

# Karren L More

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/107221/publications.pdf>

Version: 2024-02-01

324  
papers

35,703  
citations

6592

79  
h-index

3394

183  
g-index

334  
all docs

334  
docs citations

334  
times ranked

29033  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | High-Performance Electrocatalysts for Oxygen Reduction Derived from Polyaniline, Iron, and Cobalt. <i>Science</i> , 2011, 332, 443-447.   | 6.0  | 3,672     |
| 2  | Scientific Aspects of Polymer Electrolyte Fuel Cell Durability and Degradation. <i>Chemical Reviews</i> , 2007, 107, 3904-3951.   | 23.0 | 2,976     |
| 3  | Lattice-strain control of the activity in dealloyed core-shell fuel cell catalysts. <i>Nature Chemistry</i> , 2010, 2, 454-460.   | 6.6  | 2,489     |
| 4  | Highly Crystalline Multimetallic Nanoframes with Three-Dimensional Electrocatalytic Surfaces. <i>Science</i> , 2014, 343, 1339-1343.  | 6.0  | 2,376     |
| 5  | Direct atomic-level insight into the active sites of a high-performance PGM-free ORR catalyst. <i>Science</i> , 2017, 357, 479-484.   | 6.0  | 1,273     |
| 6  | Atomically dispersed manganese catalysts for oxygen reduction in proton-exchange membrane fuel cells. <i>Nature Catalysis</i> , 2018, 1, 935-945.   | 16.1 | 1,075     |
| 7  | Nitrogen-Coordinated Single Cobalt Atom Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. <i>Advanced Materials</i> , 2018, 30, 1706758.   | 11.1 | 788       |
| 8  | Highly active atomically dispersed CoN <sub>4</sub> fuel cell cathode catalysts derived from surfactant-assisted MOFs: carbon-shell confinement strategy. <i>Energy and Environmental Science</i> , 2019, 12, 250-260.    | 15.6 | 691       |
| 9  | Synthesis-structure-performance correlation for polyaniline-MeC non-precious metal cathode catalysts for oxygen reduction in fuel cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 11392.                         | 6.7  | 545       |
| 10 | Design and Synthesis of Bimetallic Electrocatalyst with Multilayered Pt-Skin Surfaces. <i>Journal of the American Chemical Society</i> , 2011, 133, 14396-14403.  | 6.6  | 541       |
| 11 | Thermal stability of oxygen storage properties in a mixed CeO <sub>2</sub> -ZrO <sub>2</sub> system. <i>Applied Catalysis B: Environmental</i> , 1998, 16, 105-117.   | 10.8 | 492       |
| 12 | New roads and challenges for fuel cells in heavy-duty transportation. <i>Nature Energy</i> , 2021, 6, 462-474.  | 19.8 | 480       |
| 13 | High-performance fuel cell cathodes exclusively containing atomically dispersed iron active sites. <i>Energy and Environmental Science</i> , 2019, 12, 2548-2558.   | 15.6 | 457       |
| 14 | Multimetallic Au/FePt <sub>3</sub> Nanoparticles as Highly Durable Electrocatalyst. <i>Nano Letters</i> , 2011, 11, 919-926.  | 4.5  | 435       |
| 15 | Metal-organic framework-derived nitrogen-doped highly disordered carbon for electrochemical ammonia synthesis using N <sub>2</sub> and H <sub>2</sub> O in alkaline electrolytes. <i>Nano Energy</i> , 2018, 48, 217-226. | 8.2  | 406       |
| 16 | Unveiling Active Sites of CO <sub>2</sub> Reduction on Nitrogen-Coordinated and Atomically Dispersed Iron and Cobalt Catalysts. <i>ACS Catalysis</i> , 2018, 8, 3116-3122.  | 5.5  | 405       |
| 17 | Core/Shell Pd/FePt Nanoparticles as an Active and Durable Catalyst for the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2010, 132, 7848-7849.   | 6.6  | 366       |
| 18 | Thermally Driven Structure and Performance Evolution of Atomically Dispersed FeN <sub>4</sub> Sites for Oxygen Reduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18971-18980.                       | 7.2  | 362       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Creep-Resistant, Al <sub>2</sub> O <sub>3</sub> -Forming Austenitic Stainless Steels. <i>Science</i> , 2007, 316, 433-436.   | 6.0  | 337       |
| 20 | Microstructural Changes of Membrane Electrode Assemblies during PEFC Durability Testing at High Humidity Conditions. <i>Journal of the Electrochemical Society</i> , 2005, 152, A1011.                       | 1.3  | 328       |
| 21 | Hard-Magnet L10-CoPt Nanoparticles Advance Fuel Cell Catalysis. <i>Joule</i> , 2019, 3, 124-135.   | 11.7 | 326       |
| 22 | Interfacial Stability of Li Metal in Solid Electrolyte Elucidated via in Situ Electron Microscopy. <i>Nano Letters</i> , 2016, 16, 7030-7036.  | 4.5  | 309       |
| 23 | Single Cobalt Sites Dispersed in Hierarchically Porous Nanofiber Networks for Durable and High-Power PGM-Free Cathodes in Fuel Cells. <i>Advanced Materials</i> , 2020, 32, e2003577.                        | 11.1 | 262       |
| 24 | Recent advances in platinum monolayer electrocatalysts for oxygen reduction reaction: Scale-up synthesis, structure and activity of Pt shells on Pd cores. <i>Electrochimica Acta</i> , 2010, 55, 2645-2652. | 2.6  | 248       |
| 25 | A Facile Synthesis of MPd (M = Co, Cu) Nanoparticles and Their Catalysis for Formic Acid Oxidation. <i>Nano Letters</i> , 2012, 12, 1102-1106.   | 4.5  | 233       |
| 26 | High-Thermal-Conductivity Aluminum Nitride Ceramics: The Effect of Thermodynamic, Kinetic, and Microstructural Factors. <i>Journal of the American Ceramic Society</i> , 1997, 80, 1421-1435.                | 1.9  | 232       |
| 27 | Composition-Controlled Synthesis of Bimetallic PdPt Nanoparticles and Their Electro-oxidation of Methanol. <i>Chemistry of Materials</i> , 2011, 23, 4199-4203.  | 3.2  | 232       |
| 28 | Mechanism of Zn Insertion into Nanostructured $\gamma$ -MnO <sub>2</sub> : A Nonaqueous Rechargeable Zn Metal Battery. <i>Chemistry of Materials</i> , 2017, 29, 4874-4884.                                  | 3.2  | 225       |
| 29 | Atomic-scale origin of the large grain-boundary resistance in perovskite Li-ion-conducting solid electrolytes. <i>Energy and Environmental Science</i> , 2014, 7, 1638.                                      | 15.6 | 219       |
| 30 | Correlation Between Surface Chemistry and Electrocatalytic Properties of Monodisperse PtNi Nanoparticles. <i>Advanced Functional Materials</i> , 2011, 21, 147-152.  | 7.8  | 218       |
| 31 | Electrocatalytic oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid on supported Au and Pd bimetallic nanoparticles. <i>Green Chemistry</i> , 2014, 16, 3778-3786.                           | 4.6  | 217       |
| 32 | Recent developments in catalyst-related PEM fuel cell durability. <i>Current Opinion in Electrochemistry</i> , 2020, 21, 192-200.  | 2.5  | 216       |
| 33 | Ozonated Graphene Oxide Film as a Proton-Exchange Membrane. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3588-3593.  | 7.2  | 214       |
| 34 | Highly Robust Lithium Ion Battery Anodes from Lignin: An Abundant, Renewable, and Low-Cost Material. <i>Advanced Functional Materials</i> , 2014, 24, 86-94.   | 7.8  | 205       |
| 35 | Carbon Corrosion in PEM Fuel Cells and the Development of Accelerated Stress Tests. <i>Journal of the Electrochemical Society</i> , 2018, 165, F3148-F3160.  | 1.3  | 202       |
| 36 | A carbon-nanotube-supported graphene-rich non-precious metal oxygen reduction catalyst with enhanced performance durability. <i>Chemical Communications</i> , 2013, 49, 3291.                                | 2.2  | 196       |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Phase evolution in boron nitride thin films. <i>Journal of Materials Research</i> , 1993, 8, 1213-1216.  | 1.2 | 193       |
| 38 | Nanoscale Imaging of Fundamental Li Battery Chemistry: Solid-Electrolyte Interphase Formation and Preferential Growth of Lithium Metal Nanoclusters. <i>Nano Letters</i> , 2015, 15, 2011-2018.            | 4.5 | 185       |
