Chuan Cheng

List of Publications by Year
in descending order

29 papers	420 citations	687363 13 h-index	752698 20 g-index
34 all docs	34 docs citations	34 times ranked	451 citing authors

#	Article	IF	Citations
1	Modelling the Impedance Response of Graded LiFePO₄ Cathodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 010528.	2.9	9
2	Extending the energy-power balance of Li-ion batteries using graded electrodes with precise spatial control of local composition. Journal of Power Sources, 2022, 542, 231758.	7.8	3
3	Simultaneous Enhancement of Actuation Strain and Mechanical Strength of Nanoporous Niâ€“Mn Actuators. Advanced Electronic Materials, 2021, 7, 2100381.	5.1	13
4	Robust Metallic Actuators Based on Nanoporous Gold Rapidly Dealloyed from Goldâ€“Nickel Precursors. Advanced Functional Materials, 2021, 31, 2107241.	14.9	18
5	Combining composition graded positive and negative electrodes for higher performance Li-ion batteries. Journal of Power Sources, 2020, 448, 227376.	7.8	22
6	Electrochemical Mechanics of Metal Thin Films: Chargeâ€Induced Reversible Surface Stress for Actuation. Advanced Electronic Materials, 2020, 6, 1900364.	5.1	12
7	Micro-scale graded electrodes for improved dynamic and cycling performance of Li-ion batteries. Journal of Power Sources, 2019, 413, 59-67.	7.8	36
8	Semiordered Hierarchical Metallic Network for Fast and Large Charge-Induced Strain. Nano Letters, 2017, 17, 4774-4780.	9.1	17
9	Fast and Reversible Actuation of Metallic Muscles Composed of Nickel Nanowireâ€Forest. Advanced Materials, 2016, 28, 5315-5321.	21.0	30
10	Numerical Simulation Based on the Established Kinetics Model. Springer Theses, 2015, , 37-60.	0.1	0
11	Research Background and Motivation. Springer Theses, 2015, , 1-20.	0.1	0
12	Fast Fabrication of Self-ordered Anodic Porous Alumina on Oriented Aluminum Grains. Springer Theses, 2015, , 105-126.	0.1	0
13	Establishment of a Kinetics Model. Springer Theses, 2015, , 23-35.	0.1	0
14	Chemomechanical Softening During In Situ Nanoindentation of Anodic Porous Alumina with Anodization Processing. Springer Theses, 2015, , 143-160.	0.1	0
15	Experimental Verification I: Growth Sustainability of Nanopore Channels Guided with Pre-patterns. Springer Theses, 2015, , 61-73.	0.1	0
16	Reversible Electrochemical Actuation of Metallic Nanohoneycombs Induced by Pseudocapacitive Redox Processes. ACS Nano, 2015, 9, 3984-3995.	14.6	43
17	Theoretical Pore Growth Models for Nanoporous Alumina. Springer Series in Materials Science, 2015, , 31-60.	0.6	9
18	Chemo-mechanical softening during in situ nanoindentation of anodic porous alumina with anodization processing. Journal of Applied Physics, 2013, 113, .	2.5	6

#	Article	IF	Citations
19	Growth Sustainability of Nanopore Channels in Anodic Aluminum Oxide Guided with Prepatterns. Journal of Physical Chemistry C, 2013, 117, 12183-12190.	3.1	13
20	Fast fabrication of self-ordered anodic porous alumina on oriented aluminum grains by high acid concentration and high temperature anodization. Nanotechnology, 2013, 24, 215602.	2.6	37
21	Charge-induced reversible bending in nanoporous alumina-aluminum composite. Applied Physics Letters, 2013, 102, .	3.3	9
22	Simulation and experiment of substrate aluminum grain orientation dependent self-ordering in anodic porous alumina. Journal of Applied Physics, 2013, 113, .	2.5	16
23	Quantitative characterization of acid concentration and temperature dependent self-ordering conditions of anodic porous alumina. AIP Advances, 2011, 1, .	1.3	17
24	Modelling and simulation of self-ordering in anodic porous alumina. Electrochimica Acta, 2011, 56, 9998-10008.	5.2	45
25	Nonlinear optical properties of Au M (M = Ag, Cu; m= 1, 2) clusters. Computational and Theoretical Chemistry, 2009, 893, 88-92.	1.5	18
26	Size dependent structural and electronic properties of MgO nanotube clusters. International Journal of Quantum Chemistry, 2009, 109, 349-356.	2.0	16
27	Photonic bands in two-dimensional metallodielectric photonic crystals composed of metal coated cylinders. Journal of Applied Physics, 2009, 106, 033101.	2.5	10
28	Temperature dependent complex photonic band structures in two-dimensional photonic crystals composed of high-temperature superconductors. Journal of Physics Condensed Matter, 2008, 20, 275203.	1.8	15
29	A Simple Theoretical Model for Ring and Nanotube Radial Breathing Mode. Acta Physico-chimica Sinica, 2008, 24, 1579-1583.	0.6	3