Hui-Chia Yu

List of Publications by Year
in descending order

28	1,151	567281 15	552781 26
papers	citations	h-index	g-index

28	28	28	1834
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Smoothed Boundary Method Electrochemical Simulation Framework for Complex Electrode Microstructures. ECS Meeting Abstracts, 2022, MA2022-01, 1968-1968.	0.0	0
2	Complex Electrode Microstructure Simulations using a Smoothed Boundary Method with Adaptive Mesh Refinement. Journal of the Electrochemical Society, 2022, 169, 070527.	2.9	3
3	Smoothed boundary method for simulating incompressible flow in complex geometries. Computer Methods in Applied Mechanics and Engineering, 2022, 399, 115312.	6.6	5
4	Three-dimensional phase field sintering simulations accounting for the rigid-body motion of individual grains. Computational Materials Science, 2021, 186, 109963.	3.0	32
5	Simulation of the diffusional impedance and application to the characterization of electrodes with complex microstructures. Electrochimica Acta, 2020, 354, 136534.	5.2	14
6	Simulation of Electrochemical Double Layer Formation with Complex Geometries. Journal of the Electrochemical Society, 2020, 167, 140515.	2.9	5
7	Deformation and stresses in solid-state composite battery cathodes. Journal of Power Sources, 2019, 440, 227116.	7.8	26
8	Development of an 18â€item abbreviated Chinese version of Berger's HIV Stigma Scale. International Journal of Nursing Practice, 2019, 25, e12708.	1.7	10
9	Localized concentration reversal of lithium during intercalation into nanoparticles. Science Advances, 2018, 4, eaao2608.	10.3	50
10	Rate-dependent Reversal of Lithium Concentration During Intercalation into LixFePO4 Nanoparticles. Microscopy and Microanalysis, 2018, 24, 1482-1483.	0.4	0
11	Smoothed Boundary Method for simulating bulk and grain boundary transport in complex polycrystalline microstructures. Computational Materials Science, 2016, 121, 14-22.	3.0	10
12	A Phase-Field Model and Simulation of Kinetically Asymmetric Ternary Conversion-Reconversion Transformation in Battery Electrodes. Journal of Phase Equilibria and Diffusion, 2016, 37, 86-99.	1.4	11
13	Effect of a Size-Dependent Equilibrium Potential on Nano-LiFePO₄Particle Interactions. Journal of the Electrochemical Society, 2015, 162, A1718-A1724.	2.9	29
14	Mapping the Inhomogeneous Electrochemical Reaction Through Porous LiFePO4-Electrodes in a Standard Coin Cell Battery. Chemistry of Materials, 2015, 27, 2374-2386.	6.7	93
15	Kinetics of Nanoparticle Interactions in Battery Electrodes. Journal of the Electrochemical Society, 2015, 162, A965-A973.	2.9	28
16	Particle-Level Modeling of the Charge-Discharge Behavior of Nanoparticulate Phase-Separating Li-Ion Battery Electrodes. Journal of the Electrochemical Society, 2014, 161, A535-A546.	2.9	69
17	Architecture Dependence on the Dynamics of Nano-LiFePO4 Electrodes. Electrochimica Acta, 2014, 137, 245-257.	5.2	43
18	Extended smoothed boundary method for solving partial differential equations with general boundary conditions on complex boundaries. Modelling and Simulation in Materials Science and Engineering, 2012, 20, 075008.	2.0	86

#	Article	IF	Citations
19	Simulations of the Kirkendall-Effect-Induced Deformation of Thermodynamically Ideal Binary Diffusion Couples with General Geometries. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3481-3500.	2.2	15
20	Tracking lithium transport and electrochemical reactions in nanoparticles. Nature Communications, 2012, 3, 1201.	12.8	254
21	Simulation of coarsening in three-phase solid oxide fuel cell anodes. Journal of Power Sources, 2011, 196, 1333-1337.	7.8	105
22	Vacancy mediated substitutional diffusion in binary crystalline solids. Progress in Materials Science, 2010, 55, 61-105.	32.8	95
23	Continuum simulations of the formation of Kirkendall-effect-induced hollow cylinders in a binary substitutional alloy. Acta Materialia, 2009, 57, 5348-5360.	7.9	13
24	Theory of grain boundary diffusion induced by the Kirkendall effect. Applied Physics Letters, 2008, 93, .	3.3	38
25	Substitutional diffusion and Kirkendall effect in binary crystalline solids containing discrete vacancy sources and sinks. Acta Materialia, 2007, 55, 6690-6704.	7.9	29
26	Dynamics of the self-assembly of nanovoids and nanobubbles in solids. Acta Materialia, 2005, 53, 1799-1807.	7.9	81
27	Ordering of Nanovoids in an Anisotropic Solid Driven by Surface Misfit. Journal of Computational and Theoretical Nanoscience, 2005, 2, 256-262.	0.4	4
28	Effects of low-energy impact and thermal cycling loadings on fatigue behavior of the quasi-isotropic carbon/epoxy composites. Journal of Polymer Research, 1998, 5, 143-151.	2.4	3