

Thomas M Arruda

List of Publications by Year in descending order

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36
papers

2,080
citations

471509

17
h-index

454955

30
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38
all docs

38
docs citations

38
times ranked

3656
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of State of Charge on the Physical Characteristics of V(IV)/V(V) Electrolytes and Membrane for the All Vanadium Flow Battery. Batteries, 2020, 6, 49.	4.5	1
2	State of Charge Effects on Vanadium Crossover in Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 2895-2895.	0.0	0
3	Effect of State of Charge on Physical Properties of Vanadium Redox Flow Battery Electrolytes. ECS Meeting Abstracts, 2020, MA2020-02, 3434-3434.	0.0	0
4	The Effect of Sulfuric Acid Concentration on the Physical and Electrochemical Properties of Vanadyl Solutions. Batteries, 2018, 4, 40.	4.5	15
5	Electrochemical and EPR Measurements of Vanadium Redox Couples for All Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
6	Investigation of Waste Heat Accumulation and Internal Resistance of AA Nimh Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
7	Understanding the Effects of Sulfate/Bisulfate Ions on Electrolytes for Vanadium/Sulfuric Acid Redox Flow Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
8	Vapor-Deposited Pt and Pd-Pt Catalysts for Solid Acid Fuel Cells: Short Range Structure and Interactions with the CsH ₂ PO ₄ Electrolyte. Journal of the Electrochemical Society, 2016, 163, F464-F469.	2.9	6
9	Sub-nA spatially resolved conductivity profiling of surface and interface defects in ceria films. APL Materials, 2015, 3, 036106.	5.1	3
10	Water-mediated electrochemical nano-writing on thin ceria films. Nanotechnology, 2014, 25, 075701.	2.6	12
11	Ferroelectricity in Si-doped HfO ₂ Revealed: A Binary Lead-free Ferroelectric. Advanced Materials, 2014, 26, 8198-8202.	21.0	147
12	Toward Quantitative Electrochemical Measurements on the Nanoscale by Scanning Probe Microscopy: Environmental and Current Spreading Effects. ACS Nano, 2013, 7, 8175-8182.	14.6	19
13	Switching of ferroelectric polarization in epitaxial BaTiO ₃ films on silicon without a conducting bottom electrode. Nature Nanotechnology, 2013, 8, 748-754.	31.5	218
14	Nanometer-scale mapping of irreversible electrochemical nucleation processes on solid Li-ion electrolytes. Scientific Reports, 2013, 3, 1621.	3.3	29
15	Frequency spectroscopy of irreversible electrochemical nucleation kinetics on the nanoscale. Nanoscale, 2013, 5, 11964.	5.6	12
16	In situ tracking of the nanoscale expansion of porous carbon electrodes. Energy and Environmental Science, 2013, 6, 225-231.	30.8	60
17	Nanoscale mapping of oxygen vacancy kinetics in nanocrystalline Samarium doped ceria thin films. Applied Physics Letters, 2013, 103, .	3.3	23
18	ELECTROCHEMICAL STRAIN MICROSCOPY OF LI-ION AND LI-AIR BATTERY MATERIALS. World Scientific Series in Nanoscience and Nanotechnology, 2013, , 393-454.	0.1	3

#	ARTICLE	IF	CITATIONS
19	The partially reversible formation of Li-metal particles on a solid Li electrolyte: applications toward nanobatteries. <i>Nanotechnology</i> , 2012, 23, 325402.	2.6	30
20	Electrochemical Strain Microscopy: Probing Electrochemical Transformations in Nanoscale Volumes. <i>Microscopy Today</i> , 2012, 20, 10-15.	0.3	11
21	Electrochemical strain microscopy: Probing ionic and electrochemical phenomena in solids at the nanometer level. <i>MRS Bulletin</i> , 2012, 37, 651-658.	3.5	83
22	Probing Surface and Bulk Electrochemical Processes on the LaAlO ₃ –SrTiO ₃ Interface. <i>ACS Nano</i> , 2012, 6, 3841-3852.	14.6	65
23	Probing Local Electromechanical Effects in Highly Conductive Electrolytes. <i>ACS Nano</i> , 2012, 6, 10139-10146.	14.6	14
24	Structure of the catalytic sites in Fe/N/C-catalysts for O ₂ -reduction in PEM fuel cells. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 11673.	2.8	622
25	Mapping Irreversible Electrochemical Processes on the Nanoscale: Ionic Phenomena in Li Ion Conductive Glass Ceramics. <i>Nano Letters</i> , 2011, 11, 4161-4167.	9.1	70
26	Unveiling N-Protonation and Anion-Binding Effects on Fe/N/C Catalysts for O ₂ Reduction in Proton-Exchange-Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2011, 115, 16087-16097.	3.1	300
27	Li-ion dynamics and reactivity on the nanoscale. <i>Materials Today</i> , 2011, 14, 548-558.	14.2	73
28	Protein hot spots at bio-nano interfaces. <i>Materials Today</i> , 2011, 14, 360-365.	14.2	10
29	Fundamental Aspects of Spontaneous Cathodic Deposition of Ru onto Pt/C Electrocatalysts and Membranes under Direct Methanol Fuel Cell Operating Conditions: An in Situ X-ray Absorption Spectroscopy and Electron Spin Resonance Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1028-1040.	3.1	67
30	In-Situ Synchrotron Spectroscopic Studies of Electrocatalysis on Highly Dispersed Nano-Materials. <i>Modern Aspects of Electrochemistry</i> , 2010, , 503-572.	0.2	4
31	Enhanced activity and interfacial durability study of ultra low Pt based electrocatalysts prepared by ion beam assisted deposition (IBAD) method. <i>Electrochimica Acta</i> , 2009, 54, 6756-6766.	5.2	29
32	Effect of RuO _x /H _y Island Size on PtRu Particle Aging in Methanol. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19713-19721.	3.1	19
33	Investigation into the Competitive and Site-Specific Nature of Anion Adsorption on Pt Using In Situ X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2008, 112, 18087-18097.	3.1	122
34	Understanding Electrocatalytic Pathways in Low and Medium Temperature Fuel Cells: Synchrotron-based In Situ X-Ray Absorption Spectroscopy. <i>Electrochemical Society Interface</i> , 2008, 17, 46-52.	0.4	6
35	In Situ XAS Investigation of Electrocatalysts Surface Poisoning by Halides. <i>ECS Transactions</i> , 2007, 11, 903-911.	0.5	2
36	Observation of PtRu Particle Aging in Methanol with X-ray Absorption Spectroscopy. <i>ECS Transactions</i> , 2007, 11, 1359-1368.	0.5	0