

# Kyu Hwan Oh

## List of Publications by Citations

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173  
papers

9,231  
citations

42  
h-index

93  
g-index

178  
ext. papers

10,551  
ext. citations

7.4  
avg, IF

6.02  
L-index

| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 173 | Highly stretchable and tough hydrogels. <i>Nature</i> , <b>2012</b> , 489, 133-6  | 50.4 | 3109      |
| 172 | Highly stretchable, transparent ionic touch panel. <i>Science</i> , <b>2016</b> , 353, 682-7  | 33.3 | 599       |
| 171 | Microscale spherical carbon-coated Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> as ultra high power anode material for lithium batteries. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 1345                                | 35.4 | 399       |
| 170 | Double carbon coating of LiFePO <sub>4</sub> as high rate electrode for rechargeable lithium batteries. <i>Advanced Materials</i> , <b>2010</b> , 22, 4842-5  | 24   | 329       |
| 169 | Wrinkled hard skins on polymers created by focused ion beam. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 1130-3   | 11.5 | 190       |
| 168 | Stable silicon-ionic liquid interface for next-generation lithium-ion batteries. <i>Nature Communications</i> , <b>2015</b> , 6, 6230   | 17.4 | 183       |
| 167 | Reversible high-capacity Si nanocomposite anodes for lithium-ion batteries enabled by molecular layer deposition. <i>Advanced Materials</i> , <b>2014</b> , 26, 1596-601  | 24   | 146       |
| 166 | Nanoscale Interface Modification of LiCoO <sub>2</sub> by Al <sub>2</sub> O <sub>3</sub> Atomic Layer Deposition for Solid-State Li Batteries. <i>Journal of the Electrochemical Society</i> , <b>2012</b> , 159, A1120-A1124               | 3.9  | 140       |
| 165 | Folding wrinkles of a thin stiff layer on a soft substrate. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2012</b> , 468, 932-953   | 2.4  | 133       |
| 164 | Solid State Enabled Reversible Four Electron Storage. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 120-127   | 21.8 | 131       |
| 163 | A new criterion for internal crack formation in continuously cast steels. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2000</b> , 31, 779-794                                | 2.5  | 128       |
| 162 | Electric current-induced annealing during uniaxial tension of aluminum alloy. <i>Scripta Materialia</i> , <b>2014</b> , 75, 58-61   | 5.6  | 124       |
| 161 | Ionic liquid enabled FeS <sub>2</sub> for high-energy-density lithium-ion batteries. <i>Advanced Materials</i> , <b>2014</b> , 26, 7386-92  | 24   | 106       |
| 160 | Conformal Coatings of Cyclized-PAN for Mechanically Resilient Si nano-Composite Anodes. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 697-702   | 21.8 | 105       |
| 159 | Structure and mechanical properties of Ag-incorporated DLC films prepared by a hybrid ion beam deposition system. <i>Thin Solid Films</i> , <b>2007</b> , 516, 248-251  | 2.2  | 94        |
| 158 | A Stabilized PAN-FeS <sub>2</sub> Cathode with an EC/DEC Liquid Electrolyte. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1300961  | 21.8 | 91        |
| 157 | A Highly Reversible Nano-Si Anode Enabled by Mechanical Confinement in an Electrochemically Activated Li <sub>x</sub> Ti <sub>4</sub> Ni <sub>4</sub> Si <sub>7</sub> Matrix. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 1226-1231 | 21.8 | 86        |

