Byung-Kwon Kim

List of Publications by Year
in descending order

42 papers	1,222 citations	516710 16 h-index	361022 35 g-index
43 all docs	43 docs citations	43 times ranked	1068 citing authors

#	Article	IF	Citations
1	Electrosynthesis of palladium nanocatalysts using single droplet reactors and catalytic activity for formic acid oxidation. Electrochimica Acta, 2022, 401, 139446.	5.2	11
2	The discrete single-entity electrochemistry of Pickering emulsions. Nanoscale, 2022, 14, 6981-6989.	5.6	13
3	(Invited) Measuring Molecular Weight of Poly(methyl methacrylate) through Electrochemistry. ECS Meeting Abstracts, 2022, MA2022-01, 2155-2155.	0.0	0
4	Analysis of Single Blood Entities Using an Ultramicroelectrode through Single-Entity Electrochemistry. ECS Meeting Abstracts, 2022, MA2022-01, 2217-2217.	0.0	0
5	Synthesis of regiocontrolled triarylamine-based polymer with a naphthol unit. Polymer Bulletin, 2021, 78, 965-979.	3.3	2
6	Simple method to analyze the molecular weight of polymers using cyclic voltammetry. Sensors and Actuators B: Chemical, 2021, 330, 129305.	7.8	4
7	Single Microcystis Detection Through Electrochemical Collision Events on Ultramicroelectrodes. Bulletin of the Korean Chemical Society, 2021, 42, 818-823.	1.9	5
8	Determination of the hydrogenation state of benzene by the thermally induced phase separation of Poly(ethersulfone). Polymer, 2021, 230, 124105.	3.8	1
9	Synthesis of Arylene Ether-Type Hyperbranched Poly(triphenylamine) for Lithium Battery Cathodes. Materials, 2021, 14, 7885.	2.9	1
10	Current research on single-entity electrochemistry for soft nanoparticle detection: Introduction to detection methods and applications. Biosensors and Bioelectronics, 2020, 151, 111999.	10.1	29
11	Electrochemical Descaling of Metal Oxides from Stainless Steel Using an Ionic Liquidâ€“Acid Solution. ACS Omega, 2020, 5, 15709-15714.	3.5	5
12	Determination of Serotonin Concentration in Single Human Platelets through Single-Entity Electrochemistry. ACS Sensors, 2020, 5, 1943-1948.	7.8	17
13	Direct Electrolysis and Detection of Single Nanosized Water Emulsion Droplets in Organic Solvent Using Stochastic Collisions. Electroanalysis, 2019, 31, 167-171.	2.9	15
14	Electrochemical detection of single attoliter aqueous droplets in electrolyte-free organic solvent via collision events. Electrochimica Acta, 2019, 320, 134620.	5.2	20
15	Stochastic Electrochemical Cytometry of Human Platelets via a Particle Collision Approach. ACS Sensors, 2019, 4, 3248-3256.	7.8	9
16	Factors that determine thione(thiol)â€“disulfide interconversion in a bis(thiosemicarbazone) copper(<scp>ii</scp>) complex. RSC Advances, 2019, 9, 9049-9052.	3.6	8
17	Application of ionic liquids for metal dissolution and extraction. Journal of Industrial and Engineering Chemistry, 2018, 61, 388-397.	5.8	66
18	Determining mean corpuscular volume and red blood cell count using electrochemical collision events. Biosensors and Bioelectronics, 2018, 110, 155-159.	10.1	41

