4615-4622.	11.3	99
52	Electrochemical selective ion separation in capacitive deionization with sodium manganese oxide. <i>Journal of Colloid and Interface Science</i> , 2017, 506, 644-648.	9.4	99
53	Oxidation of suspected N-nitrosodimethylamine (NDMA) precursors by ferrate (VI): Kinetics and effect on the NDMA formation potential of natural waters. <i>Water Research</i> , 2008, 42, 433-441.	11.3	98
54	Blue TiO ₂ 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

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55	Capacitive and Oxidant Generating Properties of Black-Colored TiO ₂ Nanotube Array Fabricated by Electrochemical Self-Doping. ACS Applied Materials & Interfaces, 2015, 7, 7486-7491.	8.0	98
56	Direct energy recovery system for membrane capacitive deionization. Desalination, 2016, 398, 144-150.	8.2	98
57	Tolerance of dormant and active cells in Pseudomonas aeruginosa PA01 biofilm to antimicrobial agents. Journal of Antimicrobial Chemotherapy, 2009, 63, 129-135.	3.0	97
58	Development of nanoscale zirconium molybdate embedded anion exchange resin for selective removal of phosphate. Water Research, 2018, 134, 22-31.	11.3	96
59	Kinetics and mechanisms of DMSO (dimethylsulfoxide) degradation by UV/H ₂ O ₂ process. Water Research, 2004, 38, 2579-2588.	11.3	90
60	Application of photoactivated periodate to the decolorization of reactive dye: reaction parameters and mechanism. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 165, 35-41.	3.9	89
61	Capacitive deionization with Ca-alginate coated-carbon electrode for hardness control. Desalination, 2016, 392, 46-53.	8.2	89
62	UV Photolytic Mechanism of N-Nitrosodimethylamine in Water: Roles of Dissolved Oxygen and Solution pH. Environmental Science & Technology, 2005, 39, 9702-9709.	10.0	86
63	Investigating synergism during sequential inactivation of Bacillus subtilis spores with several disinfectants. Water Research, 2006, 40, 2911-2920.	11.3	86
64	Temperature dependence of hydroxyl radical formation in the hv/Fe ³⁺ /H ₂ O ₂ and Fe ³⁺ /H ₂ O ₂ systems. Chemosphere, 2004, 56, 923-934.	8.2	84
65	Removal characteristics of engineered nanoparticles by activated sludge. Chemosphere, 2013, 92, 524-528.	8.2	83
66	Electrochemical Lithium Recovery with a LiMn ₂ O ₄ Zinc Battery System using Zinc as a Negative Electrode. Energy Technology, 2018, 6, 340-344.	3.8	83
67	Review of concepts and applications of electrochemical ion separation (EIONS) process. Separation and Purification Technology, 2019, 215, 190-207.	7.9	81
68	Solvent evaporation mediated preparation of hierarchically porous metal organic framework-derived carbon with controllable and accessible large-scale porosity. Carbon, 2014, 71, 294-302.	10.3	77
69	Relationship between capacitance of activated carbon composite electrodes measured at a low electrolyte concentration and their desalination performance in capacitive deionization. Journal of Electroanalytical Chemistry, 2013, 704, 169-174.	3.8	74
70	The improvement of antibiofouling properties of a reverse osmosis membrane by oxidized CNTs. RSC Advances, 2014, 4, 32802.	3.6	74
71	Role of Reactive Oxygen Species in <i>Escherichia coli</i> Inactivation by Cupric Ion. Environmental Science & Technology, 2012, 46, 11299-11304.	10.0	72
72	Biofilm-inactivating activity of silver nanoparticles: A comparison with silver ions. Journal of Industrial and Engineering Chemistry, 2013, 19, 614-619.	5.8	72

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73	Rocking-Chair Capacitive Deionization for Continuous Brackish Water Desalination. ACS Sustainable Chemistry and Engineering, 2018, 6, 10815-10822.	6.7	72
74	Effect of surface properties of reverse osmosis membranes on biofouling occurrence under filtration conditions. Journal of Membrane Science, 2011, 382, 91-99.	8.2	71
75	Selective phosphate removal using layered double hydroxide/reduced graphene oxide (LDH/rGO) composite electrode in capacitive deionization. Journal of Colloid and Interface Science, 2020, 564, 1-7.	9.4	68
76	High-Desalination Performance via Redox Couple Reaction in the Multichannel Capacitive Deionization System. ACS Sustainable Chemistry and Engineering, 2019, 7, 16182-16189.	6.7	67
77	Inactivation of MS2 coliphage by Fenton's reagent. Water Research, 2010, 44, 2647-2653.	11.3	65
78	Influence of membrane surface properties on the behavior of initial bacterial adhesion and biofilm development onto nanofiltration membranes. Biofouling, 2010, 26, 313-321.	2.2	64
