

Choong Kyun Rhee

List of Publications by Year in descending order

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papers

1,813
citations

331259

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docs citations

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times ranked

2313
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#	ARTICLE	IF	CITATIONS
1	Electrochemical Ce ³⁺ /Ce ⁴⁺ and Eu ²⁺ /Eu ³⁺ interconversion, complexation, and electrochemical CO ₂ reduction on thio-terpyridyl-derivatized Au electrodes. <i>Applied Surface Science</i> , 2022, 576, 151793.	3.1	7
2	Electrochemical Ce(III)/Ce(IV) interconversion, electrodeposition, and catalytic CO ₂ interconversion over terpyridine-modified indium tin oxide electrodes. <i>Journal of Industrial and Engineering Chemistry</i> , 2022, 106, 520-536.	2.9	3
3	X-ray micro computed tomography and efficient electrochemical recovery of lanthanides on porous carbon cylinder electrodes. <i>Composites Part B: Engineering</i> , 2022, 231, 109590.	5.9	6
4	Photoelectrochemical CO ₂ Reduction Products Over Sandwiched Hybrid Ga ₂ O ₃ :ZnO/Indium/ZnO Nanorods. <i>Frontiers in Chemistry</i> , 2022, 10, 814766.	1.8	6
5	CO ₂ reduction by photocatalytic and photoelectrocatalytic approaches over Eu(III)-ZnGa ₂ O ₄ nanoparticles and Eu(III)-ZnGa ₂ O ₄ /ZnO nanorods. <i>Journal of CO₂ Utilization</i> , 2022, 60, 101994.	3.3	16
6	Electrochemical Eu(III) behaviours and Eu oxysulfate recovery over terpyridine-functionalized indium tin oxide electrodes. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 1175-1188.	3.0	12
7	Photocatalytic CO ₂ reduction and hydrogen production over Pt/Zn-embedded β -Ga ₂ O ₃ nanorods. <i>Applied Surface Science</i> , 2021, 536, 147753.	3.1	41
8	Electrodeposition and Characterization of Lanthanide Elements on Carbon Sheets. <i>Coatings</i> , 2021, 11, 100.	1.2	14
9	Enhanced Photoluminescence of Electrodeposited Europium Complex on Bare and Terpyridine-Functionalized Porous Si Surfaces. <i>Photochem</i> , 2021, 1, 38-52.	1.3	4
10	Electrochemical Eu(III)/Eu(II) behaviors and recovery over terpyridyl-derivatized modified indium tin oxide electrode surfaces. <i>Chemical Engineering Journal</i> , 2021, 412, 128717.	6.6	8
11	Electrochemical behaviors and electrodeposited materials of lanthanides (La, Ce, Pr, Nd, Sm, Eu, Gd, Tb). <i>Talanta</i> , 2021, 217, 102305.	10.784314	14
12	Electrochemical Ce(III)/Ce(IV) Redox Behavior and Ce Oxide Nanostructure Recovery over Thio-Terpyridine-Functionalized Au/Carbon Paper Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 27594-27611.	4.0	11
13	Water Electrolysis Accompanied by Side Reactions. <i>Journal of Chemical Education</i> , 2021, 98, 2381-2386.	1.1	6
14	Electrochemistry, Electrodeposition, and Photoluminescence of Eu(III)/Lanthanides(III) on Terpyridine-Functionalized Ti Nanospikes. <i>Metals</i> , 2021, 11, 977.	1.0	2
15	Photocatalytic and Electrocatalytic Properties of Cu-Loaded ZIF-67-Derivatized Bean Sprout-Like Co-TiO ₂ /Ti Nanostructures. <i>Nanomaterials</i> , 2021, 11, 1904.	1.9	3
16	Pt-Bi Co-Deposit Shell on Au Nanoparticle Core: High Performance and Long Durability for Formic Acid Oxidation. <i>Catalysts</i> , 2021, 11, 1049.	1.6	2
17	Pt Deposits on Bi-Modified Pt Electrodes of Nanoparticle and Disk: A Contrasting Behavior of Formic Acid Oxidation. <i>Journal of Electrochemical Science and Technology</i> , 2021, 12, 323-329.	0.9	4
18	Photocatalytic and photoelectrocatalytic properties of Eu(III)-doped perovskite SrTiO ₃ nanoparticles with dopant level approaches. <i>Materials Science in Semiconductor Processing</i> , 2021, 132, 105919.	1.9	28