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19	Electrochemical detection of reduced graphene oxide nanoparticles in aqueous solution. Research on Chemical Intermediates, 2018, 44, 3753-3760.	2.7	5
20	Transition metal doped Sb@SnO2 nanoparticles for photochemical and electrochemical oxidation of cysteine. Scientific Reports, 2018, 8, 12348.	3.3	10
21	Observing Phase Transition of a Temperature-Responsive Polymer Using Electrochemical Collisions on an Ultramicroelectrode. Analytical Chemistry, 2018, 90, 7261-7266.	6.5	17
22	Detection and Study of Single Water/Oil Nanoemulsion Droplet by Electrochemical Collisions on an Ultramicroelectrode. Electrochimica Acta, 2017, 245, 128-132.	5.2	30
23	Electrochemical Study of Ferrocene and Anthracene using Ultramicroelectrode in Chloroform over the Temperature Range of 25â€“50Â°C. Bulletin of the Korean Chemical Society, 2017, 38, 772-776.	1.9	7
24	Electrochemical Detection of Hydrazine Using Poly(dopamine)-Modified Electrodes. Sensors, 2016, 16, 647.	3.8	22
25	Label-Free Detection of Single Living Bacteria via Electrochemical Collision Event. Scientific Reports, 2016, 6, 30022.	3.3	64
26	Comparative Study of the Catalytic Activities of Three Distinct Carbonaceous Materials through Photocatalytic Oxidation, CO Conversion, Dye Degradation, and Electrochemical Measurements. Scientific Reports, 2016, 6, 35500.	3.3	7
27	Electrochemistry of a Single Attoliter Emulsion Droplet in Collisions. Journal of the American Chemical Society, 2015, 137, 2343-2349.	13.7	128
28	Simultaneous Detection of Single Attoliter Droplet Collisions by Electrochemical and Electrogenerated Chemiluminescent Responses. Angewandte Chemie - International Edition, 2014, 53, 11859-11862.	13.8	120
29	Synthesis of triarylamine-containing poly(arylene ether)s by nucleophilic aromatic substitution reaction. Journal of Polymer Science Part A, 2014, 52, 2692-2702.	2.3	1
30	Electrogenerated Chemiluminescence of Common Organic Luminophores in Water Using an Emulsion System. Journal of the American Chemical Society, 2014, 136, 13546-13549.	13.7	101
31	Tunneling Ultramicroelectrode: Nanoelectrodes and Nanoparticle Collisions. Journal of the American Chemical Society, 2014, 136, 8173-8176.	13.7	130
32	Characterizing Emulsions by Observation of Single Droplet Collisionsâ€”Attoliter Electrochemical Reactors. Journal of the American Chemical Society, 2014, 136, 4849-4852.	13.7	186
33	Soft colloidal lithography by strong physical contact using swollen magnetic microspheres and magnetic force. Electrochemistry Communications, 2013, 30, 99-102.	4.7	1
34	Electrochemical detection of dopamine using a bare indiumâ€“tin oxide electrode and scan rate control. Journal of Electroanalytical Chemistry, 2013, 708, 7-12.	3.8	17
35	Synthetic, ¹¹⁹Sn NMR Spectroscopic, Electrochemical, and Reactivity Study of Organotin A₃ Corrolates Including Chiral and Ferrocenyl Derivatives. Inorganic Chemistry, 2013, 52, 1991-1999.	4.0	16
36	Dopamine Detection Using the Selective and Spontaneous Formation of Electrocatalytic Poly(dopamine) Films on Indiumï£¿Tin Oxide Electrodes. Electroanalysis, 2012, 24, 993-996.	2.9	16

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37	Immunosensing Microchip Using Fast and Selective Preparation of an Iridium Oxide Nanoparticleâ€Based Pseudoreference Electrode. Electroanalysis, 2011, 23, 2042-2048.	2.9	5
38	Electrochemical Immunosensing Chip Using Selective Surface Modification, Capillaryâ€Driven Microfluidic Control, and Signal Amplification by Redox Cycling. Electroanalysis, 2010, 22, 2235-2244.	2.9	12
39	Electrochemical deposition of Pd nanoparticles on indium-tin oxide electrodes and their catalytic properties for formic acid oxidation. Electrochemistry Communications, 2010, 12, 1442-1445.	4.7	34
40	Label-Free Electrochemical DNA Detection Based on Electrostatic Interaction between DNA and Ferrocene Dendrimers. Bulletin of the Korean Chemical Society, 2010, 31, 3099-3102.	1.9	4
41	Passive washing using inlet-pressure difference and a washing valve. Journal of Micromechanics and Microengineering, 2007, 17, N22-N29.	2.6	3
42	Mass Transport Properties and Influence of Natural Convection for Voltammetry at the Agarose Hydrogel Interface. Journal of Electrochemical Science and Technology, 0, , .	2.2	4