| 39 | Ternary Electrocatalysts for Oxidizing Ethanol to Carbon Dioxide: Making Ir Capable of Splitting C-C Bond. <i>Journal of the American Chemical Society</i> , 2013, 135, 132-141.                           | 6.6 | 184       |
| 40 | Direct visualization of initial SEI morphology and growth kinetics during lithium deposition by in situ electrochemical transmission electron microscopy. <i>Chemical Communications</i> , 2014, 50, 2104. | 2.2 | 172       |
| 41 | Influence of Sulfur, Platinum, and Hafnium on the Oxidation Behavior of CVD NiAl Bond Coatings. <i>Oxidation of Metals</i> , 2002, 58, 513-544.  | 1.0 | 170       |
| 42 | Preferential thermal nitridation to form pin-hole free Cr-nitrides to protect proton exchange membrane fuel cell metallic bipolar plates. <i>Scripta Materialia</i> , 2004, 50, 1017-1022.                 | 2.6 | 168       |
| 43 | Synthesis and Characterization of Multimetallic Pd/Au and Pd/Au/FePt Core/Shell Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9368-9372.                                     | 7.2 | 167       |
| 44 | Control of Architecture in Rhombic Dodecahedral Pt-Ni Nanoframe Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2017, 139, 11678-11681.  | 6.6 | 166       |
| 45 | Surface faceting and elemental diffusion behaviour at atomic scale for alloy nanoparticles during in situ annealing. <i>Nature Communications</i> , 2015, 6, 8925.   | 5.8 | 159       |
| 46 | Observations of Accelerated Silicon Carbide Recession by Oxidation at High Water Vapor Pressures. <i>Journal of the American Ceramic Society</i> , 2000, 83, 211-13.                                       | 1.9 | 150       |
| 47 | Atomically Dispersed Single Ni Site Catalysts for Nitrogen Reduction toward Electrochemical Ammonia Synthesis Using $N_2$ and $H_2O$ . <i>Small Methods</i> , 2020, 4, 1900821.                            | 4.6 | 148       |
| 48 | Multimetallic Core/Interlayer/Shell Nanostructures as Advanced Electrocatalysts. <i>Nano Letters</i> , 2014, 14, 6361-6367.  | 4.5 | 146       |
| 49 | Tunnel structured manganese oxide nanowires as redox active electrodes for hybrid capacitive deionization. <i>Nano Energy</i> , 2018, 44, 476-488.   | 8.2 | 145       |
| 50 | Functionally graded hydroxyapatite coatings doped with antibacterial components. <i>Acta Biomaterialia</i> , 2010, 6, 2264-2273.   | 4.1 | 143       |
| 51 | Thermally nitrated stainless steels for polymer electrolyte membrane fuel cell bipolar plates. <i>Journal of Power Sources</i> , 2004, 138, 79-85.   | 4.0 | 142       |
| 52 | Electrical properties of epoxy resin based nano-composites. <i>Nanotechnology</i> , 2007, 18, 025703.  | 1.3 | 133       |
| 53 | Antioxidant Deactivation on Graphenic Nanocarbon Surfaces. <i>Small</i> , 2011, 7, 2775-2785.  | 5.2 | 133       |
| 54 | Rational Development of Ternary Alloy Electrocatalysts. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1668-1673.   | 2.1 | 130       |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 55 | Methanol tolerance of atomically dispersed single metal site catalysts: mechanistic understanding and high-performance direct methanol fuel cells. <i>Energy and Environmental Science</i> , 2020, 13, 3544-3555.                               | 15.6 | 129       |
| 56 | Chemical Vapor Deposition for Atomically Dispersed and Nitrogen Coordinated Single Metal Site Catalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21698-21705.  | 7.2  | 128       |
| 57 | Eliminating dissolution of platinum-based electrocatalysts at the atomic scale. <i>Nature Materials</i> , 2020, 19, 1207-1214.  | 13.3 | 127       |
| 58 | Synthesis of Homogeneous Pt-Bimetallic Nanoparticles as Highly Efficient Electrocatalysts. <i>ACS Catalysis</i> , 2011, 1, 1355-1359.   | 5.5  | 124       |
| 59 | ElectroCat: DOE's approach to PGM-free catalyst and electrode R&D. <i>Solid State Ionics</i> , 2018, 319, 68-76.  | 1.3  | 121       |
| 60 | Porosimetry of MEAs Made by a Thin Film Decal Method and Its Effect on Performance of PEFCs. <i>Journal of the Electrochemical Society</i> , 2004, 151, A1841.  | 1.3  | 117       |
| 61 | Phosphate-Tolerant Oxygen Reduction Catalysts. <i>ACS Catalysis</i> , 2014, 4, 3193-3200.   | 5.5  | 116       |
| 62 | Excellent Stability of a Lithium-Ion Conducting Solid Electrolyte upon Reversible Li <sup>+</sup> /H <sup>+</sup> Exchange in Aqueous Solutions. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 129-133.                          | 7.2  | 112       |
| 63 | Highly Stable and Active Pt <sup>~</sup> Cu Oxygen Reduction Electrocatalysts Based on Mesoporous Graphitic Carbon Supports. <i>Chemistry of Materials</i> , 2009, 21, 4515-4526.   | 3.2  | 109       |
| 64 | Evaluation of CFCC liners with EBC after field testing in a gas turbine. <i>Journal of the European Ceramic Society</i> , 2002, 22, 2769-2775.  | 2.8  | 108       |
| 65 | Effect of Quaternary Additions on the Oxidation Behavior of Hf-Doped NiAl. <i>Oxidation of Metals</i> , 2003, 59, 257-283.  | 1.0  | 106       |
| 66 | Preparation and Characterization of PdFe Nanoleaves as Electrocatalysts for Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2011, 23, 1570-1577.   | 3.2  | 106       |
| 67 | Identifying Contributing Degradation Phenomena in PEM Fuel Cell Membrane Electrode Assemblies Via Electron Microscopy. <i>ECS Transactions</i> , 2006, 3, 717-733.  | 0.3  | 103       |
| 68 | Influence of ionomer content on the structure and performance of PEFC membrane electrode assemblies. <i>Electrochimica Acta</i> , 2010, 55, 7404-7412.  | 2.6  | 100       |
| 69 | Nitrogen: unraveling the secret to stable carbon-supported Pt-alloy electrocatalysts. <i>Energy and Environmental Science</i> , 2013, 6, 2957.  | 15.6 | 99        |
| 70 | Recent Advances in Catalyst Accelerated Stress Tests for Polymer Electrolyte Membrane Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2018, 165, F492-F501.   | 1.3  | 98        |
| 71 | Elucidating the Dynamic Nature of Fuel Cell Electrodes as a Function of Conditioning: An ex Situ Material Characterization and in Situ Electrochemical Diagnostic Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 45016-45030. | 4.0  | 96        |
| 72 | An examination of double positioning boundaries and interface misfit in beta-SiC films on alpha-SiC substrates. <i>Journal of Applied Physics</i> , 1988, 63, 2645-2650.  | 1.1  | 94        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Transmission Electron Microscopy Observation of Corrosion Behaviors of Platinized Carbon Blacks under Thermal and Electrochemical Conditions. <i>Journal of the Electrochemical Society</i> , 2010, 157, B906.  | 1.3 | 91        |
| 74 | Enhancement of dielectric strength in nanocomposites. <i>Nanotechnology</i> , 2007, 18, 325704.   | 1.3 | 89        |
| 75 | Creep and Stress Rupture Behavior of an Advanced Silicon Nitride: Part I, Experimental Observations. <i>Journal of the American Ceramic Society</i> , 1994, 77, 1217-1227.  | 1.9 | 86        |
| 76 | Effects of High Water Vapor Pressure on Oxidation of Silicon Carbide at 1200°C. <i>Journal of the American Ceramic Society</i> , 2003, 86, 1249-1255.   | 1.9 | 84        |
| 77 | Fuel-Cell Catalyst-Layer Resistance via Hydrogen Limiting-Current Measurements. <i>Journal of the Electrochemical Society</i> , 2019, 166, F3020-F3031.   | 1.3 | 84        |
| 78 | Direct Visualization of Solid Electrolyte Interphase Formation in Lithium-Ion Batteries with <i>In Situ</i> Electrochemical Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2014, 20, 1029-1037.  | 0.2 | 83        |
| 79 | Quantitative Electrochemical Measurements Using <i>In Situ</i> ec-S/TEM Devices. <i>Microscopy and Microanalysis</i> , 2014, 20, 452-461.   | 0.2 | 80        |