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19	Photocatalytic CO ₂ Reduction and Electrocatalytic H ₂ Evolution over Pt(0,II,IV)-Loaded Oxidized Ti Sheets. <i>Nanomaterials</i> , 2020, 10, 1909.	1.9	9
20	Photoelectrochemical and photocatalytic detoxification of Cr(VI) to Cr(III) over terpyridine-derivatized Au nanoparticles on carbon paper and indium-tin-oxide electrodes. <i>Chemical Engineering Journal</i> , 2020, 402, 126266.	6.6	14
21	Electrochemical Recovery and Behaviors of Rare Earth (La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, and Y) on Ti/TiO ₂ Nanotubes. <i>Journal of Electrochemical Society</i> , 2020, 167, 034501.	1.3	16
22	Co-deposits of Pt and Bi on Au disk toward formic acid oxidation. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 2535-2542.	1.2	3
23	Pt Deposits on Bi/Pt NP Catalyst for Formic Acid Oxidation: Catalytic Enhancement and Longer Lifetime. <i>Langmuir</i> , 2020, 36, 5359-5368.	1.6	17
24	Irreversibly Adsorbed Tri-metallic PtBiPd/C Electrocatalyst for the Efficient Formic Acid Oxidation Reaction. <i>Journal of Electrochemical Science and Technology</i> , 2020, 11, 84-91.	0.9	7
25	Electrochemical Cr(VI) Reduction over Terpyridine-Derivatized Ti Sheets. <i>Applied Science and Convergence Technology</i> , 2020, 29, 108-112.	0.3	0
26	Photoluminescence imaging of europium (III)-doped TiO ₂ nanofiber structures. <i>Luminescence</i> , 2019, 34, 838-845.	1.5	4
27	Photoelectrochemical Hydrogen Evolution and CO ₂ Reduction over MoS ₂ /Si and MoSe ₂ /Si Nanostructures by Combined Photoelectrochemical Deposition and Rapid-Thermal Annealing Process. <i>Catalysts</i> , 2019, 9, 494.	1.6	19
28	Electrochemical hydrogen evolution and CO ₂ reduction over hierarchical MoS _x Se _{2-x} hybrid nanostructures. <i>Applied Surface Science</i> , 2019, 489, 976-982.	3.1	19
29	Formic acid oxidation on Pt deposit model catalysts on Au: Single-layered Pt deposits, plateau-type Pt deposits, and conical Pt deposits. <i>Electrochimica Acta</i> , 2019, 310, 38-44.	2.6	9
30	Bi-modified Pt supported on carbon black as electro-oxidation catalyst for 300 W formic acid fuel cell stack. <i>Applied Catalysis B: Environmental</i> , 2019, 253, 187-195.	10.8	60
31	Photoluminescence, electro- and thermal catalytic properties of bare and Eu(III)-doped GaOOH, TiO ₂ and TiO ₂ -Ga ₂ O ₃ nanorods. <i>Journal of Alloys and Compounds</i> , 2019, 774, 11-17.	2.8	19
32	Formic acid electrooxidation activity of Pt and Pt/Au catalysts: Effects of surface physical properties and irreversible adsorption of Bi. <i>Electrochimica Acta</i> , 2018, 273, 307-317.	2.6	28
33	Atomic and Molecular Adsorption on the Bi(111) Surface: Insights into Catalytic CO ₂ Reduction. <i>Journal of Physical Chemistry C</i> , 2018, 122, 23084-23090.	1.5	48
34	Conical multiple-layered Pt deposits on Au and its adsorption stoichiometries of CO and hydrogen. <i>Electrochimica Acta</i> , 2018, 290, 244-254.	2.6	10
35	Paramagnetic Ho ₂ O ₃ nanowires, nano-square sheets, and nanoplates. <i>Ceramics International</i> , 2018, 44, 17919-17924.	2.3	16
36	Highly graphitized carbon from non-graphitizable raw material and its formation mechanism based on domain theory. <i>Carbon</i> , 2017, 121, 301-308.	5.4	68

