

Byung-Kwon Kim

List of Publications by Year in descending order

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42
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1,222
citations

516710

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all docs

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docs citations

43
times ranked

1068
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterizing Emulsions by Observation of Single Droplet Collisions—Attoliter Electrochemical Reactors. <i>Journal of the American Chemical Society</i> , 2014, 136, 4849-4852.	13.7	186
2	Tunneling Ultramicroelectrode: Nanoelectrodes and Nanoparticle Collisions. <i>Journal of the American Chemical Society</i> , 2014, 136, 8173-8176.	13.7	130
3	Electrochemistry of a Single Attoliter Emulsion Droplet in Collisions. <i>Journal of the American Chemical Society</i> , 2015, 137, 2343-2349.	13.7	128
4	Simultaneous Detection of Single Attoliter Droplet Collisions by Electrochemical and Electrogenerated Chemiluminescent Responses. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 11859-11862.	13.8	120
5	Electrogenerated Chemiluminescence of Common Organic Luminophores in Water Using an Emulsion System. <i>Journal of the American Chemical Society</i> , 2014, 136, 13546-13549.	13.7	101
6	Application of ionic liquids for metal dissolution and extraction. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 61, 388-397.	5.8	66
7	Label-Free Detection of Single Living Bacteria via Electrochemical Collision Event. <i>Scientific Reports</i> , 2016, 6, 30022.	3.3	64
8	Determining mean corpuscular volume and red blood cell count using electrochemical collision events. <i>Biosensors and Bioelectronics</i> , 2018, 110, 155-159.	10.1	41
9	Electrochemical deposition of Pd nanoparticles on indium-tin oxide electrodes and their catalytic properties for formic acid oxidation. <i>Electrochemistry Communications</i> , 2010, 12, 1442-1445.	4.7	34
10	Detection and Study of Single Water/Oil Nanoemulsion Droplet by Electrochemical Collisions on an Ultramicroelectrode. <i>Electrochimica Acta</i> , 2017, 245, 128-132.	5.2	30
11	Current research on single-entity electrochemistry for soft nanoparticle detection: Introduction to detection methods and applications. <i>Biosensors and Bioelectronics</i> , 2020, 151, 111999.	10.1	29
12	Electrochemical Detection of Hydrazine Using Poly(dopamine)-Modified Electrodes. <i>Sensors</i> , 2016, 16, 647.	3.8	22
13	Electrochemical detection of single attoliter aqueous droplets in electrolyte-free organic solvent via collision events. <i>Electrochimica Acta</i> , 2019, 320, 134620.	5.2	20
14	Electrochemical detection of dopamine using a bare indium—tin oxide electrode and scan rate control. <i>Journal of Electroanalytical Chemistry</i> , 2013, 708, 7-12.	3.8	17
15	Observing Phase Transition of a Temperature-Responsive Polymer Using Electrochemical Collisions on an Ultramicroelectrode. <i>Analytical Chemistry</i> , 2018, 90, 7261-7266.	6.5	17
16	Determination of Serotonin Concentration in Single Human Platelets through Single-Entity Electrochemistry. <i>ACS Sensors</i> , 2020, 5, 1943-1948.	7.8	17
17	Dopamine Detection Using the Selective and Spontaneous Formation of Electrocatalytic Poly(dopamine) Films on Indium—Tin Oxide Electrodes. <i>Electroanalysis</i> , 2012, 24, 993-996.	2.9	16
18	Synthetic, ¹¹⁹ Sn NMR Spectroscopic, Electrochemical, and Reactivity Study of Organotin A ₃ Corrolates Including Chiral and Ferrocenyl Derivatives. <i>Inorganic Chemistry</i> , 2013, 52, 1991-1999.	4.0	16