| 80 | Dictating Pt-Based Electrocatalyst Performance in Polymer Electrolyte Fuel Cells, from Formulation to Application. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 46953-46964.   | 4.0 | 80        |
| 81 | Graphene-Riched Co <sub>9</sub> S <sub>8</sub> -N-C Non-Precious Metal Catalyst for Oxygen Reduction in Alkaline Media. <i>ECS Transactions</i> , 2011, 41, 1709-1717.  | 0.3 | 79        |
| 82 | Advanced analytical electron microscopy for lithium-ion batteries. <i>NPG Asia Materials</i> , 2015, 7, e193-e193.  | 3.8 | 76        |
| 83 | 3D Analysis of Fuel Cell Electrocatalyst Degradation on Alternate Carbon Supports. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 29839-29848.  | 4.0 | 76        |
| 84 | Effect of thermally grown oxide (TGO) microstructure on the durability of TBCs with PtNiAl diffusion bond coats. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 417, 322-333.                              | 2.6 | 75        |
| 85 | A Combined Probe-Molecule, Mössbauer, Nuclear Resonance Vibrational Spectroscopy, and Density Functional Theory Approach for Evaluation of Potential Iron Active Sites in an Oxygen Reduction Reaction Catalyst. <i>Journal of Physical Chemistry C</i> , 2017, 121, 16283-16290. | 1.5 | 75        |
| 86 | Low dose irradiation performance of SiC interphase SiC/SiC composites. <i>Journal of Nuclear Materials</i> , 1998, 253, 20-30.  | 1.3 | 73        |
| 87 | Atomic-level active sites of efficient imidazolate framework-derived nickel catalysts for CO <sub>2</sub> reduction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26231-26237.  | 5.2 | 72        |
| 88 | Single walled carbon nanohorns as photothermal cancer agents. <i>Lasers in Surgery and Medicine</i> , 2011, 43, 43-51.  | 1.1 | 67        |
| 89 | Durability of Pt-Co Alloy Polymer Electrolyte Fuel Cell Cathode Catalysts under Accelerated Stress Tests. <i>Journal of the Electrochemical Society</i> , 2018, 165, F3166-F3177.   | 1.3 | 66        |
| 90 | High-Temperature Stability of SiC-Based Composites in High-Water Vapor Pressure Environments. <i>Journal of the American Ceramic Society</i> , 2003, 86, 1272-1281.   | 1.9 | 65        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 91  | A comparative study of phosphoric acid-doped $\text{PBI}$ membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014, 52, 26-35.  | 2.4  | 65        |
| 92  | The formation of protective nitride surfaces for PEM fuel cell metallic bipolar plates. <i>Jom</i> , 2006, 58, 50-57.   | 0.9  | 62        |
| 93  | As-deposited mixed zone in thermally grown oxide beneath a thermal barrier coating. <i>Surface and Coatings Technology</i> , 2001, 146-147, 152-161.  | 2.2  | 61        |
| 94  | Elucidation of Fe-N-C electrocatalyst active site functionality via in-situ X-ray absorption and operando determination of oxygen reduction reaction kinetics in a PEFC. <i>Applied Catalysis B: Environmental</i> , 2019, 257, 117929. | 10.8 | 61        |
| 95  | Unraveling manganese dissolution/deposition mechanisms on the negative electrode in lithium ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10398.  | 1.3  | 59        |
| 96  | Characterization of alumina interfaces in TBC systems. <i>Journal of Materials Science</i> , 2009, 44, 1676-1686.   | 1.7  | 58        |
| 97  | Imaging and Microanalysis of Thin Ionomer Layers by Scanning Transmission Electron Microscopy. <i>Journal of the Electrochemical Society</i> , 2014, 161, F1111-F1117.  | 1.3  | 58        |
| 98  | Acid-Functionalized Mesoporous Carbon: An Efficient Support for Ruthenium-Catalyzed $\gamma$ -Valerolactone Production. <i>ChemSusChem</i> , 2015, 8, 2520-2528.  | 3.6  | 58        |
| 99  | Enhanced visible light photocatalytic water reduction from a $\text{g-C}_3\text{N}_4/\text{SrTa}_2\text{O}_6$ heterojunction. <i>Applied Catalysis B: Environmental</i> , 2017, 217, 448-458.   | 10.8 | 58        |
| 100 | Au on Nanosized NiO: A Cooperative Effect between Au and Nanosized NiO in the Base-Free Alcohol Oxidation. <i>ChemCatChem</i> , 2011, 3, 1612-1618.   | 1.8  | 57        |
| 101 | Potentiostatic and Potential Cycling Dissolution of Polycrystalline Platinum and Platinum Nano-Particle Fuel Cell Catalysts. <i>Journal of the Electrochemical Society</i> , 2018, 165, F3178-F3190.                                    | 1.3  | 57        |
| 102 | Thermally Driven Structure and Performance Evolution of Atomically Dispersed $\text{FeN}_4$ Sites for Oxygen Reduction. <i>Angewandte Chemie</i> , 2019, 131, 19147-19156.  | 1.6  | 57        |
| 103 | In Vitro and in Vivo Studies of Single-Walled Carbon Nanohorns with Encapsulated Metallofullerenes and Exohedrally Functionalized Quantum Dots. <i>Nano Letters</i> , 2010, 10, 2843-2848.  | 4.5  | 56        |
| 104 | Ion implantation in $\text{SiC}$ : Effect of channeling direction and critical energy for amorphization. <i>Journal of Materials Research</i> , 1988, 3, 321-328.   | 1.2  | 55        |
| 105 | The effect of water vapor on the oxidation behavior of Ni-Pt-Al coatings and alloys. <i>Surface and Coatings Technology</i> , 2006, 201, 3852-3856.   | 2.2  | 55        |
| 106 | Preparation and characterization of carbon-supported PtTi alloy electrocatalysts. <i>Journal of Power Sources</i> , 2008, 175, 794-799.   | 4.0  | 55        |
| 107 | Highly Active, Durable Dispersed Iridium Nanocatalysts for PEM Water Electrolyzers. <i>Journal of the Electrochemical Society</i> , 2018, 165, F82-F89.   | 1.3  | 55        |
| 108 | Visible-light-driven $\text{Bi}_2\text{O}_3/\text{WO}_3$ composites with enhanced photocatalytic activity. <i>RSC Advances</i> , 2015, 5, 91094-91102.  | 1.7  | 54        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 109 | Self-Assembly of Perylenediimide and Naphthalenediimide Nanostructures on Glass Substrates through Deposition from the Gas Phase. <i>Journal of the American Chemical Society</i> , 2008, 130, 10056-10057.  | 6.6  | 53        |
| 110 | Properties of ultrafast laser textured silicon for photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 2745-2751.   | 3.0  | 53        |
| 111 | Creep and Creep Rupture of an Advanced Silicon Nitride Ceramic. <i>Journal of the American Ceramic Society</i> , 1994, 77, 867-874.  | 1.9  | 51        |
| 112 | Physical properties of epoxy resin/titanium dioxide nanocomposites. <i>Polymer Engineering and Science</i> , 2011, 51, 87-93.  | 1.5  | 51        |
| 113 | The Thermal Expansion, Elastic and Fracture Properties of Porous Cordierite at Elevated Temperatures. <i>Journal of the American Ceramic Society</i> , 2012, 95, 1682-1691.  | 1.9  | 50        |
| 114 | PEM Fuel Cell Durability With Transportation Transient Operation. <i>ECS Transactions</i> , 2006, 3, 879-886.  | 0.3  | 49        |
| 115 | Effect of polymer-nanoparticle interactions on the glass transition dynamics and the conductivity mechanism in polyurethane titanium dioxide nanocomposites. <i>Polymer</i> , 2012, 53, 595-603.   | 1.8  | 49        |
| 116 | Self-Assembly of Nanostructured, Complex, Multication Films via Spontaneous Phase Separation and Strain-Driven Ordering. <i>Advanced Functional Materials</i> , 2013, 23, 1912-1918.   | 7.8  | 49        |
| 117 | Electron microscopy of the growth features and crystal structures of filament assisted CVD diamond films. <i>Surface and Coatings Technology</i> , 1989, 39-40, 199-210.   | 2.2  | 48        |
| 118 | Generating gradient germanium nanostructures by shock-induced amorphization and crystallization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9791-9796.  | 3.3  | 48        |