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37	Spontaneous Deposition of Ultrathin Ag Shell on Cu Nanoparticle Core Using Galvanic Replacement. <i>Bulletin of the Korean Chemical Society</i> , 2016, 37, 258-261.	1.0	1
38	Formic acid oxidation on Bi-modified Pt surfaces: Pt deposits on Au versus bulk Pt. <i>Electrochimica Acta</i> , 2016, 216, 16-23.	2.6	16
39	Structural evolution of trimesic acid (TMA)/Zn ²⁺ ion network on Au(111) to final structure of (10 ³ Å ⁻¹) ³ Tj ETQq1 1 0.784314 rgBT 0.8	0.8	1
40	Solution phase post-modification of a trimesic acid network on Au(111) with Zn ²⁺ ions. <i>Chemical Communications</i> , 2015, 51, 873-876.	2.2	4
41	A highly sensitive quartz crystal microbalance immunosensor based on magnetic bead-supported bienzymes catalyzed mass enhancement strategy. <i>Biosensors and Bioelectronics</i> , 2015, 66, 539-546.	5.3	45
42	Sensitivity enhancement of an electrochemical immunosensor through the electrocatalysis of magnetic bead-supported non-enzymatic labels. <i>Biosensors and Bioelectronics</i> , 2014, 54, 351-357.	5.3	31
43	Quantitative analysis of BF ₄ ⁻ ions infiltrated into micropores of activated carbon fibers using nuclear magnetic resonance. <i>RSC Advances</i> , 2014, 4, 16726.	1.7	7
44	Contrasting Electrochemical Behavior of CO, Hydrogen, and Ethanol on Single-Layered and Multiple-Layered Pt Islands on Au Surfaces. <i>Journal of Physical Chemistry C</i> , 2014, 118, 24425-24436.	1.5	13
45	Fe nanoparticle entrained in tubular carbon nanofiber as an effective electrode material for metal-air batteries: A fundamental reason. <i>Carbon</i> , 2014, 80, 698-707.	5.4	24
46	Formation of Single-Layered Pt Islands on Au(111) Using Irreversible Adsorption of Pt and Selective Adsorption of CO to Pt. <i>Langmuir</i> , 2014, 30, 4203-4206.	1.6	12
47	Formic Acid Oxidation Depending on Rotating Speed of Smooth Pt Disk Electrode. <i>Journal of Electrochemical Science and Technology</i> , 2014, 5, 82-86.	0.9	4
48	A Contoured Network of Anionic Trimesic Acids on Au(111) and Its Host-Guest Chemistry. <i>Journal of Physical Chemistry C</i> , 2013, 117, 22636-22643.	1.5	3
49	A stable and sensitive voltammetric immunosensor based on a new non-enzymatic label. <i>Biosensors and Bioelectronics</i> , 2013, 50, 118-124.	5.3	30
50	Increased Electrocatalyzed Performance through Dendrimer-Encapsulated Gold Nanoparticles and Carbon Nanotube-Assisted Multiple Bienzymatic Labels: Highly Sensitive Electrochemical Immunosensor for Protein Detection. <i>Analytical Chemistry</i> , 2013, 85, 1784-1791.	3.2	169
51	Structural evolution of irreversibly adsorbed Bi on Pt(111) under potential excursion. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 3109-3114.	1.2	12
52	Multiple Nonenzymatic Labels-Based Impedimetric Aptamer Sensor for the Competitive Detection of Thrombin. <i>Bulletin of the Korean Chemical Society</i> , 2013, 34, 721-722.	1.0	3
53	Structure and electrochemical applications of boron-doped graphitized carbon nanofibers. <i>Nanotechnology</i> , 2012, 23, 315602.	1.3	7
54	Amplified Electrochemical Detection of a Cancer Biomarker by Enhanced Precipitation Using Horseradish Peroxidase Attached on Carbon Nanotubes. <i>Analytical Chemistry</i> , 2012, 84, 6407-6415.	3.2	168

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55	Preoxidation of CO on Os-Modified Pt(111): A Comparison with Ru-Modified Pt(111). <i>Langmuir</i> , 2011, 27, 2044-2051.	1.6	5
56	Adsorptive Behavior of Dimethylglyoxime on Au(111). <i>Langmuir</i> , 2011, 27, 14638-14646.	1.6	2
57	Electron transfer behavior at polyoxometalate-adsorbed alkanethiol self-assembled monolayers. <i>Applied Surface Science</i> , 2011, 257, 9490-9497.	3.1	4
58	Oxygen reduction on composite FeOx nanoparticles embedded in porous carbon. <i>Electrochimica Acta</i> , 2011, 58, 422-426.	2.6	9
59	ToF-SIMS imaging and spectroscopic analyses of PEG-conjugated AuNPs. <i>Surface and Interface Analysis</i> , 2011, 43, 628-631.	0.8	10
60	Assembly of strands of multiwall carbon nanotubes and gold nanoparticles using alkanedithiols. <i>Carbon</i> , 2011, 49, 487-494.	5.4	9
61	Ensemble size estimation in formic acid oxidation on Bi-modified Pt(111). <i>Electrochemistry Communications</i> , 2010, 12, 1731-1733.	2.3	20
62	CO preoxidation on Ru-modified Pt(111). <i>Electrochemistry Communications</i> , 2010, 12, 1363-1366.	2.3	7
63	Modification of Au Nanoparticles Dispersed on Carbon Support Using Spontaneous Deposition of Pt toward Formic Acid Oxidation. <i>Langmuir</i> , 2010, 26, 4497-4505.	1.6	29
64	Selective adsorption of dithiolate-modified multi-wall carbon nanotubes onto alkanethiol self-assembled monolayers on Au(111). <i>Chemical Communications</i> , 2010, 46, 6584.	2.2	7
65	Effects of oxidation and heat treatment of acetylene blacks on their electrochemical double layer capacitances. <i>Carbon</i> , 2009, 47, 226-233.	5.4	17
66	Impedance Analysis for Hydrogen Adsorption Pseudocapacitance and Electrochemically Active Surface Area of Pt Electrode. <i>Langmuir</i> , 2009, 25, 11947-11954.	1.6	31
67	Size Effect of Pt Nanoparticle on Catalytic Activity in Oxidation of Methanol and Formic Acid: Comparison to Pt(111), Pt(100), and Polycrystalline Pt Electrodes. <i>Langmuir</i> , 2009, 25, 7140-7147.	1.6	102
68	Morphological reason for enhancement of electrochemical double layer capacitances of various acetylene blacks by electrochemical polarization. <i>Electrochimica Acta</i> , 2008, 53, 5789-5795.	2.6	11
69	Modification of Pt nanoelectrodes dispersed on carbon support using irreversible adsorption of Bi to enhance formic acid oxidation. <i>Electrochimica Acta</i> , 2008, 53, 7744-7750.	2.6	46
70	Electrocatalytic Oxidation of Formic Acid and Methanol on Pt Deposits on Au(111). <i>Langmuir</i> , 2007, 23, 10831-10836.	1.6	66
71	Electrochemical Scanning Tunneling Microscopic Observation of the Preoxidation Process of CO on Pt(111) Electrode Surface. <i>Langmuir</i> , 2007, 23, 9495-9500.	1.6	18
72	Electrochemical STM observation of new structures of CO adsorbed on a Pt(111) electrode surface. <i>Chemical Communications</i> , 2006, , 2191.	2.2	8