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|-----|---|------|----|
| 156 | Effect of pores in hollow carbon nanofibers on their negative electrode properties for a lithium rechargeable battery. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 6702-10   | 9.5  | 74 |
| 155 | Effect of -Carbon and Sulfur in Continuously Cast Strand on Longitudinal Surface Cracks.. <i>ISIJ International</i> , <b>1996</b> , 36, 284-289   | 1.7  | 70 |
| 154 | Co-precipitation synthesis of micro-sized spherical LiMn <sub>0.5</sub> Fe <sub>0.5</sub> PO <sub>4</sub> cathode material for lithium batteries. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 19368   |      | 68 |
| 153 | Unexpected high power performance of atomic layer deposition coated Li[Ni <sub>1/3</sub> Mn <sub>1/3</sub> Co <sub>1/3</sub> ]O <sub>2</sub> cathodes. <i>Journal of Power Sources</i> , <b>2014</b> , 254, 190-197   | 8.9  | 66 |
| 152 | Direct growth of compound semiconductor nanowires by on-film formation of nanowires: bismuth telluride. <i>Nano Letters</i> , <b>2009</b> , 9, 2867-72  | 11.5 | 64 |
| 151 | Electric current-assisted deformation behavior of Al-Mg-Si alloy under uniaxial tension. <i>International Journal of Plasticity</i> , <b>2017</b> , 94, 148-170   | 7.6  | 63 |
| 150 | Highly Stretchable and Notch-Insensitive Hydrogel Based on Polyacrylamide and Milk Protein. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 29220-29226  | 9.5  | 60 |
| 149 | Effect of Cooling Rate on ZST, LIT and ZDT of Carbon Steels Near Melting Point.. <i>ISIJ International</i> , <b>1998</b> , 38, 1093-1099  | 1.7  | 57 |
| 148 | Prediction of cracks in continuously cast steel beam blank through fully coupled analysis of fluid flow, heat transfer, and deformation behavior of a solidifying shell. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2000</b> , 31, 225-237 | 2.3  | 55 |
| 147 | Microstructure Study of Electrochemically Driven Li <sub>x</sub> Si. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 1199-1204  | 21.8 | 53 |
| 146 | Interface-enhanced Li ion conduction in a LiBH <sub>4</sub> -SiO <sub>2</sub> solid electrolyte. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 22540-7   | 3.6  | 51 |
| 145 | Extreme wettability of nanostructured glass fabricated by non-lithographic, anisotropic etching. <i>Scientific Reports</i> , <b>2015</b> , 5, 9362  | 4.9  | 48 |
| 144 | Controlled formation of nanoscale wrinkling patterns on polymers using focused ion beam. <i>Scripta Materialia</i> , <b>2007</b> , 57, 747-750  | 5.6  | 47 |
| 143 | Measurements of stress and fracture in germanium electrodes of lithium-ion batteries during electrochemical lithiation and delithiation. <i>Journal of Power Sources</i> , <b>2016</b> , 304, 164-169   | 8.9  | 46 |
| 142 | UV-responsive nano-sponge for oil absorption and desorption. <i>Scientific Reports</i> , <b>2015</b> , 5, 12908   | 4.9  | 46 |
| 141 | Experimental Realization of Few Layer Two-Dimensional MoS Membranes of Near Atomic Thickness for High Efficiency Water Desalination. <i>Nano Letters</i> , <b>2019</b> , 19, 5194-5204  | 11.5 | 45 |
| 140 | Bioinspired steel surfaces with extreme wettability contrast. <i>Nanoscale</i> , <b>2012</b> , 4, 2900-5  | 7.7  | 45 |
| 139 | Phase Analysis of Steels by Grain-averaged EBSD Functions. <i>ISIJ International</i> , <b>2011</b> , 51, 130-136  | 1.7  | 45 |