79	High temperature dependence of 2,4-dichlorophenoxyacetic acid degradation by Fe ³⁺ /H ₂ O ₂ system. Chemosphere, 2003, 51, 963-971.	8.2	63
80	Rapid bacterial detection with an interdigitated array electrode by electrochemical impedance spectroscopy. Electrochimica Acta, 2012, 82, 126-131.	5.2	62
81	Temporal and spatial distribution of pH in flow-mode capacitive deionization and membrane capacitive deionization. Desalination, 2018, 439, 188-195.	8.2	62
82	Hydrogen peroxide generation in flow-mode capacitive deionization. Journal of Electroanalytical Chemistry, 2016, 776, 101-104.	3.8	60
83	Electrochemical lithium recovery and organic pollutant removal from industrial wastewater of a battery recycling plant. Environmental Science: Water Research and Technology, 2018, 4, 175-182.	2.4	60
84	Physicochemical properties of RuO ₂ and IrO ₂ electrodes affecting chlorine evolutions. Journal of Industrial and Engineering Chemistry, 2015, 21, 400-404.	5.8	59
85	Influence of various reaction parameters on 2,4-D removal in photo/ferrioxalate/H ₂ O ₂ process. Chemosphere, 2003, 51, 901-912.	8.2	57
86	Inactivation of Escherichia coli by Photochemical Reaction of Ferrioxalate at Slightly Acidic and Near-Neutral pHs. Applied and Environmental Microbiology, 2004, 70, 1129-1134.	3.1	57
87	High performance electrochemical saline water desalination using silver and silver-chloride electrodes. Desalination, 2020, 476, 114216.	8.2	57
88	Silver-perfluorodecanethiolate complexes having superhydrophobic, antifouling, antibacterial properties. Journal of Colloid and Interface Science, 2012, 366, 64-69.	9.4	56
89	Dual roles of CO ₂ for degrading synthetic organic chemicals in the photo/ferrioxalate system. Water Research, 2004, 38, 3531-3540.	11.3	54
90	Cyclic voltammetry for monitoring bacterial attachment and biofilm formation. Journal of Industrial and Engineering Chemistry, 2012, 18, 800-807.	5.8	54

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91	Rapid and selective lithium recovery from desalination brine using an electrochemical system. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 667-676.	3.5	53
92	Enhanced disinfection efficiency of mechanically mixed oxidants with free chlorine. <i>Water Research</i> , 2005, 39, 721-727.	11.3	51
93	Measurement of OH radical CT for inactivating <i>Cryptosporidium parvum</i> using photo/ferrioxalate and photo/TiO ₂ systems. <i>Journal of Applied Microbiology</i> , 2008, 104, 759-766.	3.1	51
94	Effect of doping level of colored TiO ₂ nanotube arrays fabricated by electrochemical self-doping on electrochemical properties. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 14370-14375.	2.8	51
95	Evaluation of carbon nanotube-polyamide thin-film nanocomposite reverse osmosis membrane: Surface properties, performance characteristics and fouling behavior. <i>Journal of Industrial and Engineering Chemistry</i> , 2017, 56, 327-334.	5.8	50
96	Selective fluoride removal in capacitive deionization by reduced graphene oxide/hydroxyapatite composite electrode. <i>Journal of Colloid and Interface Science</i> , 2021, 581, 396-402.	9.4	50
97	A Facile Surface Modification for Antifouling Reverse Osmosis Membranes Using Polydopamine under UV Irradiation. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 5756-5760.	3.7	44
98	Quantitative Evaluation of the Synergistic Sequential Inactivation of <i>Bacillus subtilis</i> Spores with Ozone Followed by Chlorine. <i>Environmental Science & Technology</i> , 2003, 37, 2134-2138.	10.0	43
99	A high-performance and fouling resistant thin-film composite membrane prepared via coating TiO ₂ nanoparticles by sol-gel-derived spray method for PRO applications. <i>Desalination</i> , 2016, 397, 157-164.	8.2	38
100	Rapid Inversion of Surface Charges in Heteroatom-Doped Porous Carbon: A Route to Robust Electrochemical Desalination. <i>Advanced Functional Materials</i> , 2020, 30, 1909387.	14.9	38
101	Prevention of <i>Pseudomonas aeruginosa</i> adhesion by electric currents. <i>Biofouling</i> , 2011, 27, 217-224.	2.2	37
102	Electroconductive Feed Spacer as a Tool for Biofouling Control in a Membrane System for Water Treatment. <i>Environmental Science and Technology Letters</i> , 2014, 1, 179-184.	8.7	37
103	UV-A induced photochemical formation of N-nitrosodimethylamine (NDMA) in the presence of nitrite and dimethylamine. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007, 189, 128-134.	3.9	35