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73	Atomic Arrangements inside Ru and Os Nanoislands Spontaneously Deposited on Pt(111). Journal of Physical Chemistry B, 2006, 110, 13425-13429.	1.2	6
74	Electrochemical Capacitances of Well-Defined Carbon Surfaces. Langmuir, 2006, 22, 9086-9088.	1.6	104
75	Adlayers of Sb Irreversibly Adsorbed on Pt(111): An Electrochemical Scanning Tunneling Microscopy Study. Journal of Physical Chemistry B, 2006, 110, 10814-10821.	1.2	4
76	Simultaneous separation of nine surfactants of various types by HPLC with evaporative light scattering detection. Talanta, 2006, 70, 481-484.	2.9	26
77	2-Dimensional atomic arrangements of Te on Pt(111) whose coverage is higher than 0.25+. Journal of Solid State Electrochemistry, 2005, 9, 247-253.	1.2	9
78	Atomic Rearrangements during the Electrochemical Treatments of Au(111) Covered with Irreversibly Adsorbed Sb. Journal of Physical Chemistry B, 2005, 109, 8961-8966.	1.2	10
79	Initial adsorption stage of irreversibly adsorbing Sb on Au(111). Journal of Electroanalytical Chemistry, 2004, 566, 1-5.	1.9	15
80	Structural evolution of self-assembled monolayer of 1-mercapto-2-propanol on Au(111) in a N ₂ flow: an electrochemical and STM study. Applied Surface Science, 2004, 228, 313-319.	3.1	8
81	Simultaneous determination of nonionic and anionic industrial surfactants by liquid chromatography combined with evaporative light-scattering detection. Journal of Chromatography A, 2004, 1046, 289-291.	1.8	27
82	Simultaneous determination of nonionic and anionic industrial surfactants by liquid chromatography combined with evaporative light-scattering detection. Journal of Chromatography A, 2004, 1046, 289-291.	1.8	17
83	Photodissolution of cleaved CdTe(110): atomic force microscopic and Auger electron spectroscopic study. Applied Surface Science, 2002, 187, 179-186.	3.1	1
84	Spectral holes and induced luminescence in KCl co-doped with Eu ²⁺ and Eu ³⁺ ions. Journal of Physics Condensed Matter, 2001, 13, 2835-2843.	0.7	4
85	Electrochemical scanning tunneling microscope study of irreversibly adsorbed Te on a Pt(111) single crystal electrode surface. Journal of Electroanalytical Chemistry, 2001, 506, 149-154.	1.9	13
86	Contrasting electrochemical behavior of irreversibly adsorbed Sb monolayer on Pt(100) and Pt(111) single crystal electrode surfaces. Journal of Electroanalytical Chemistry, 1998, 453, 243-247.	1.9	21
87	Two electrochemical processes for the deposition of Sb on Au(100) and Au(111): irreversible adsorption and underpotential deposition. Journal of Electroanalytical Chemistry, 1997, 436, 277-280.	1.9	29
88	Electrochemical Atomic Layer Processing. Materials and Manufacturing Processes, 1995, 10, 283-301.	2.7	18
89	Co oxidation on LaCoO ₃ perovskite. Korean Journal of Chemical Engineering, 1994, 11, 48-54.	1.2	9