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|-----|--|------|----|
| 138 | Microstructural evolution of NbF5-doped MgH2 exhibiting fast hydrogen sorption kinetics. <i>Journal of Power Sources</i> , <b>2008</b> , 178, 373-378  | 8.9  | 45 |
| 137 | Horizontal-to-Vertical Transition of 2D Layer Orientation in Low-Temperature Chemical Vapor Deposition-Grown PtSe and Its Influences on Electrical Properties and Device Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 13598-13607 | 9.5  | 44 |
| 136 | Liquid Metal Nanoparticles as Initiators for Radical Polymerization of Vinyl Monomers. <i>ACS Macro Letters</i> , <b>2019</b> , 8, 1522-1527   | 6.6  | 44 |
| 135 | Tensile deformation behavior of stainless steel clad aluminum bilayer sheet. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 222, 158-165  | 5.3  | 44 |
| 134 | Hierarchical porous framework of Si-based electrodes for minimal volumetric expansion. <i>Advanced Materials</i> , <b>2014</b> , 26, 3520-5  | 24   | 42 |
| 133 | Water condensation behavior on the surface of a network of superhydrophobic carbon fibers with high-aspect-ratio nanostructures. <i>Carbon</i> , <b>2012</b> , 50, 5085-5092   | 10.4 | 42 |
| 132 | A Finite Element Model for 2-Dimensional Slice of Cast Strand.. <i>ISIJ International</i> , <b>1999</b> , 39, 445-454  | 1.7  | 42 |
| 131 | Multifunctional Two-Dimensional PtSe-Layer Kirigami Conductors with 2000% Stretchability and Metallic-to-Semiconducting Tunability. <i>Nano Letters</i> , <b>2019</b> , 19, 7598-7607  | 11.5 | 41 |
| 130 | Mechanical Behavior of Carbon Steels in the Temperature Range of Mushy Zone.. <i>ISIJ International</i> , <b>2000</b> , 40, 356-363  | 1.7  | 41 |
| 129 | Thermal stability of superhydrophobic, nanostructured surfaces. <i>Journal of Colloid and Interface Science</i> , <b>2013</b> , 391, 152-7   | 9.3  | 40 |
| 128 | Adhesion behavior of mouse liver cancer cells on nanostructured superhydrophobic and superhydrophilic surfaces. <i>Soft Matter</i> , <b>2013</b> , 9, 8705   | 3.6  | 39 |
| 127 | Texture and Deformation Behaviour through Thickness Direction in Strip-cast 4.5wt% Si Steel Sheet.. <i>ISIJ International</i> , <b>2000</b> , 40, 1210-1215  | 1.7  | 38 |
| 126 | FeS2-Imbedded Mixed Conducting Matrix as a Solid Battery Cathode. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600495  | 21.8 | 38 |
| 125 | Enhanced Li Ion Conductivity in LiBH4/Al2O3 Mixture via Interface Engineering. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 26209-26215   | 3.8  | 37 |
| 124 | Controlled epitaxial growth modes of ZnO nanostructures using different substrate crystal planes. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 941  |      | 37 |
| 123 | Fracture behavior of diamond-like carbon films on stainless steel under a micro-tensile test condition. <i>Diamond and Related Materials</i> , <b>2006</b> , 15, 38-43   | 3.5  | 37 |
| 122 | Precipitation of austenite particles at grain boundaries during aging of Fe-Mn-Ni steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2002</b> , 33, 1057-1067  | 2.3  | 36 |
| 121 | Analysis of hot forging of porous metals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1996</b> , 206, 81-89   | 5.3  | 35 |

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|-----|---|------|----|
| 120 | Plasma-Induced Hetero-Nanostructures on a Polymer with Selective Metal Co-Deposition. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1400431   | 4.6  | 34 |
| 119 | Facile conductive bridges formed between silicon nanoparticles inside hollow carbon nanofibers. <i>Nanoscale</i> , <b>2013</b> , 5, 4790-6  | 7.7  | 34 |
| 118 | Orientation rotation behavior during in situ tensile deformation of polycrystalline 1050 aluminum alloy. <i>International Journal of Mechanical Sciences</i> , <b>2003</b> , 45, 1613-1623  | 5.5  | 34 |
| 117 | Centimeter-scale Green Integration of Layer-by-Layer 2D TMD vdW Heterostructures on Arbitrary Substrates by Water-Assisted Layer Transfer. <i>Scientific Reports</i> , <b>2019</b> , 9, 1641  | 4.9  | 33 |
| 116 | Microstructural evolution induced by micro-cracking during fast lithiation of single-crystalline silicon. <i>Journal of Power Sources</i> , <b>2014</b> , 265, 160-165  | 8.9  | 32 |
| 115 | Optimized Silicon Electrode Architecture, Interface, and Microgeometry for Next-Generation Lithium-Ion Batteries. <i>Advanced Materials</i> , <b>2016</b> , 28, 188-93  | 24   | 32 |
| 114 | A three-dimensional model of the spray forming method. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>1998</b> , 29, 699-708   | 2.5  | 31 |
| 113 | Wetting behaviours of a-C:H:Si:O film coated nano-scale dual rough surface. <i>Chemical Physics Letters</i> , <b>2007</b> , 436, 199-203  | 2.5  | 31 |
| 112 | Model for compaction of metal powders. <i>International Journal of Mechanical Sciences</i> , <b>1999</b> , 41, 121-141  | 5.5  | 31 |
| 111 | An All-Solid-State Li-Ion Battery with a Pre-Lithiated Si-Ti-Ni Alloy Anode. <i>Journal of the Electrochemical Society</i> , <b>2013</b> , 160, A1497-A1501   | 3.9  | 30 |
| 110 | Thickness-Independent Semiconducting-to-Metallic Conversion in Wafer-Scale Two-Dimensional PtSe Layers by Plasma-Driven Chalcogen Defect Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 14341-14351           | 9.5  | 29 |
| 109 | Hierarchical structures of ALOOH nanoflakes nested on Si nanopillars with anti-reflectance and superhydrophobicity. <i>Nanoscale</i> , <b>2013</b> , 5, 10014-21  | 7.7  | 28 |
| 108 | A Fully Coupled Analysis of Fluid Flow, Heat Transfer and Stress in Continuous Round Billet Casting. <i>ISIJ International</i> , <b>1999</b> , 39, 435-444  | 1.7  | 27 |
| 107 | Microstructural change of 2LiBH <sub>4</sub> /Al with hydrogen sorption cycling: Separation of Al and B. <i>Scripta Materialia</i> , <b>2009</b> , 60, 1089-1092  | 5.6  | 26 |
| 106 | Strain-Driven and Layer-Number-Dependent Crossover of Growth Mode in van der Waals Heterostructures: 2D/2D Layer-By-Layer Horizontal Epitaxy to 2D/3D Vertical Reorientation. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1800382 | 4.6  | 26 |
| 105 | Centimeter-Scale 2D van der Waals Vertical Heterostructures Integrated on Deformable Substrates Enabled by Gold Sacrificial Layer-Assisted Growth. <i>Nano Letters</i> , <b>2017</b> , 17, 6157-6165  | 11.5 | 25 |
| 104 | Unraveling the Origin and Mechanism of Nanofilament Formation in Polycrystalline SrTiO Resistive Switching Memories. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901322   | 24   | 25 |
| 103 | A simple technique for measuring the fracture energy of lithiated thin-film silicon electrodes at various lithium concentrations. <i>Journal of Power Sources</i> , <b>2015</b> , 294, 159-166  | 8.9  | 25 |