| 119 | Gravure Coating for Roll-to-Roll Manufacturing of Proton-Exchange-Membrane Fuel Cell Catalyst Layers. <i>Journal of the Electrochemical Society</i> , 2018, 165, F1012-F1018.  | 1.3  | 48        |
| 120 | Enhanced performance of room-temperature-grown epitaxial thin films of vanadium dioxide. <i>Applied Physics Letters</i> , 2011, 98, 251916.  | 1.5  | 47        |
| 121 | Visible light assisted photocatalytic hydrogen generation by Ta <sub>2</sub> O <sub>5</sub> /Bi <sub>2</sub> O <sub>3</sub> , TaON/Bi <sub>2</sub> O <sub>3</sub> , and Ta <sub>3</sub> N <sub>5</sub> /Bi <sub>2</sub> O <sub>3</sub> composites. <i>RSC Advances</i> , 2015, 5, 54998-55005. | 1.7  | 47        |
| 122 | Mesoscopic Framework Enables Facile Ionic Transport in Solid Electrolytes for Li Batteries. <i>Advanced Energy Materials</i> , 2016, 6, 1600053.   | 10.2 | 46        |
| 123 | Visible-light-active g-C <sub>3</sub> N <sub>4</sub> /N-doped Sr <sub>2</sub> Nb <sub>2</sub> O <sub>7</sub> heterojunctions as photocatalysts for the hydrogen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2507-2515.  | 2.5  | 46        |
| 124 | Protective nitride formation on stainless steel alloys for proton exchange membrane fuel cell bipolar plates. <i>Journal of Power Sources</i> , 2007, 174, 228-236.  | 4.0  | 45        |
| 125 | Nanoscale Engineering of Efficient Oxygen Reduction Electrocatalysts by Tailoring the Local Chemical Environment of Pt Surface Sites. <i>ACS Catalysis</i> , 2017, 7, 17-24.   | 5.5  | 44        |
| 126 | Helium irradiated cavity formation and defect energetics in Ni-based binary single-phase concentrated solid solution alloys. <i>Acta Materialia</i> , 2019, 164, 283-292.  | 3.8  | 44        |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Composition/structure/property relations of multi-ion-beam reactive sputtered lead lanthanum titanate thin films: Part I. Composition and structure analysis. Journal of Materials Research, 1992, 7, 3039-3055.                      | 1.2 | 43        |
| 128 | Non-congruence of thermally driven structural and electronic transitions in VO <sub>2</sub> . Journal of Applied Physics, 2012, 112, .  | 1.1 | 43        |
| 129 | A Visible-Light-Active Heterojunction with Enhanced Photocatalytic Hydrogen Generation. ChemSusChem, 2016, 9, 1869-1879.  | 3.6 | 42        |
| 130 | Direct in Situ Observation and Analysis of the Formation of Palladium Nanocrystals with High-Index Facets. Nano Letters, 2018, 18, 7004-7013.   | 4.5 | 42        |
| 131 | Pulsed Growth of Vertically Aligned Nanotube Arrays with Variable Density. ACS Nano, 2010, 4, 7573-7581.  | 7.3 | 41        |
| 132 | Pre-oxidized and nitrated stainless steel alloy foil for proton exchange membrane fuel cell bipolar plates: Part 1. Corrosion, interfacial contact resistance, and surface structure. Journal of Power Sources, 2010, 195, 5610-5618. | 4.0 | 41        |
| 133 | CO oxidation studies over cluster-derived Au/TiO <sub>2</sub> and Au/TiO <sub>2</sub> catalysts using DRIFTS. Catalysis Today, 2013, 208, 72-81.  | 2.2 | 41        |
| 134 | Enhanced Water Management of Polymer Electrolyte Fuel Cells with Additive-Containing Microporous Layers. ACS Applied Energy Materials, 2018, 1, 6006-6017.  | 2.5 | 41        |
| 135 | Effects of radiation on SiC-based Nicalon fibers. Journal of Materials Research, 1995, 10, 736-747.   | 1.2 | 40        |
| 136 | Effects of 3d electron configurations on helium bubble formation and void swelling in concentrated solid-solution alloys. Acta Materialia, 2019, 181, 519-529.  | 3.8 | 40        |
| 137 | Multilayered Oxide Interphase Concept for Ceramic-Matrix Composites. Journal of the American Ceramic Society, 1998, 81, 717-720.  | 1.9 | 38        |
| 138 | Pt <sub>3</sub> Re alloy nanoparticles as electrocatalysts for the oxygen reduction reaction. Nano Energy, 2016, 20, 202-211.   | 8.2 | 38        |
| 139 | Critical role of intercalated water for electrocatalytically active nitrogen-doped graphitic systems. Science Advances, 2016, 2, e1501178.  | 4.7 | 36        |
| 140 | Formation of the Conducting Filament in TaO <sub>x</sub> -Resistive Switching Devices by Thermal-Gradient-Induced Cation Accumulation. ACS Applied Materials & Interfaces, 2018, 10, 23187-23197.                                     | 4.0 | 35        |
| 141 | Transmission Electron Microscopy of Boundary-Lubricated Bearing Surfaces. Part II: Mineral Oil Lubricant with Sulfur-and Phosphorus-Containing Gear Oil Additives. Tribology Transactions, 2005, 48, 299-307.                         | 1.1 | 34        |
| 142 | Low-angle grain boundaries in YBaCuO high critical current densities. Physical Review B, 2009, 79, .  | 2.4 | 34        |
| 143 | Solid-state graphene formation via a nickel carbide intermediate phase. RSC Advances, 2015, 5, 99037-99043.   | 1.7 | 34        |
| 144 | Transformation of Al <sub>2</sub> O <sub>3</sub> to LiAlO <sub>2</sub> in Pb <sup>17</sup> Li at 800°C. Journal of Nuclear Materials, 2008, 376, 108-113.   | 1.3 | 33        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Properties of a nanodielectric cryogenic resin. <i>Applied Physics Letters</i> , 2010, 96, .  | 1.5 | 33        |
| 146 | Flux-Dependent Growth Kinetics and Diameter Selectivity in Single-Wall Carbon Nanotube Arrays. <i>ACS Nano</i> , 2011, 5, 8311-8321.  | 7.3 | 33        |
| 147 | High-Activity, Durable Oxygen Reduction Electrocatalyst: Nanoscale Composite of Platinum <sup>2+</sup> Tantalum Oxyphosphate on Vulcan Carbon. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1977-1981.                   | 2.1 | 32        |
| 148 | Evidence of High Electrocatalytic Activity of Molybdenum Carbide Supported Platinum Nanorrafts. <i>Journal of the Electrochemical Society</i> , 2015, 162, H681-H685.   | 1.3 | 32        |
| 149 | Impact of Catalyst Ink Dispersing Solvent on PEM Fuel Cell Performance and Durability. <i>Journal of the Electrochemical Society</i> , 2021, 168, 044517.   | 1.3 | 32        |
| 150 | Layer-by-layer epitaxial growth of GaN at low temperatures. <i>Thin Solid Films</i> , 1993, 225, 244-249.   | 0.8 | 31        |
| 151 | Occurrence and Distribution of Boron-Containing Phases in Sintered $\alpha$ -Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 1986, 69, 695-698.   | 1.9 | 30        |
| 152 | Evaluating the effect of oxygen content in BN interfacial coatings on the stability of SiC/BN/SiC composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 1999, 30, 463-470.                                      | 3.8 | 30        |
| 153 | Exposure of Ceramics and Ceramic Matrix Composites in Simulated and Actual Combustor Environments. <i>Journal of Engineering for Gas Turbines and Power</i> , 2000, 122, 212-218.   | 0.5 | 30        |
| 154 | Advanced alloys for compact, high-efficiency, high-temperature heat-exchangers. <i>International Journal of Hydrogen Energy</i> , 2007, 32, 3622-3630.  | 3.8 | 30        |
| 155 | Nanofiber Fuel Cell MEAs with a PtCo/C Cathode. <i>Journal of the Electrochemical Society</i> , 2019, 166, F3202-F3209.   | 1.3 | 30        |
| 156 | Growth stress $\epsilon$ ... $\epsilon$ ...microstructure relationships for alumina scales. <i>Materials at High Temperatures</i> , 2003, 20, 303-309.  | 0.5 | 30        |
| 157 | Characterization of thermally cycled alumina scales. <i>Materials at High Temperatures</i> , 2000, 17, 165-171.   | 0.5 | 29        |
| 158 | Microstructural stability of copper with antimony dopants at grain boundaries: experiments and molecular dynamics simulations. <i>Journal of Materials Science</i> , 2010, 45, 6707-6718.   | 1.7 | 29        |
| 159 | Fuel Cells Catalyst for Start-Up and Shutdown Conditions: Electrochemical, XPS, and STEM Evaluation of Sputter-Deposited Ru, Ir, and Ti on Pt-Coated Nanostructured Thin Film Supports. <i>Electrocatalysis</i> , 2012, 3, 284-297. | 1.5 | 29        |
