

Jacob Bowen

List of Publications by Year in descending order

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33
papers

632
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686830

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580395

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37
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docs citations

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times ranked

888
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Microstructural Degradation of Ni/YSZ Electrodes in Solid Oxide Electrolysis Cells under High Current. <i>Journal of the Electrochemical Society</i> , 2013, 160, F883-F891. | 1.3 | 136 |
| 2 | Stability of La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ /Ce _{0.9} Gd _{0.1} O ₂ cathodes during sintering and solid oxide fuel cell operation. <i>Journal of Power Sources</i> , 2015, 283, 151-161. | 4.0 | 77 |
| 3 | A framework for automatic segmentation in three dimensions of microstructural tomography data. <i>Ultramicroscopy</i> , 2010, 110, 216-228. | 0.8 | 50 |
| 4 | 3D-printed barium titanate/poly-(vinylidene fluoride) nano-hybrids with anisotropic dielectric properties. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12430-12440. | 2.7 | 33 |
| 5 | Three dimensional characterization of nickel coarsening in solid oxide cells via ex-situ ptychographic nano-tomography. <i>Journal of Power Sources</i> , 2018, 383, 72-79. | 4.0 | 29 |
| 6 | Lattice constant measurement from electron backscatter diffraction patterns. <i>Journal of Microscopy</i> , 2017, 266, 200-210. | 0.8 | 26 |
| 7 | Geometrical characterization of interconnected phase networks in three dimensions. <i>Journal of Microscopy</i> , 2011, 244, 45-58. | 0.8 | 25 |
| 8 | Visualization of Dissolution–Precipitation Processes in Lithium–Sulfur Batteries. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 24 |
| 9 | Electrochemistry Unlocks Wettability: Epitaxial Growth of Oxide Nanoparticles on Rough Metallic Surfaces. <i>ChemElectroChem</i> , 2014, 1, 520-523. | 1.7 | 22 |
| 10 | Ex-situ tracking solid oxide cell electrode microstructural evolution in a redox cycle by high resolution ptychographic nanotomography. <i>Journal of Power Sources</i> , 2017, 360, 520-527. | 4.0 | 20 |
| 11 | Quantitative characterization of the orientation spread within individual grains in copper after tensile deformation. <i>International Journal of Materials Research</i> , 2009, 100, 433-438. | 0.1 | 17 |
| 12 | Quantification of microstructure refinement in aluminium deformed by equal channel angular extrusion: Route A vs. route Bc in a 90° die. <i>Scripta Materialia</i> , 2010, 63, 20-23. | 2.6 | 17 |
| 13 | On the accuracy of triple phase boundary lengths calculated from tomographic image data. <i>Journal of Power Sources</i> , 2014, 261, 198-205. | 4.0 | 17 |
| 14 | Diffusion of Nickel into Ferritic Steel Interconnects of Solid Oxide Fuel/Electrolysis Stacks. <i>ECS Transactions</i> , 2013, 57, 2245-2252. | 0.3 | 13 |
| 15 | Enhanced Electromechanical Response in Sm and Nd Co-doped Ceria. <i>Materialia</i> , 2020, 12, 100728. | 1.3 | 13 |
| 16 | Transmission Electron Microscopy Specimen Preparation Method for Multiphase Porous Functional Ceramics. <i>Microscopy and Microanalysis</i> , 2013, 19, 501-505. | 0.2 | 12 |
| 17 | In-operando observation of microstructural evolution in a solid oxide cell electrolyte operating at high polarization. <i>Journal of Power Sources</i> , 2019, 413, 351-359. | 4.0 | 12 |
| 18 | Support-free nanostructured Pt Cu electrocatalyst for the oxygen reduction reaction prepared by alternating magnetron sputtering. <i>Journal of Power Sources</i> , 2019, 413, 432-440. | 4.0 | 12 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Microstructural Evolution of the Deformed State during Severe Deformation of an ECAE Processed Al-0.13%Mg Alloy. Materials Science Forum, 2000, 331-337, 545-550. | 0.3 | 10 |
| 20 | Stability of Ultra-Fine Grain Structures™ Produced by Severe Deformation. Materials Science Forum, 2004, 467-470, 1261-1270. | 0.3 | 10 |
| 21 | Effects of focused ion beam milling on electron backscatter diffraction patterns in strontium titanate and stabilized zirconia. Journal of Microscopy, 2012, 246, 279-286. | 0.8 | 10 |
| 22 | Deposition of highly oriented (K,Na)NbO ₃ films on flexible metal substrates. Thin Solid Films, 2018, 650, 7-10. | 0.8 | 10 |
| 23 | Tracking nickel oxide reduction in solid oxide cells via ex-situ ptychographic nano-tomography. Materials Characterization, 2020, 162, 110183. | 1.9 | 8 |
| 24 | Determination of Three Dimensional Microstructure Parameters from a Solid Oxide Ni/YSZ Electrode after Electrolysis Operation. ECS Transactions, 2011, 35, 1655-1660. | 0.3 | 7 |
| 25 | Ion beam polishing for three-dimensional electron backscattered diffraction. Journal of Microscopy, 2013, 249, 36-40. | 0.8 | 7 |
| 26 | Hybrid inks for 3D printing of tall BaTiO ₃ -based ceramics. Open Ceramics, 2021, 6, 100110. | 1.0 | 6 |
| 27 | Phase Formation in the System ZrO ₂ -LaO _{1.5} -MnO _x in Air and 10^{-4} Pa After 500 h of Annealing at 1200Å° and 1400Å°C. Journal of the American Ceramic Society, 2010, 93, 2884-2890. | 1.9 | 2 |
| 28 | Recrystallization Kinetics in the Bulk and at the Surface. Materials Science Forum, 2004, 467-470, 147-152. | 0.3 | 1 |
| 29 | The Effect of Second-Phase Particles on the Severe Deformation of Aluminium Alloys during Equal Channel Angular Extrusion. , 2005, , 138-144. | | 1 |
| 30 | Effects of strain on the microstructure-hardness annealing response of highly deformed Al-0.13Mg. Materials Science and Technology, 2005, 21, 1460-1465. | 0.8 | 1 |
| 31 | Microstructure Evolution after Large Strain Deformation in Al-0.13%Mg. Materials Science Forum, 2007, 550, 235-240. | 0.3 | 1 |
| 32 | Texture evolution during tensile necking of copper processed by equal channel angular extrusion. Journal of Physics: Conference Series, 2010, 240, 012161. | 0.3 | 1 |
| 33 | Special Issue on Modeling and Experimental Validation of Fuel Cells, Batteries, and Electrolysers. Journal of Electrochemical Energy Conversion and Storage, 2017, 14, . | 1.1 | 0 |