104	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
105	Determination of quantum yields for the photolysis of Fe(III)-hydroxo complexes in aqueous solution using a novel kinetic method. <i>Chemosphere</i> , 2004, 57, 1449-1458.	8.2	34
106	Fouling and rejection behavior of carbon nanotube membranes. <i>Desalination</i> , 2014, 343, 180-186.	8.2	34
107	Hybrid Electrochemical Desalination System Combined with an Oxidation Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 1620-1626.	6.7	34
108	Oxidative degradation of dimethylsulfoxide by locally concentrated hydroxyl radicals in streamer corona discharge process. <i>Chemosphere</i> , 2006, 65, 1163-1170.	8.2	33

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109	UV direct photolysis of 2,2-azino-bis(3-ethylbenzothiazoline-6-sulfonate) (ABTS) in aqueous solution: Kinetics and mechanism. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2008, 197, 232-238.	3.9	33
110	Photocatalytic bacterial inactivation by polyoxometalates. <i>Chemosphere</i> , 2008, 72, 174-181.	8.2	33
111	Short Review of Multichannel Membrane Capacitive Deionization: Principle, Current Status, and Future Prospect. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 683.	2.5	33
112	Effect of Preozonation on Flux and Water Quality in Ozonation-Ultrafiltration Hybrid System for Water Treatment. <i>Ozone: Science and Engineering</i> , 2000, 22, 637-652.	2.5	32
113	Understanding the Behaviors of MnO_2 in Electrochemical Lithium Recovery: Key Limiting Factors and a Route to the Enhanced Performance. <i>Environmental Science & Technology</i> , 2020, 54, 9044-9051.	10.0	32
114	Effect of pH and Importance of Ozone initiated Radical Reactions In Inactivating <i>Bacillus subtilis</i> Spore. <i>Ozone: Science and Engineering</i> , 2002, 24, 145-150.	2.5	30
115	Bacterial Translational Motion on the Electrode Surface under Anodic Electric Field. <i>Environmental Science & Technology</i> , 2011, 45, 5769-5774.	10.0	30
116	Inactivation of MS2 bacteriophage by streamer corona discharge in water. <i>Chemosphere</i> , 2011, 82, 1135-1140.	8.2	30
117	Design and operating parameters affecting an electrochlorination system. <i>Journal of Industrial and Engineering Chemistry</i> , 2013, 19, 215-219.	5.8	30
118	New disinfectant to control biofouling of polyamide reverse osmosis membrane. <i>Journal of Membrane Science</i> , 2013, 427, 30-36.	8.2	30
119	Enhancement in Desalination Performance of Battery Electrodes via Improved Mass Transport Using a Multichannel Flow System. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 36580-36588.	8.0	30
120	Structural understanding of quorum-sensing inhibitors by molecular modeling study in <i>Pseudomonas aeruginosa</i> . <i>Applied Microbiology and Biotechnology</i> , 2009, 83, 1095-1103.	3.6	29
121	Inactivation of <i>Ascaris</i> eggs in soil by microwave treatment compared to UV and ozone treatment. <i>Chemosphere</i> , 2009, 77, 285-290.	8.2	29
122	Performance analysis of the multi-channel membrane capacitive deionization with porous carbon electrode stacks. <i>Desalination</i> , 2020, 479, 114315.	8.2	29
123	RuO_2 coated blue TiO_2 nanotube array (blue TNA- RuO_2) as an effective anode material in electrochemical chlorine generation. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 66, 478-483.	5.8	28
124	Low trihalomethane formation in Korean drinking water. <i>Science of the Total Environment</i> , 2003, 302, 157-166.	8.0	27
125	Assessment of zero-valent iron as a permeable reactive barrier for long-term removal of arsenic compounds from synthetic water. <i>Environmental Technology (United Kingdom)</i> , 2009, 30, 1425-1434.	2.2	27
126	Application of a Flow-Type Electrochemical Lithium Recovery System with $\text{MnO}_2/\text{LiMnO}_4$: Experiment and Simulation. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9622-9631.	6.7	27

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127	Facile detection of photogenerated reactive oxygen species in TiO ₂ nanoparticles suspension using colorimetric probe-assisted spectrometric method. <i>Chemosphere</i> , 2013, 93, 2011-2015.	8.2	26
128	Tailoring the porosity of MOF-derived N-doped carbon electrocatalysts for highly efficient solar energy conversion. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20170-20183.	10.3	25
129	Short Review: Timeline of the Electrochemical Lithium Recovery System Using the Spinel LiMn ₂ O ₄ as a Positive Electrode. <i>Energies</i> , 2020, 13, 6235.	3.1	25