| 160 | One-Step Synthesis of Zeolite Membranes Containing Catalytic Metal Nanoclusters. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 24671-24681.  | 4.0 | 29        |
| 161 | Selection of Single-Walled Carbon Nanotube with Narrow Diameter Distribution by Using a PPE $\epsilon$ PPV Copolymer. <i>ACS Macro Letters</i> , 2012, 1, 246-251.  | 2.3 | 28        |
| 162 | Todorokite-type manganese oxide nanowires as an intercalation cathode for Li-ion and Na-ion batteries. <i>RSC Advances</i> , 2015, 5, 106265-106271.  | 1.7 | 28        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | PtCo Cathode Catalyst Morphological and Compositional Changes after PEM Fuel Cell Accelerated Stress Testing. <i>Journal of the Electrochemical Society</i> , 2018, 165, F3078-F3084.   | 1.3 | 28        |
| 164 | Stable Metallic Enrichment in Conductive Filaments in TaO <sub>x</sub> -Based Resistive Switches Arising from Competing Diffusive Fluxes. <i>Advanced Electronic Materials</i> , 2019, 5, 1800954.                                | 2.6 | 28        |
| 165 | Evolution of Stress Failure Resulting from High-Temperature Stress-Corrosion Cracking in a Hot Isostatically Pressed Silicon Nitride. <i>Journal of the American Ceramic Society</i> , 1995, 78, 2129-2140.                       | 1.9 | 27        |
| 166 | Characterization of fiber/matrix interfaces in composites with a boron nitride matrix. <i>Composites Science and Technology</i> , 1996, 56, 967-975.  | 3.8 | 26        |
| 167 | Alkylamine Stabilized Ruthenium Nanocrystals: Faceting and Branching. <i>Journal of Physical Chemistry C</i> , 2008, 112, 12122-12126.  | 1.5 | 26        |
| 168 | Composition Dependence of the Pore Structure and Water Transport of Composite Catalyst Layers for Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2013, 160, F1000-F1005.                         | 1.3 | 26        |
| 169 | Transmission Electron Microscopy of Boundary-Lubricated Bearing Surfaces. Part I: Mineral Oil Lubricant. <i>Tribology Transactions</i> , 2004, 47, 430-439.   | 1.1 | 25        |
| 170 | Probing battery chemistry with liquid cell electron energy loss spectroscopy. <i>Chemical Communications</i> , 2015, 51, 16377-16380.   | 2.2 | 25        |
| 171 | Laminated C/SiC Matrix Composites Produced by CVI. <i>Journal of the American Ceramic Society</i> , 1997, 80, 113-116.  | 1.9 | 24        |
| 172 | Ceramic Composites with Multilayer Interface Coatings. <i>Journal of the American Ceramic Society</i> , 2000, 83, 3014-3020.  | 1.9 | 24        |
| 173 | Characterization of Si <sub>3</sub> N <sub>4</sub> Coated with Chemically-Vapor-Deposited Mullite after Na <sub>2</sub> SO <sub>4</sub> -Induced Corrosion. <i>Journal of the American Ceramic Society</i> , 1996, 79, 2489-2492. | 1.9 | 23        |
| 174 | Accelerated Testing of Carbon Corrosion and Membrane Degradation in PEM Fuel Cells. <i>ECS Transactions</i> , 2013, 50, 1003-1010.  | 0.3 | 23        |
| 175 | Bottom up synthesis of boron-doped graphene for stable intermediate temperature fuel cell electrodes. <i>Carbon</i> , 2017, 123, 605-615.   | 5.4 | 23        |
| 176 | Unraveling the Effects of Strontium Incorporation on Barite Growth—In Situ and Ex Situ Observations Using Multiscale Chemical Imaging. <i>Crystal Growth and Design</i> , 2018, 18, 5521-5533.                                    | 1.4 | 23        |
| 177 | Interpreting nanovoids in atom probe tomography data for accurate local compositional measurements. <i>Nature Communications</i> , 2020, 11, 1022.  | 5.8 | 23        |
| 178 | The effects of structure, composition, and chemical bonding on the mechanical properties of Si-aC:H thin films. <i>Surface and Coatings Technology</i> , 2002, 157, 197-206.  | 2.2 | 22        |
| 179 | A Facile High-speed Vibration Milling Method to Water-disperse Single-walled Carbon Nanohorns. <i>Chemistry of Materials</i> , 2010, 22, 347-351.   | 3.2 | 22        |
| 180 | Wet oxidation of stainless steels: New insights into hydrogen ingress. <i>Corrosion Science</i> , 2011, 53, 1633-1638.  | 3.0 | 22        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 181 | High Surface Area Molybdenum Nitride Support for Fuel Cell Electrodes. Journal of the Electrochemical Society, 2011, 158, B1255.   | 1.3 | 22        |
| 182 | Understanding Oxygen Reduction on Tantalum Oxyphosphate and Tantalum Oxide Supported Platinum by X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 18175-18183.                   | 1.5 | 22        |
| 183 | Monolithic Composite Electrodes Comprising Silicon Nanoparticles Embedded in Lignin-derived Carbon Fibers for Lithium-ion Batteries. Energy Technology, 2014, 2, 773-777.                                  | 1.8 | 22        |
| 184 | From suppressed void growth to significant void swelling in NiCoFeCr complex concentrated solid-solution alloy. Materialia, 2020, 9, 100603.   | 1.3 | 22        |
| 185 | Composition and Microstructure of Chemically Vapor-Deposited Boron Nitride, Aluminum Nitride, and Boron Nitride + Aluminum Nitride Composites. Journal of the American Ceramic Society, 1991, 74, 301-305. | 1.9 | 21        |
| 186 | Evaluating Environmental Barrier Coatings on Ceramic Matrix Composites After Engine and Laboratory Exposures. , 2002, , 155.   |     | 21        |
| 187 | Effects of Fe concentration on helium bubble formation in NiFe single-phase concentrated solid solution alloys. Materialia, 2019, 5, 100183.   | 1.3 | 21        |
| 188 | Improving Electronic Conductivity of Layered Oxides through the Formation of Two-Dimensional Heterointerface for Intercalation Batteries. ACS Applied Energy Materials, 2020, 3, 3835-3844.                | 2.5 | 21        |
| 189 | Structural-property relationships in dielectrophoretically assembled BaTiO <sub>3</sub> nanocomposites. Materials Letters, 1992, 15, 26-30.  | 1.3 | 20        |
| 190 | Matrix characterization of fibre-reinforced SiC matrix composites fabricated by chemical vapour infiltration. Journal of Materials Science, 1995, 30, 4279-4285.   | 1.7 | 20        |
| 191 | Syntheses, characterization, and catalytic oxygen electroreduction activities of carbon-supported PtW nanoparticle catalysts. Journal of Power Sources, 2010, 195, 2570-2578.                              | 4.0 | 20        |
| 192 | Epoxy nanodielectrics fabricated with <i>in situ</i> and <i>ex situ</i> techniques. Journal of Experimental Nanoscience, 2012, 7, 274-281.   | 1.3 | 20        |
| 193 | Achieving Diameter-Selective Separation of Single-Walled Carbon Nanotubes by Using Polymer Conformation-Confined Helical Cavity. ACS Macro Letters, 2012, 1, 701-705.                                      | 2.3 | 19        |
| 194 | Impact of IrRu oxygen evolution reaction catalysts on Pt nanostructured thin films under start-up/shutdown cycling. Journal of Power Sources, 2014, 269, 671-681.  | 4.0 | 19        |
| 195 | Durability of Polymer Electrolyte Membrane Fuel Cells Operated at Subfreezing Temperatures. Journal of the Electrochemical Society, 2016, 163, F1317-F1329.  | 1.3 | 19        |
| 196 | Crystal orientation and near-interface structure of chemically vapor deposited MoS <sub>2</sub> films. Journal of Materials Research, 1995, 10, 49-53.   | 1.2 | 18        |
| 197 | A narrow biasing window for high density diamond nucleation on Ir/YSZ/Si(100) using microwave plasma chemical vapor deposition. Diamond and Related Materials, 2012, 23, 28-33.                            | 1.8 | 18        |
