

Kee-Chul Chang

List of Publications by Year in descending order

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50
papers

10,142
citations

304368
22
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233125
45
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54
all docs

54
docs citations

54
times ranked

12226
citing authors

#	ARTICLE	IF	CITATIONS
1	Trends in activity for the water electrolyser reactions on 3d M(Ni,Co,Fe,Mn) hydr(oxy)oxide catalysts. Nature Materials, 2012, 11, 550-557.	13.3	2,423
2	Enhancing Hydrogen Evolution Activity in Water Splitting by Tailoring Li ⁺ -Ni(OH) ₂ -Pt Interfaces. Science, 2011, 334, 1256-1260.	6.0	2,385
3	Design of active and stable Co _x Mo _{6-x} chalcogels as pH-universal catalysts for the hydrogen evolution reaction. Nature Materials, 2016, 15, 197-203.	13.3	825
4	Enhancing the Alkaline Hydrogen Evolution Reaction Activity through the Bifunctionality of Ni(OH) ₂ /Metal Catalysts. Angewandte Chemie - International Edition, 2012, 51, 12495-12498.	7.2	615
5	Pentacene Thin Film Growth. Chemistry of Materials, 2004, 16, 4497-4508.	3.2	588
6	Activityâ€“Stability Trends for the Oxygen Evolution Reaction on Monometallic Oxides in Acidic Environments. Journal of Physical Chemistry Letters, 2014, 5, 2474-2478.	2.1	569
7	Design and Synthesis of Bimetallic Electrocatalyst with Multilayered Pt-Skin Surfaces. Journal of the American Chemical Society, 2011, 133, 14396-14403.	6.6	541
8	Functional links between stability and reactivity of strontium ruthenate single crystals during oxygen evolution. Nature Communications, 2014, 5, 4191.	5.8	252
9	Spontaneous Nanoscale Corrugation of Ion-ErodedSiO ₂ : The Role of Ion-Irradiation-Enhanced Viscous Flow. Physical Review Letters, 2001, 87, 246104.	2.9	235
10	Monodisperse Pt ₃ Co Nanoparticles as a Catalyst for the Oxygen Reduction Reaction: Size-Dependent Activity. Journal of Physical Chemistry C, 2009, 113, 19365-19368.	1.5	192
11	Stabilization of ultrathin (hydroxy)oxide films on transition metal substrates for electrochemical energy conversion. Nature Energy, 2017, 2, .	19.8	167
12	Unique Activity of Platinum Adislands in the CO Electrooxidation Reaction. Journal of the American Chemical Society, 2008, 130, 15332-15339.	6.6	142
13	Effects of Li ⁺ , K ⁺ , and Ba ²⁺ Cations on the ORR at Model and High Surface Area Pt and Au Surfaces in Alkaline Solutions. Journal of Physical Chemistry Letters, 2011, 2, 2733-2736.	2.1	142
14	Stability and Dissolution of Platinum Surfaces in Perchloric Acid. Journal of the Electrochemical Society, 2006, 153, B446.	1.3	141
15	Shape-Dependent Activity of Platinum Array Catalyst. Journal of the American Chemical Society, 2009, 131, 5732-5733.	6.6	134
16	Monodisperse Pt ₃ Co nanoparticles as electrocatalyst: the effects of particle size and pretreatment on electrocatalytic reduction of oxygen. Physical Chemistry Chemical Physics, 2010, 12, 6933.	1.3	124
17	Activityâ€“stability relationship in the surface electrochemistry of the oxygen evolution reaction. Faraday Discussions, 2014, 176, 125-133.	1.6	83
18	Surface X-Ray Speckles: Coherent Surface Diffraction from Au(001). Physical Review Letters, 2009, 103, 165501.	2.9	41