130	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
131	Investigation of Ozone Reaction in River Waters Causing Instantaneous Ozone Demand. <i>Ozone: Science and Engineering</i> , 2003, 25, 251-259.	2.5	24
132	Extraction of Salinity-Gradient Energy by a Hybrid Capacitive-Mixing System. <i>ChemSusChem</i> , 2017, 10, 1600-1606.	6.8	24
133	Inactivation of <i>Bacillus subtilis</i> spores during ozonation in water treatment plant: Influence of pre-treatment and consequences for positioning of the ozonation step. <i>Chemosphere</i> , 2007, 69, 675-681.	8.2	23
134	Autonomous Graphene Vessel for Suctioning and Storing Liquid Body of Spilled Oil. <i>Scientific Reports</i> , 2016, 6, 22339.	3.3	23
135	Electrochemical Peroxodisulfate (PDS) Generation on a Self-Doped TiO ₂ Nanotube Array Electrode. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 11465-11471.	3.7	23
136	Effects of characteristics of cation exchange membrane on desalination performance of membrane capacitive deionization. <i>Desalination</i> , 2019, 458, 116-121.	8.2	23
137	Inactivation of <i>Pseudomonas aeruginosa</i> biofilm by dense phase carbon dioxide. <i>Biofouling</i> , 2009, 25, 473-479.	2.2	22
138	Effect of valence band energy on the photocatalytic performance of N-doped TiO ₂ for the production of O ₂ via the oxidation of water by visible light. <i>Journal of Molecular Catalysis A</i> , 2013, 378, 221-226.	4.8	22
139	High yield hydrogen peroxide production in a solid polymer electrolyte electrolyzer with a carbon fiber coated mesh substrate. <i>Electrochemistry Communications</i> , 2013, 30, 95-98.	4.7	22
140	Electrochemical sodium ion impurity removal system for producing high purity KCl. <i>Hydrometallurgy</i> , 2018, 175, 354-358.	4.3	22
141	Potential Sweep Method to Evaluate Rate Capability in Capacitive Deionization. <i>Electrochimica Acta</i> , 2014, 139, 374-380.	5.2	20
142	A short review on electrochemically self-doped TiO ₂ nanotube arrays: Synthesis and applications. <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 1753-1766.	2.7	20
143	Development of Inhibitors against TraR Quorum-Sensing System in <i>Agrobacterium tumefaciens</i> by Molecular Modeling of the Ligand-Receptor Interaction. <i>Molecules and Cells</i> , 2009, 28, 447-454.	2.6	19
144	Pilot-scale demonstration of an electrochemical system for lithium recovery from the desalination concentrate. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 290-295.	2.4	19

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145	A Review of Chlorine Evolution Mechanism on Dimensionally Stable Anode (DSA). Korean Chemical Engineering Research, 2015, 53, 531-539.	0.2	19
146	Differential effect of chlorine on the oxidative stress generation in dormant and active cells within colony biofilm. Water Research, 2009, 43, 5252-5259.	11.3	18
147	Effect of Annealing Temperature on the Capacitive and Oxidant-generating Properties of an Electrochemically Reduced TiO ₂ Nanotube Array. Electrochimica Acta, 2016, 222, 1578-1584.	5.2	18
148	Membrane of Functionalized Reduced Graphene Oxide Nanoplates with Angstrom-Level Channels. Scientific Reports, 2016, 6, 28052.	3.3	18
149	Effect of Hydrophilicity of Activated Carbon Electrodes on Desalination Performance in Membrane Capacitive Deionization. Applied Sciences (Switzerland), 2019, 9, 5055.	2.5	18
150	Nafion-coated Prussian blue electrodes to enhance the stability and efficiency of battery desalination system. Desalination, 2021, 500, 114778.	8.2	18
151	Inactivation behavior of Pseudomonas aeruginosa by supercritical N ₂ O compared to supercritical CO ₂ . International Journal of Food Microbiology, 2011, 144, 372-378.	4.7	17
152	A surface-modified EDTA-reduced graphene oxide membrane for nanofiltration and anti-biofouling prepared by plasma post-treatment. Environmental Science: Nano, 2019, 6, 2292-2298.	4.3	17
153	Efficient bicarbonate removal and recovery of ammonium bicarbonate as CO ₂ utilization using flow-electrode capacitive deionization. Chemical Engineering Journal, 2022, 431, 134233.	12.7	16
154	Enhanced Bactericidal Effect of O ₃ /H ₂ O ₂ Followed by Cl ₂ . Ozone: Science and Engineering, 2006, 28, 335-340.	2.5	15
155	Improvement of vertically aligned carbon nanotube membranes: desalination potential, flux enhancement and scale-up. Desalination and Water Treatment, 2016, 57, 28133-28140.	1.0	15
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