| 198 | Magnetic alignment of SWCNTs decorated with Fe <sub>3</sub> O <sub>4</sub> to enhance mechanical properties of SC-15 epoxy. AIP Advances, 2013, 3, .   | 0.6 | 18        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 199 | Chemical Vapor Deposition of B <sub>13</sub> C <sub>2</sub> from BCl <sub>3</sub> -CH <sub>4</sub> -H <sub>2</sub> -Argon Mixtures. Journal of the American Ceramic Society, 1998, 81, 3077-3086.                  | 1.9 | 17        |
| 200 | Materials Selection for High Temperature (750Å°â€“1000Å°C) Metallic Recuperators for Improved Efficiency Microturbines. , 2001, , .  |     | 17        |
| 201 | Applications of High-Resolution Aberration-Corrected STEM Imaging to Studies of the Behavior of Nanophase Materials at Elevated Temperatures. Microscopy and Microanalysis, 2009, 15, 130-131.                     | 0.2 | 17        |
| 202 | Uniform texture in meter-long YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> tape. Physica C: Superconductivity and Its Applications, 2002, 382, 342-348.   | 0.6 | 16        |
| 203 | Water-gas shift reaction on alumina-supported Pt-CeO catalysts prepared by supercritical fluid deposition. Journal of Supercritical Fluids, 2017, 119, 113-121.  | 1.6 | 16        |
| 204 | Exposure of Ceramics and Ceramic Matrix Composites in Simulated and Actual Combustor Environments. , 1999, , .   |     | 15        |
| 205 | EBC Protection of SiC/SiC Composites in the Gas Turbine Combustion Environment. , 2000, , .  |     | 15        |
| 206 | The Effect of Water Vapor on Oxidation Performance of Alloys Used in Recuperators. , 2002, , 1045.   |     | 15        |
| 207 | Defect evolution in Ni and NiCoCr by in situ 2.8Å€MeV Au irradiation. Journal of Nuclear Materials, 2019, 523, 502-509.  | 1.3 | 15        |
| 208 | Overview of Creep Strength and Oxidation of Heat-Resistant Alloy Sheets and Foils for Compact Heat Exchangers. Journal of Turbomachinery, 2006, 128, 814-819.  | 0.9 | 14        |
| 209 | Structural Evolution of Molybdenum Carbides in Hot Aqueous Environments and Impact on Low-Temperature Hydroprocessing of Acetic Acid. Catalysts, 2015, 5, 406-423.   | 1.6 | 14        |
| 210 | Improved Fiber Coatings for NicalonÅ®/SiC Composites. , 0, , 375-384.  |     | 14        |
| 211 | The use of two reactive elements to optimize oxidation performance of alumina-forming alloys. Materials at High Temperatures, 2003, 20, 375-386.   | 0.5 | 14        |
| 212 | Ion beam deposition of Î²-SiC layers onto Î±-SiC substrates. Vacuum, 1989, 39, 1065-1068.  | 1.6 | 13        |
| 213 | Composition/structure/property relations of multi-ion-beam reactive sputtered lead lanthanum titanate thin films: Part II. Textured microstructure development. Journal of Materials Research, 1993, 8, 2191-2202. | 1.2 | 13        |
| 214 | Coating and near-surface modification design strategies for protective and functional surfaces. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 748-755.   | 0.8 | 13        |
| 215 | Effective Strategy for Improving Electrocatalyst Durability by Adhesive Immobilization of Catalyst Nanoparticles on Graphitic Carbon Supports. ACS Catalysis, 2015, 5, 3662-3674.                                  | 5.5 | 13        |
| 216 | Impact of Polyvinylidene Fluoride on Nanofiber Cathode Structure and Durability in Proton Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2020, 167, 054517.                                 | 1.3 | 13        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Preparation and investigation of Pd doped Cu catalysts for selective hydrogenation of acetylene. <i>Frontiers of Chemical Science and Engineering</i> , 2020, 14, 522-533.  | 2.3 | 12        |
| 218 | Exchange of Ions across the TiN/TaO <sub>x</sub> Interface during Electroformation of TaO <sub>x</sub> -Based Resistive Switching Devices. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 27378-27385.   | 4.0 | 12        |
| 219 | Selection, Development and Testing of Stainless Steels and Alloys for High-Temperature Recuperator Applications. , 2003, , 763.   |     | 11        |
| 220 | Colloidal synthesis of BaF <sub>2</sub> nanoparticles and their application as fillers in polymer nanocomposites. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 106, 661-667.  | 1.1 | 11        |
| 221 | Electrospun Particle/Polymer Fiber Electrodes with a Neat Nafion Binder for Hydrogen/Air Fuel Cells. <i>ECS Transactions</i> , 2019, 92, 595-602.   | 0.3 | 11        |
| 222 | Effect of Catalyst and Catalyst Layer Composition on Catalyst Support Durability. <i>Journal of the Electrochemical Society</i> , 2021, 168, 044502.  | 1.3 | 11        |
| 223 | High radiation tolerance of an ultrastrong nanostructured NiCoCr alloy with stable dispersed nanooxides and fine grain structure. <i>Journal of Nuclear Materials</i> , 2021, 557, 153316.  | 1.3 | 11        |
| 224 | Interaction of Chemically Vapor Deposited YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> with Ytria-Stabilized Zirconia Substrates. <i>Journal of the American Ceramic Society</i> , 1991, 74, 2021-2024.  | 1.9 | 10        |
| 225 | Synthesis of functionally graded metal-ceramic microstructures by chemical vapor deposition. <i>Journal of Materials Research</i> , 1995, 10, 3000-3002.  | 1.2 | 10        |
| 226 | Nanodielectrics for Cryogenic Applications. <i>IEEE Transactions on Applied Superconductivity</i> , 2009, 19, 2354-2358.  | 1.1 | 10        |
| 227 | Sulfidationâ€“Oxidation Behavior of FeCrAl and TiCrAl and the Third-Element Effect. <i>Oxidation of Metals</i> , 2010, 74, 1-9.   | 1.0 | 10        |
| 228 | ELECTRICAL AND MECHANICAL PROPERTIES OF TITANIUM DIOXIDE NANOPARTICLE FILLED EPOXY RESIN COMPOSITES. <i>AIP Conference Proceedings</i> , 2010, , .  | 0.3 | 10        |
| 229 | Novel Pulse Electrodeposited Coâ€“Cuâ€“ZnO Nanowire/tube Catalysts for C <sub>1</sub> -C <sub>4</sub> Alcohols and C <sub>2</sub> -C <sub>6</sub> (Except C <sub>5</sub> ) Hydrocarbons from CO and H <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2012, 116, 10924-10933. | 1.5 | 10        |
| 230 | Comparison of Short-Term Oxidation Behavior of Model and Commercial Chromia-Forming Ferritic Stainless Steels in Dry and Wet Air. <i>Oxidation of Metals</i> , 2012, 78, 1-16.  | 1.0 | 10        |
| 231 | High-temperature transformation of Fe-decorated single-wall carbon nanohorns to nanoysters: a combined experimental and theoretical study. <i>Nanoscale</i> , 2013, 5, 1849-1857.   | 2.8 | 10        |
| 232 | Chemical Vapor Deposition for Atomically Dispersed and Nitrogen Coordinated Single Metal Site Catalysts. <i>Angewandte Chemie</i> , 2020, 132, 21882-21889.   | 1.6 | 10        |
| 233 | Austenitic Stainless Steels and Alloys With Improved High-Temperature Performance for Advanced Microturbine Recuperators. , 2004, , 131.  |     | 9         |
| 234 | Incremental Growth of Short SWNT Arrays by Pulsed Chemical Vapor Deposition. <i>Small</i> , 2012, 8, 1534-1542.   | 5.2 | 9         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 235 | High temperature proton exchange membranes with enhanced proton conductivities at low humidity and high temperature based on polymer blends and block copolymers of poly(1,3-cyclohexadiene) and poly(ethylene glycol). <i>Polymer</i> , 2015, 77, 208-217. | 1.8 | 9         |
| 236 | Brittle fracture to recoverable plasticity: polytypism-dependent nanomechanics in todorokite-like nanobelts. <i>Nanoscale Advances</i> , 2019, 1, 357-366.  | 2.2 | 9         |
| 237 | Electron Microscopy of Defects in Epitaxial beta-SiC Thin Films Grown on Silicon and Carbon {0001} Faces of alpha-SiC Substrates. <i>Journal of the American Ceramic Society</i> , 1990, 73, 1283-1288.   | 1.9 | 8         |
| 238 | Deformation and microstructural changes in SiC whisker-reinforced Si <sub>3</sub> N <sub>4</sub> composites. <i>Journal of Materials Research</i> , 1991, 6, 2735-2746.   | 1.2 | 8         |