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|-----|---|------|----|
| 102 | Wafer-Scale Growth of 2D PtTe with Layer Orientation Tunable High Electrical Conductivity and Superior Hydrophobicity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 10839-10851                  | 9.5  | 25 |
| 101 | Tin Networked Electrode Providing Enhanced Volumetric Capacity and Pressureless Operation for All-Solid-State Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, A711-A715          | 3.9  | 25 |
| 100 | Effects of surface nanostructures on self-cleaning and anti-fogging characteristics of transparent glass. <i>Journal of Mechanical Science and Technology</i> , <b>2017</b> , 31, 5407-5414                           | 1.6  | 23 |
| 99  | In situ transmission electron microscopy study on microstructural changes in NbF5-doped MgH2 during dehydrogenation. <i>Scripta Materialia</i> , <b>2010</b> , 62, 701-704  | 5.6  | 23 |
| 98  | High Temperature Deformation Behavior of Carbon Steel in the Austenite and .DELTA.-Ferrite Regions.. <i>ISIJ International</i> , <b>1999</b> , 39, 91-98  | 1.7  | 23 |
| 97  | Reduction of the residual compressive stress of tetrahedral amorphous carbon film by Ar background gas during the filtered vacuum arc process. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 023504          | 2.5  | 22 |
| 96  | In Situ Engineering of the Electrode-Electrolyte Interface for Stabilized Overlithiated Cathodes. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604549   | 24   | 21 |
| 95  | Two-Dimensional Near-Atom-Thickness Materials for Emerging Neuromorphic Devices and Applications. <i>IScience</i> , <b>2020</b> , 23, 101676  | 6.1  | 21 |
| 94  | Gelation dynamics of ionically crosslinked alginate gel with various cations. <i>Macromolecular Research</i> , <b>2015</b> , 23, 1112-1116  | 1.9  | 20 |
| 93  | High performance gas diffusion layer with hydrophobic nanolayer under a supersaturated operation condition for fuel cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 5506-13                   | 9.5  | 20 |
| 92  | Electrochemically induced and orientation dependent crack propagation in single crystal silicon. <i>Journal of Power Sources</i> , <b>2014</b> , 267, 739-743   | 8.9  | 20 |
| 91  | Face-centered-cubic lithium crystals formed in mesopores of carbon nanofiber electrodes. <i>ACS Nano</i> , <b>2013</b> , 7, 5801-7  | 16.7 | 20 |
| 90  | Microtexture development during equibiaxial tensile deformation in monolithic and dual phase steels. <i>Acta Materialia</i> , <b>2011</b> , 59, 5462-5471   | 8.4  | 20 |
| 89  | Analysis of the deformation of a perforated sheet under uniaxial tension. <i>Journal of Materials Processing Technology</i> , <b>1996</b> , 58, 139-144   | 5.3  | 20 |
| 88  | Wafer-Scale Two-Dimensional MoS Layers Integrated on Cellulose Substrates Toward Environmentally Friendly Transient Electronic Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 25200-25210 | 9.5  | 18 |
| 87  | Nanostructures formed on carbon-based materials with different levels of crystallinity using oxygen plasma treatment. <i>Thin Solid Films</i> , <b>2015</b> , 590, 324-329  | 2.2  | 17 |
| 86  | Simple and inexpensive coal-tar-pitch derived Si-C anode composite for all-solid-state Li-ion batteries. <i>Solid State Ionics</i> , <b>2018</b> , 324, 207-217   | 3.3  | 17 |
| 85  | Pd effect on reliability of Ag bonding wires in microelectronic devices in high-humidity environments. <i>Metals and Materials International</i> , <b>2012</b> , 18, 881-885  | 2.4  | 17 |

