

R T Baker

List of Publications by Year in descending order

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35
papers

828
citations

471371

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h-index

501076

28
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all docs

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docs citations

35
times ranked

1162
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural, morphological and electrical properties of Gd _{0.1} Ce _{0.9} O _{1.95} prepared by a citrate complexation method. <i>Journal of Power Sources</i> , 2009, 186, 268-277.	4.0	90
2	Preparation and property-performance relationships in samarium-doped ceria nanopowders for solid oxide fuel cell electrolytes. <i>Journal of Power Sources</i> , 2011, 196, 2498-2512.	4.0	87
3	Factors affecting the preparation of ordered mesoporous ZrO ₂ using the replica method. <i>Journal of Materials Chemistry</i> , 2008, 18, 5200.	6.7	61
4	Synthesis of Nanocrystalline CeO ₂ -ZrO ₂ Solid Solutions by a Citrate Complexation Route: A Thermochemical and Structural Study. <i>Journal of Physical Chemistry C</i> , 2009, 113, 914-924.	1.5	56
5	Efficient batch and Fixed-Bed sequestration of a basic dye using a novel variant of ordered mesoporous carbon as adsorbent. <i>Arabian Journal of Chemistry</i> , 2021, 14, 103186.	2.3	46
6	Ionic conductivity in multiply substituted ceria-based electrolytes. <i>Solid State Ionics</i> , 2018, 316, 9-19.	1.3	37
7	Batch and bulk adsorptive removal of anionic dye using metal/halide-free ordered mesoporous carbon as adsorbent. <i>Journal of Cleaner Production</i> , 2021, 321, 129060.	4.6	35
8	The enhancement effect of lithium ions on actuation performance of ionic liquid-based IPMC soft actuators. <i>Polymer</i> , 2015, 76, 140-149.	1.8	31
9	Visualisation of single atom dynamics in water gas shift reaction for hydrogen generation. <i>Catalysis Science and Technology</i> , 2016, 6, 2214-2227.	2.1	31
10	Acetylene hydrogenation over structured Au-Pd catalysts. <i>Faraday Discussions</i> , 2016, 188, 499-523.	1.6	30
11	Nanoparticulate ceria-zirconia anode materials for intermediate temperature solid oxide fuel cells using hydrocarbon fuels. <i>Journal of Materials Chemistry</i> , 2010, 20, 9760.	6.7	27
12	Redox properties of nanostructured lanthanide-doped ceria spheres prepared by microwave assisted hydrothermal homogeneous co-precipitation. <i>Nanoscale</i> , 2015, 7, 271-281.	2.8	27
13	Magnetic resonance imaging study of a soft actuator element during operation. <i>Soft Matter</i> , 2008, 4, 1879.	1.2	25
14	Electromechanical behaviour of Nafion-based soft actuators. <i>Journal of Materials Chemistry B</i> , 2013, 1, 2502.	2.9	23
15	Steam Reforming of Methanol with Sm ₂ O ₃ -CeO ₂ -Supported Palladium Catalysts: Influence of the Thermal Treatments of Catalyst and Support. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 8364-8372.	1.8	18
16	Deformation of Ordered Mesoporous Silica Structures on Exposure to High Temperatures. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-13.	1.5	18
17	Oxygen ion conductivity in ceria-based electrolytes co-doped with samarium and gadolinium. <i>Solid State Ionics</i> , 2020, 347, 115255.	1.3	18
18	In situ magnetic resonance imaging of electrically-induced water diffusion in a Nafion ionic polymer film Electronic supplementary information (ESI) available: structure of Na-exchanged Nafion and schematic description of actuation mechanism of an electro-active polymer actuator device. See http://www.rsc.org/suppdata/cc/b3/b301039b/ . <i>Chemical Communications</i> , 2003, , 962-963.	2.2	16

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19	Time-Resolved Mapping of Water Diffusion Coefficients in a Working Soft Actuator Device. <i>Journal of Physical Chemistry B</i> , 2008, 112, 9761-9768.	1.2	15
20	Reduction and catalytic behaviour of nanostructured Pd/gadolinia-doped ceria catalysts for methane combustion. <i>Applied Catalysis B: Environmental</i> , 2013, 136-137, 122-132.	10.8	14
21	Physicochemical properties of nanostructured Pd/lanthanide-doped ceria spheres with high catalytic activity for CH ₄ combustion. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7488-7499.	5.2	14
22	Preparation and characterisation of nanostructured gadolinia-doped ceria tubes. <i>Journal of Materials Chemistry</i> , 2008, 18, 5689.	6.7	13
23	Nanostructured terbium-doped ceria spheres: effect of dopants on their physical and chemical properties under reducing and oxidizing conditions. <i>Journal of Materials Chemistry A</i> , 2015, 3, 16120-16131.	5.2	11
24	Pretreatment-Induced Nanostructural Evolution in CeO ₂ -, Sm ₂ O ₃ -, and CeO ₂ /Sm ₂ O ₃ -Supported Pd Catalysts for Intermediate-Temperature Methanol Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 12465-12475.	1.5	10
25	Effect of preparation method on the properties of nanostructured gadolinia-doped ceria materials for IT-SOFCs. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 14854-14863.	3.8	10
26	Metal- and halogen-free synthesis of ordered mesoporous carbon materials. <i>Microporous and Mesoporous Materials</i> , 2019, 289, 109622.	2.2	10
27	Inhomogeneous composition of alloyed iron-platinum magnetic nanoparticles synthesized at low temperature. <i>Journal of Materials Chemistry</i> , 2011, 21, 3646.	6.7	9
28	Structural Properties and Reduction Behavior of Novel Nanostructured Pd/Gadolinia-Doped Ceria Catalysts with Tubular Morphology. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8744-8752.	1.5	9
29	Nanostructured carbons containing FeNi/NiFe ₂ O ₄ supported over N-doped carbon nanofibers for oxygen reduction and evolution reactions. <i>RSC Advances</i> , 2019, 9, 36586-36599.	1.7	9
30	Synthesis of mesoporous ceria using metal- and halogen-free ordered mesoporous carbon as a hard template. <i>Nanoscale Advances</i> , 2019, 1, 4772-4782.	2.2	7
31	Influence of electrolytes of Li salts, EMIMBF ₄ , and mixed phases on electrochemical and physical properties of Nafion membrane. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45239.	1.3	6
32	Ordered Mesoporous Carbon as a Support for Palladium-Based Hydrodechlorination Catalysts. <i>Catalysts</i> , 2021, 11, 23.	1.6	6
33	Effects of Strontium Content on the Microstructure and Ionic Conductivity of Samarium-Doped Ceria. <i>Solids</i> , 2021, 2, 293-313.	1.1	5
34	Optimization of STEM-HAADF Electron Tomography Reconstructions by Parameter Selection in Compressed Sensing Total Variation Minimization-Based Algorithms. <i>Particle and Particle Systems Characterization</i> , 2020, 37, 2000070.	1.2	4
35	Effects on Microstructure and Ionic Conductivity of the Co-Doping with Strontium and Samarium of Ceria with Constant Oxygen Vacancy Concentration. <i>Solids</i> , 2021, 2, 341-370.	1.1	0