| 239 | Epitaxial nucleation of polycrystalline silicon carbide during chemical vapor deposition. <i>Journal of Materials Research</i> , 1993, 8, 1086-1092.  | 1.2 | 8         |
| 240 | Oxidation Behavior of Prospective Silicon Nitride Materials for Advanced Microturbine Applications. , 2001, , .   |     | 8         |
| 241 | Microstructure of carbon fibers prepared laser CVD. <i>Carbon</i> , 2004, 42, 2721-2727.  | 5.4 | 8         |
| 242 | Long-Term Microturbine Exposure of an Advanced Alloy for Microturbine Primary Surface Recuperators. , 2008, , .   |     | 8         |
| 243 | Comparison of Three Microturbine Primary Surface Recuperator Alloys. <i>Journal of Engineering for Gas Turbines and Power</i> , 2010, 132, .  | 0.5 | 8         |
| 244 | Improved electrochemical cycling stability of intercalation battery electrodes via control of material morphology. <i>Ionics</i> , 2019, 25, 493-502.   | 1.2 | 8         |
| 245 | Stainless Steels With Improved Oxidation Resistance for Recuperators. , 2004, , .   |     | 8         |
| 246 | Effect of Substrate Orientation on Interfacial and Bulk Character of Chemically Vapor Deposited Monocrystalline Silicon Carbide Thin Films. <i>Journal of the American Ceramic Society</i> , 1990, 73, 1289-1296.   | 1.9 | 7         |
| 247 | Microstructural characterization of a creep-deformed SiC whisker-reinforced Si <sub>3</sub> N <sub>4</sub> . <i>Ultramicroscopy</i> , 1991, 37, 263-278.  | 0.8 | 7         |
| 248 | Radial distribution function analyses of amorphous carbon thin films containing various levels of silicon and hydrogen. <i>Journal of Applied Physics</i> , 2004, 96, 273-279.  | 1.1 | 7         |
| 249 | Overview of Creep Strength and Oxidation of Heat-Resistant Alloy Sheets and Foils for Compact Heat-Exchangers. , 2005, , 1011.  |     | 7         |
| 250 | Fabrication of epitaxial $\hat{3}$ -Al <sub>2</sub> O <sub>3</sub> and spinel NiAl <sub>2</sub> O <sub>4</sub> films on SrTiO <sub>3</sub> by pulsed laser ablation. <i>Journal of Crystal Growth</i> , 2008, 311, 210-213.                                 | 0.7 | 7         |
| 251 | Comparison of Recuperator Alloy Degradation in Laboratory and Engine Testing. <i>Journal of Engineering for Gas Turbines and Power</i> , 2008, 130, .   | 0.5 | 7         |
| 252 | Investigation of Transport Properties, Microstructure, and Thermal Behavior of PEFC Catalyst Layers. <i>ECS Transactions</i> , 2010, 33, 1207-1215.   | 0.3 | 7         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 253 | Kinetics and mechanisms of high-temperature creep in polycrystalline aluminum nitride. Journal of Materials Research, 1993, 8, 1101-1108.   | 1.2 | 6         |
| 254 | Evaluating the Stability of BSAS-Based EBCs in High Water-Vapor Pressure Environments. , 2004, , 377.   |     | 6         |
| 255 | Feasibility assessment of self-grading metallic bond coat alloys for EBCs/TBCs to protect Si-Based ceramics. Scripta Materialia, 2005, 52, 393-397.   | 2.6 | 6         |
| 256 | Creep Strength and Microstructure of AL20-25+Nb Alloy Sheets and Foils for Advanced Microturbine Recuperators. Journal of Engineering for Gas Turbines and Power, 2007, 129, 798-805.                                 | 0.5 | 6         |
| 257 | Versatile and biomass synthesis of iron-based nanoparticles supported on carbon matrix with high iron content and tunable reactivity. Journal of Nanoparticle Research, 2012, 14, 1.                                  | 0.8 | 6         |
| 258 | Oxygen Electroreduction on Nanoscale Pt/[TaOPO4/VC] and Pt/[Ta2O5/VC] in Alkaline Electrolyte. ECS Electrochemistry Letters, 2013, 2, H46-H50.  | 1.9 | 6         |
| 259 | Investigating Effects of Alloy Chemical Complexity on Helium Bubble Formation by Accurate Segregation Measurements Using Atom Probe Tomography. Microscopy and Microanalysis, 2019, 25, 1558-1559.                    | 0.2 | 6         |
| 260 | MICROSTRUCTURAL CHARACTERIZATION OF UDIMET 720 : A NICKEL-BASE ALLOY. Journal De Physique Colloque, 1988, 49, C6-391-C6-396.  | 0.2 | 5         |
| 261 | High-Resolution Electron Microscopy of Silicon Carbide-Whisker-Reinforced Alumina Composite Interfaces in Specimens Subjected to Elevated Temperatures. Journal of the American Ceramic Society, 1993, 76, 2397-2400. | 1.9 | 5         |
| 262 | The Evaluation of CFCC Liners After Field Testing in a Gas Turbine â€“ IV. , 2003, , 657.   |     | 5         |
| 263 | Microstructure and Mechanical Behavior in Spinodal Fe35Ni15Mn25Al25 Alloy. Microscopy and Microanalysis, 2009, 15, 116-117.   | 0.2 | 5         |
| 264 | Microstructure and mechanical properties of two-phase Fe30Ni20Mn20Al30. Part I: Microstructure. Journal of Materials Science, 2013, 48, 7435-7445.  | 1.7 | 5         |
| 265 | Microstructure and mechanical behavior of directionally solidified Fe35Ni15Mn25Al25. Intermetallics, 2013, 32, 413-422.   | 1.8 | 5         |
| 266 | Microstructure and Mechanical Properties of Heatâ€“Treated Silicon Carbideâ€“Aluminum Nitride Solid Solutions. Journal of the American Ceramic Society, 2002, 85, 933-940.  | 1.9 | 4         |
| 267 | Accelerated Oxidation of Type 347 Stainless Steel Primary Surface Recuperators Operating Above 600Â°C. , 2007, , 821.   |     | 4         |
| 268 | 25,000-Hour Hybrid Oxide CMC Field Test Summary. , 2008, , .  |     | 4         |
| 269 | Microstructural and Mechanical Characterization of a Hybrid Oxide CMC Combustor Liner After 25,000-Hour Engine Test. , 2009, , .  |     | 4         |
| 270 | Characterization of Durable Nanostructured Thin Film Catalysts Tested under Transient Conditions Using Analytical Aberration-Corrected Electron Microscopy. ECS Transactions, 2011, 41, 1099-1103.                    | 0.3 | 4         |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 271 | Investigation of a Silicotungstic Acid Functionalized Carbon on Pt Activity and Durability for the Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2012, 159, F871-F879.                          | 1.3 | 4         |
| 272 | Oxide growth stress measurements and relaxation mechanisms for alumina scales grown on FeCrAlY. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2012, 63, 857-861.   | 0.8 | 4         |
| 273 | PEM Fuel Cell Catalyst Layer Structure Degradation during Carbon Corrosion. <i>ECS Transactions</i> , 2013, 58, 945-952.   | 0.3 | 4         |
| 274 | Microstructural Characterization of Silicon Nitride Ceramics Processed by Pressureless Sintering, Overpressure Sintering, and Sinter HIP. <i>Ceramic Engineering and Science Proceedings</i> , 0, , 603-615.                 | 0.1 | 4         |
| 275 | Laser Interactions for the Synthesis and In Situ Diagnostics of Nanomaterials. <i>Springer Series in Materials Science</i> , 2014, , 143-173.  | 0.4 | 4         |
| 276 | Microstructural evaluation of dross formation on Mg- and non-Mg-containing Al alloys from industrial furnaces. <i>Materials at High Temperatures</i> , 2003, 20, 453-460.  | 0.5 | 4         |
| 277 | Understanding effects of chemical complexity on helium bubble formation in Ni-based concentrated solid solution alloys based on elemental segregation measurements. <i>Journal of Nuclear Materials</i> , 2022, 569, 153902. | 1.3 | 4         |
| 278 | A three-dimensional, biaxially textured oxide nanofence composed of MgO single crystal nanobelt segments. <i>Nanotechnology</i> , 2009, 20, 215608.  | 1.3 | 3         |
| 279 | Electrical properties of a polymeric nanocomposite with in-situ synthesized nanoparticles. , 2009, , .   |     | 3         |
| 280 | Synthesis of platinum single-crystal nanoparticles in water vapor. <i>Journal of Materials Science</i> , 2013, 48, 3834-3840.  | 1.7 | 3         |