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|----|---|------|----|
| 84 | Investigation of the material flow and texture evolution in friction-stir welded aluminum alloy. <i>Metals and Materials International</i> , <b>2009</b> , 15, 1027-1031  | 2.4  | 17 |
| 83 | Microstructure and Mechanical Properties of Ultrafine-Grained Austenitic Oxide Dispersion Strengthened Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 5334-5343            | 2.3  | 16 |
| 82 | Nanoscale ripples on polymers created by a focused ion beam. <i>Nanotechnology</i> , <b>2009</b> , 20, 115301   | 3.4  | 16 |
| 81 | Nitriding of Interstitial Free Steel in Potassium&ndash;Nitrate Salt Bath. <i>ISIJ International</i> , <b>2006</b> , 46, 111-120  | 1.7  | 16 |
| 80 | Analysis of forging limit for sintered porous metals. <i>Scripta Metallurgica Et Materialia</i> , <b>1995</b> , 32, 1937-1944   |      | 16 |
| 79 | Automated Assembly of Wafer-Scale 2D TMD Heterostructures of Arbitrary Layer Orientation and Stacking Sequence Using Water Dissoluble Salt Substrates. <i>Nano Letters</i> , <b>2020</b> , 20, 3925-3934  | 11.5 | 15 |
| 78 | Watching bismuth nanowires grow. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 043102  | 3.4  | 15 |
| 77 | Rate sensitive analysis of texture evolution in FCC metals. <i>Metals and Materials International</i> , <b>1997</b> , 3, 252-259  |      | 14 |
| 76 | Directed assembly of fluidic networks by buckle delamination of films on patterned substrates. <i>International Journal of Materials Research</i> , <b>2007</b> , 98, 1203-1208   | 0.5  | 14 |
| 75 | Vertically Aligned 2D MoS Layers with Strain-Engineered Serpentine Patterns for High-Performance Stretchable Gas Sensors: Experimental and Theoretical Demonstration. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 53174-53183 | 9.5  | 14 |
| 74 | Derivation of an Iron Pyrite All-Solid-State Composite Electrode with Ferrophosphorus, Sulfur, and Lithium Sulfide as Precursors. <i>Journal of the Electrochemical Society</i> , <b>2014</b> , 161, A663-A667                                      | 3.9  | 13 |
| 73 | Effect of Mn negative segregation through the thickness direction on graphitization characteristics of strip-cast white cast iron. <i>Scripta Materialia</i> , <b>2002</b> , 46, 199-203  | 5.6  | 13 |
| 72 | Forming limit diagram of perforated sheet. <i>Scripta Metallurgica Et Materialia</i> , <b>1995</b> , 33, 1201-1207  |      | 13 |
| 71 | Mitigating irreversible capacity losses from carbon agents via surface modification. <i>Journal of Power Sources</i> , <b>2015</b> , 275, 605-611   | 8.9  | 12 |
| 70 | Characterization of the crystallographic microstructure of the stress-induced void in Cu interconnects. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 141917   | 3.4  | 12 |
| 69 | Phase-field modelling of the thermo-mechanical properties of carbon steels. <i>Acta Materialia</i> , <b>2002</b> , 50, 2259-2268  | 8.4  | 12 |
| 68 | Biofunctionalized ceramic with self-assembled networks of nanochannels. <i>ACS Nano</i> , <b>2015</b> , 9, 4447-57  | 16.7 | 11 |
| 67 | The influence of interfacial tensile strain on the charge transport characteristics of MoS-based vertical heterojunction devices. <i>Nanoscale</i> , <b>2016</b> , 8, 17598-17607   | 7.7  | 11 |