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19	Direct Electrolysis and Detection of Single Nanosized Water Emulsion Droplets in Organic Solvent Using Stochastic Collisions. <i>Electroanalysis</i> , 2019, 31, 167-171.	2.9	15
20	The discrete single-entity electrochemistry of Pickering emulsions. <i>Nanoscale</i> , 2022, 14, 6981-6989.	5.6	13
21	Electrochemical Immunosensing Chip Using Selective Surface Modification, Capillary-Driven Microfluidic Control, and Signal Amplification by Redox Cycling. <i>Electroanalysis</i> , 2010, 22, 2235-2244.	2.9	12
22	Electrosynthesis of palladium nanocatalysts using single droplet reactors and catalytic activity for formic acid oxidation. <i>Electrochimica Acta</i> , 2022, 401, 139446.	5.2	11
23	Transition metal doped Sb@SnO ₂ nanoparticles for photochemical and electrochemical oxidation of cysteine. <i>Scientific Reports</i> , 2018, 8, 12348.	3.3	10
24	Stochastic Electrochemical Cytometry of Human Platelets via a Particle Collision Approach. <i>ACS Sensors</i> , 2019, 4, 3248-3256.	7.8	9
25	Factors that determine thione(thiol)-disulfide interconversion in a bis(thiosemicarbazone) copper(II) complex. <i>RSC Advances</i> , 2019, 9, 9049-9052.	3.6	8
26	Comparative Study of the Catalytic Activities of Three Distinct Carbonaceous Materials through Photocatalytic Oxidation, CO Conversion, Dye Degradation, and Electrochemical Measurements. <i>Scientific Reports</i> , 2016, 6, 35500.	3.3	7
27	Electrochemical Study of Ferrocene and Anthracene using Ultramicroelectrode in Chloroform over the Temperature Range of 25-50°C. <i>Bulletin of the Korean Chemical Society</i> , 2017, 38, 772-776.	1.9	7
28	Immunosensing Microchip Using Fast and Selective Preparation of an Iridium Oxide Nanoparticle-Based Pseudoreference Electrode. <i>Electroanalysis</i> , 2011, 23, 2042-2048.	2.9	5
29	Electrochemical detection of reduced graphene oxide nanoparticles in aqueous solution. <i>Research on Chemical Intermediates</i> , 2018, 44, 3753-3760.	2.7	5
30	Electrochemical Descaling of Metal Oxides from Stainless Steel Using an Ionic Liquid-Acid Solution. <i>ACS Omega</i> , 2020, 5, 15709-15714.	3.5	5
31	Single Microcystis Detection Through Electrochemical Collision Events on Ultramicroelectrodes. <i>Bulletin of the Korean Chemical Society</i> , 2021, 42, 818-823.	1.9	5
32	Simple method to analyze the molecular weight of polymers using cyclic voltammetry. <i>Sensors and Actuators B: Chemical</i> , 2021, 330, 129305.	7.8	4
33	Label-Free Electrochemical DNA Detection Based on Electrostatic Interaction between DNA and Ferrocene Dendrimers. <i>Bulletin of the Korean Chemical Society</i> , 2010, 31, 3099-3102.	1.9	4
34	Mass Transport Properties and Influence of Natural Convection for Voltammetry at the Agarose Hydrogel Interface. <i>Journal of Electrochemical Science and Technology</i> , 0, , .	2.2	4
35	Passive washing using inlet-pressure difference and a washing valve. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, N22-N29.	2.6	3
36	Synthesis of regiocontrolled triarylamine-based polymer with a naphthol unit. <i>Polymer Bulletin</i> , 2021, 78, 965-979.	3.3	2

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37	Soft colloidal lithography by strong physical contact using swollen magnetic microspheres and magnetic force. <i>Electrochemistry Communications</i> , 2013, 30, 99-102.	4.7	1
38	Synthesis of triarylamine-containing poly(arylene ether)s by nucleophilic aromatic substitution reaction. <i>Journal of Polymer Science Part A</i> , 2014, 52, 2692-2702.	2.3	1
39	Determination of the hydrogenation state of benzene by the thermally induced phase separation of Poly(ethersulfone). <i>Polymer</i> , 2021, 230, 124105.	3.8	1
40	Synthesis of Arylene Ether-Type Hyperbranched Poly(triphenylamine) for Lithium Battery Cathodes. <i>Materials</i> , 2021, 14, 7885.	2.9	1
41	(Invited) Measuring Molecular Weight of Poly(methyl methacrylate) through Electrochemistry. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2155-2155.	0.0	0
42	Analysis of Single Blood Entities Using an Ultramicroelectrode through Single-Entity Electrochemistry. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2217-2217.	0.0	0