| 281 | Laser-assisted solid-state synthesis of carbon nanotube/silicon core/shell structures. <i>Nanotechnology</i> , 2013, 24, 255604.   | 1.3 | 3         |
| 282 | High-Resolution Mapping of the PFSA Polymer Distribution in PEFC Electrode Layers. <i>ECS Transactions</i> , 2014, 64, 819-827.  | 0.3 | 3         |
| 283 | Microstructural Evolution and ORR Activity of Nanocolumnar Platinum Thin Films with Different Mass Loadings Grown by High Pressure Sputtering. <i>Journal of the Electrochemical Society</i> , 2020, 167, 134514.            | 1.3 | 3         |
| 284 | Powder synthesis, sintering, and characterization of $Ba_{1+x}Zr_{6-2x}Si_2O_{24}$ -A low thermal expansion system. <i>Scripta Metallurgica Et Materialia</i> , 1995, 32, 1967-1972.   | 1.0 | 2         |
| 285 | TEM Evaluation of Aged Proton Exchange Membrane Fuel Cells. <i>Microscopy and Microanalysis</i> , 2004, 10, 1368-1369.   | 0.2 | 2         |
| 286 | Liquid reagent CVD of carbon. I. Processing and microstructure. <i>Carbon</i> , 2004, 42, 1895-1900.   | 5.4 | 2         |
| 287 | The High-Temperature Stability of an Oxide/Oxide Composite at High Water-Vapor Pressure. , 2005, , 369.  |     | 2         |
| 288 | Long-Term Microturbine Exposure of an Advanced Alloy for Microturbine Primary Surface Recuperators. <i>Journal of Engineering for Gas Turbines and Power</i> , 2009, 131, .  | 0.5 | 2         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 289 | Pt-Co Bimetallic Catalysts for PEM Fuel Cell Cathodes. <i>Microscopy and Microanalysis</i> , 2009, 15, 146-147.   | 0.2 | 2         |
| 290 | Breakdown properties of epoxy nanodielectric. , 2010, , .   |     | 2         |
| 291 | Primary Surface Recuperator Alloy Oxidation: A Comparison of Accelerated Engine Testing to Field Operation. <i>Journal of Engineering for Gas Turbines and Power</i> , 2011, 133, .               | 0.5 | 2         |
| 292 | CdSe <sub>1-x</sub> Te <sub>x</sub> Phase Segregation in CdSe/CdTe Based Solar Cells. <i>Microscopy and Microanalysis</i> , 2015, 21, 691-692.  | 0.2 | 2         |
| 293 | In situ Electrochemical TEM for Quantitative Nanoscale Imaging Dynamics of Solid Electrolyte Interphase and Lithium Electrodeposition. <i>Microscopy and Microanalysis</i> , 2015, 21, 2437-2438. | 0.2 | 2         |
| 294 | Overcoming the Challenges of Beam-sensitivity in Fuel Cell Electrodes. <i>Microscopy and Microanalysis</i> , 2017, 23, 2222-2223.   | 0.2 | 2         |
| 295 | Microscopic Analysis of PEMFC Catalyst Layers. <i>ECS Transactions</i> , 2019, 92, 95-105.  | 0.3 | 2         |
| 296 | Oxygen Reduction Reaction Activity of Nanocolumnar Platinum Thin Films by High Pressure Sputtering. <i>Journal of the Electrochemical Society</i> , 2020, 167, 134508.                            | 1.3 | 2         |
| 297 | Use of Very High Water-Vapor Pressures to Evaluate Candidate Compositions for Environmental Barrier Coatings. , 2005, , 363.  |     | 1         |
| 298 | DIELECTRIC PROPERTIES OF VARIOUS NANOCOMPOSITE MATERIALS. , 2010, , .   |     | 1         |
| 299 | Tuning Electrodeposition Parameters for Tailored Nanoparticle Size, Shape, and Morphology: An In Situ ec-STEM Investigation. <i>Microscopy and Microanalysis</i> , 2014, 20, 1506-1507.           | 0.2 | 1         |
| 300 | In operando Transmission Electron Microscopy Imaging of SEI Formation and Structure in Li-Ion and Li-Metal Batteries. <i>Microscopy and Microanalysis</i> , 2014, 20, 1538-1539.                  | 0.2 | 1         |
| 301 | Novel Method for Precision Controlled Heating of TEM Thin Sections to Study Reaction Processes. <i>Microscopy and Microanalysis</i> , 2014, 20, 1628-1629.  | 0.2 | 1         |
| 302 | Application of Electrochemical Liquid Cells for Electrical Energy Storage and Conversion Studies. , 0, , 237-257.   |     | 1         |
| 303 | Electron Tomography of PEM Fuel Cell Catalyst Coarsening on Alternate Carbon Supports. <i>Microscopy and Microanalysis</i> , 2017, 23, 2090-2091.   | 0.2 | 1         |
| 304 | Resolving Active Sites in Atomically Dispersed Electrocatalysts for Energy Conversion Applications. <i>Microscopy and Microanalysis</i> , 2019, 25, 2066-2067.                                    | 0.2 | 1         |
| 305 | Electromagnetic Field Reconstructions of 4D-STEM Datasets using Ptychography and Differential Phase Contrast Imaging. <i>Microscopy and Microanalysis</i> , 2019, 25, 66-67.                      | 0.2 | 1         |
| 306 | TEM Specimen Preparation of Thin Interfacial Coatings on Continuous Ceramic Fibers Using the Focused Ion Beam (FIB) Technique. <i>Microscopy and Microanalysis</i> , 2004, 10, 1160-1161.         | 0.2 | 0         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 307 | The Evaluation of CFCC Liners After Field Testing in a Gas Turbine: V. , 2005, , 351.  |     | 0         |
| 308 | Design strategies for oxidation-resistant intermetallic and advanced metallic alloys. , 2008, , 3-18.  |     | 0         |
| 309 | Cryo-SEM of Hydrated High Temperature Proton Exchange Membranes. Microscopy and Microanalysis, 2009, 15, 1420-1421.  | 0.2 | 0         |
| 310 | XPS Analysis of Fuel Cell Membrane Prepared Using an Ultra-Low-Angle-Microtomy Technique. Microscopy and Microanalysis, 2009, 15, 1130-1131.                           | 0.2 | 0         |
| 311 | Nonequilibrium laser synthesis and real-time diagnostics of carbon nanomaterial growth. , 2012, , .  |     | 0         |
| 312 | Spatially Resolved Degradation During Startup and Shutdown PEM Fuel Cell Operation. ECS Meeting Abstracts, 2013, , .   | 0.0 | 0         |
| 313 | Quantification of Atomic Arrangements at Heterostructure Interfaces. Microscopy and Microanalysis, 2016, 22, 1502-1503.  | 0.2 | 0         |
| 314 | Evolution of Au 25 (SR)18 Nanoclusters on Ceria Surfaces during in situ Electron Beam Irradiation. Microscopy and Microanalysis, 2016, 22, 1278-1279.                  | 0.2 | 0         |
| 315 | Carbonaceous Nanowire Supports for Polymer Electrolyte Membrane Fuel Cells. Journal of the Electrochemical Society, 2016, 163, F115-F121.                              | 1.3 | 0         |
| 316 | Atom Probe Tomography of Interfacial Segregation in CdTe-based Solar Cells. Microscopy and Microanalysis, 2016, 22, 646-647.   | 0.2 | 0         |
| 317 | Data Analytics Applied to Chemical Transformations in Liquids. Microscopy and Microanalysis, 2016, 22, 740-741.  | 0.2 | 0         |
| 318 | A "Hidden" Mesoscopic Feature Revealed By Electron Microscopy Could Facilitate Ion Transport In Solid Electrolytes. Microscopy and Microanalysis, 2016, 22, 1308-1309. | 0.2 | 0         |
| 319 | Integrating Novel Microscopy into Battery Research: From Atomic Resolution to In Situ and Functional Imaging. Microscopy and Microanalysis, 2017, 23, 1998-1999.       | 0.2 | 0         |
| 320 | In situ Nanoscale Imaging and Spectroscopy of Energy Storage Materials. Microscopy and Microanalysis, 2017, 23, 1964-1965.   | 0.2 | 0         |
| 321 | Interpreting Voids in Atom Probe Tomography Data via Experiment and Theory. Microscopy and Microanalysis, 2019, 25, 290-291.   | 0.2 | 0         |
| 322 | Deep Learning-Based Workflow for Analyzing Helium Bubbles in Transmission Electron Microscopy Images. Microscopy and Microanalysis, 2021, 27, 2132-2133.               | 0.2 | 0         |
| 323 | AN APFIM/FEM INVESTIGATION OF PLANAR DEFECTS IN HIGH TEMPERATURE SUPERCONDUCTORS. Journal De Physique Colloque, 1988, 49, C6-447-C6-452.                               | 0.2 | 0         |
| 324 | FIM SIMULATION OF RBa2 Cu3 O7-x SUPERCONDUCTORS. Journal De Physique Colloque, 1988, 49, C6-483-C6-488.  | 0.2 | 0         |