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|----|--|-----|----|
| 66 | All-solid-state disordered LiTiS <sub>2</sub> pseudocapacitor. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 15661-15668  | 3   | 11 |
| 65 | Wafer-scale 2D PtTe layers for high-efficiency mechanically flexible electro-thermal smart window applications. <i>Nanoscale</i> , <b>2020</b> , 12, 10647-10655   | 7.7 | 11 |
| 64 | Large-area 2D TMD layers for mechanically reconfigurable electronic devices. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 313002  | 3   | 11 |
| 63 | Metallophobic Coatings to Enable Shape Reconfigurable Liquid Metal Inside 3D Printed Plastics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 12709-12718   | 9.5 | 11 |
| 62 | Slurry-Coated Sheet-Style Sn-PAN Anodes for All-Solid-State Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, A915-A922   | 3.9 | 10 |
| 61 | The effect of energetically coated ZrO <sub>x</sub> on enhanced electrochemical performances of Li(Ni <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> )O <sub>2</sub> cathodes using modified radio frequency (RF) sputtering. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 12982-12991 | 13  | 10 |
| 60 | An angled nano-tunnel fabricated on poly(methyl methacrylate) by a focused ion beam. <i>Nanotechnology</i> , <b>2009</b> , 20, 285301  | 3.4 | 10 |
| 59 | Manufacturing strategies for wafer-scale two-dimensional transition metal dichalcogenide heterolayers. <i>Journal of Materials Research</i> , <b>2020</b> , 35, 1350-1368  | 2.5 | 9  |
| 58 | Extremely Versatile Deformability beyond Materiality: A New Material Platform through Simple Cutting for Rugged Batteries. <i>Advanced Engineering Materials</i> , <b>2019</b> , 21, 1900206   | 3.5 | 8  |
| 57 | Wafer-scale 2D PtTe <sub>2</sub> layers-enabled Kirigami heaters with superior mechanical stretchability and electro-thermal responsiveness. <i>Applied Materials Today</i> , <b>2020</b> , 20, 100718   | 6.6 | 8  |
| 56 | Nanostructured Si/C Fibers as a Highly Reversible Anode Material for All-Solid-State Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, A1903-A1908   | 3.9 | 8  |
| 55 | Columnar grown copper films on polyimides strained beyond 100. <i>Scientific Reports</i> , <b>2015</b> , 5, 13791  | 4.9 | 8  |
| 54 | Fracture Mechanics of Solder Bumps During Ball Shear Testing: Effect of Bump Size. <i>Journal of Electronic Materials</i> , <b>2009</b> , 38, 1896-1905  | 1.9 | 8  |
| 53 | Effects of die geometry on variation of the deformation rate in equal channel angular pressing. <i>Metals and Materials International</i> , <b>2009</b> , 15, 439-445  | 2.4 | 8  |
| 52 | Structural Evolutions of Vertically Aligned Two-Dimensional MoS <sub>2</sub> Layers Revealed by in Situ Heating Transmission Electron Microscopy. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 27843-27853  | 3.8 | 7  |
| 51 | 1,3-Butadiene as an Adhesion Promoter Between Composite Resin and Dental Ceramic in a Dielectric Barrier Discharge Jet. <i>Plasma Chemistry and Plasma Processing</i> , <b>2013</b> , 33, 539-551  | 3.6 | 7  |
| 50 | Evolution of a Needle Shaped Carbide in SA508 Gr3 Steel. <i>ISIJ International</i> , <b>2008</b> , 48, 1810-1812   | 1.7 | 7  |
| 49 | Prediction of inhomogeneous texture in clad sheet metals by hot roll bond method. <i>Metals and Materials International</i> , <b>1996</b> , 2, 133-140   |     | 7  |



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