#	ARTICLE		IF	CITATIONS
19	Hydrophilicity transition of the clean rutile TiO ₂ (1 1 0) surface. <i>Electrochimica Acta</i> , 2008, 53, 6173-6177.		2.6	30
20	Nanofaceted Platinum Surfaces: A New Model System for Nanoparticle Catalysts. <i>Journal of Physical Chemistry B</i> , 2005, 109, 23543-23549.		1.2	26
21	In Situ Synchrotron X-ray Spectroscopy of Ruthenium Nanoparticles Modified with Selenium for an Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2007, 111, 16889-16894.		1.5	24
22	< i>In situ</i> x-ray studies of oxygen surface exchange behavior in thin film La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ . <i>Applied Physics Letters</i> , 2012, 101, 051603.		1.5	20
23	Resonance anomalous surface X-ray scattering. <i>Radiation Physics and Chemistry</i> , 2006, 75, 1651-1660.		1.4	19
24	CO-Induced Lifting of Au(001) Surface Reconstruction. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2231-2234.		1.5	18
25	Electrosorbed carbon monoxide monolayers on Pt(111). <i>Electrochimica Acta</i> , 2007, 52, 5749-5758.		2.6	17
26	Polarization-dependent resonant anomalous surface X-ray scattering of CO/Pt(111). <i>Europhysics Letters</i> , 2006, 74, 1032-1038.		0.7	16
27	Persistent oscillations of x-ray speckles: Pt (001) step flow. <i>Applied Physics Letters</i> , 2011, 99, 121910.		1.5	15
28	High-density electrosorbed carbon monoxide monolayers on Pt(111) under atmospheric pressure. <i>Physical Review B</i> , 2007, 75, .		1.1	14
29	Fabrication and characterization of platinum nanoparticle arrays of controlled size, shape and orientation. <i>Electrochimica Acta</i> , 2010, 55, 7934-7938.		2.6	14
30	Oxygen Exchange in La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ . Thin-Film Heterostructures under Applied Electric Potential. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19915-19921.		1.5	13
31	In situ X-ray studies of film cathodes for solid oxide fuel cells. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2013, 190, 75-83.		0.8	12
32	Nanoparticle scaffolds for syngas-fed solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 3011-3018.		5.2	12
33	Microstructural Effects on the Oxygen Exchange Kinetics of La _{0.7} Sr _{0.3} MnO ₃ Thin Films. <i>ECS Transactions</i> , 2011, 35, 2063-2075.		0.3	11
34	Synchrotron X-ray studies of model SOFC cathodes, part I: Thin film cathodes. <i>Solid State Ionics</i> , 2017, 311, 118-126.		1.3	9
35	Resonant X-ray scattering studies of epitaxial complex oxide thin films. <i>Journal of Applied Crystallography</i> , 2013, 46, 76-87.		1.9	7
36	Arrays of widely spaced atomic steps on Si(111) mesas due to sublimation. <i>Surface Science</i> , 2005, 591, 133-141.		0.8	5

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37	In situ Synchrotron X-ray Studies of Dense Thin-Film Strontium-Doped Lanthanum Manganite Solid Oxide Fuel Cell Cathodes. Materials Research Society Symposia Proceedings, 2008, 1126, 1.	0.1	5
38	A Simple Model for the Formation of Step-Free Surfaces. Materials Research Society Symposia Proceedings, 2002, 749, 1.	0.1	4
39	Epitaxial oxide bilayer on Pt (001) nanofacets. Journal of Chemical Physics, 2012, 136, 044704.	1.2	4
40	Stability and Dissolution of the Platinum Single Crystal Surfaces in Perchloric Acid. ECS Transactions, 2006, 1, 167-184.	0.3	3
41	In-situ Synchrotron X-ray Spectroscopy of Ruthenium Nanoparticles Modified with Selenium for Oxygen Reduction Reaction. ECS Transactions, 2006, 3, 161-170.	0.3	3
42	Ultra Small Angle X-ray Scattering Studies of Solid Oxide Fuel Cell Cathode Powders. ECS Transactions, 2013, 50, 111-115.	0.3	2
43	In Situ X-Ray and Electrochemical Studies of Solid Oxide Fuel Cell/Electrolyzer Oxygen Electrodes. , 0, , 153-164.		2
44	Fabrication of platinum nano-array model catalysts. , 2006, 6340, 274.		1
45	In situ X-ray Studies of $(La,Sr)MnO_3$, $(La,Sr)CoO_3$, and $La0.6Sr0.4Co0.2Fe0.8O_3$ Thin Film SOFC Cathodes Grown by Pulse Laser Deposition. Materials Research Society Symposia Proceedings, 2013, 1495, 1.	0.1	1
46	Evolution of Mesas on Si(111) Surface Under Sublimation: Nanofabrication through the Control of Atomic Steps. Materials Research Society Symposia Proceedings, 2003, 782, 1.	0.1	0
47	Spontaneous Formation of Ridges on Patterned Mesas and Their Role in the Evolution of. Materials Research Society Symposia Proceedings, 2004, 854, U2.5.1/J2.5.1/KK2.5.1.	0.1	0
48	Spontaneous Formation of Ridges on Patterned Mesas and Their Role in the Evolution of Step Arrays. Materials Research Society Symposia Proceedings, 2004, 849, 34.	0.1	0
49	Potential Driven Chemical Expansion of $La0.6Sr0.4Co1-xFe_xO_3$ Thin Films on Yttria Stabilized Zirconia. Materials Research Society Symposia Proceedings, 2013, 1494, 259-264.	0.1	0
50	The effect of water vapor on surface oxygen exchange kinetics of thin film $(La,Sr)(Co,Fe)O_3$. Journal of Power Sources, 2020, 451, 227478.	4.0	0