

# Mohsen Asle Zaeem

## List of Publications by Citations

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124  
papers

2,532  
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ext. papers

3,259  
ext. citations

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avg, IF

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L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 124 | Nickel telluride as a bifunctional electrocatalyst for efficient water splitting in alkaline medium. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 7608-7622  | 13   | 140       |
| 123 | A review on phase field modeling of martensitic phase transformation. <i>Computational Materials Science</i> , <b>2013</b> , 77, 304-311   | 3.2  | 126       |
| 122 | Phase field modeling of the tetragonal-to-monoclinic phase transformation in zirconia. <i>Acta Materialia</i> , <b>2013</b> , 61, 5223-5235  | 8.4  | 106       |
| 121 | Fatigue-resistant high-performance elastocaloric materials made by additive manufacturing. <i>Science</i> , <b>2019</b> , 366, 1116-1121   | 33.3 | 103       |
| 120 | Generalized stacking fault energies, ductilities, and twinnabilities of CoCrFeNi-based face-centered cubic high entropy alloys. <i>Scripta Materialia</i> , <b>2017</b> , 139, 83-86   | 5.6  | 86        |
| 119 | Phase field modeling of stress-induced tetragonal-to-monoclinic transformation in zirconia and its effect on transformation toughening. <i>Acta Materialia</i> , <b>2014</b> , 64, 208-219   | 8.4  | 77        |
| 118 | Superior structural, elastic and electronic properties of 2D titanium nitride MXenes over carbide MXenes: a comprehensive first principles study. <i>2D Materials</i> , <b>2018</b> , 5, 045004  | 5.9  | 77        |
| 117 | Two-phase solid-liquid coexistence of Ni, Cu, and Al by molecular dynamics simulations using the modified embedded-atom method. <i>Acta Materialia</i> , <b>2015</b> , 86, 169-181   | 8.4  | 73        |
| 116 | A review on hydride precipitation in zirconium alloys. <i>Journal of Nuclear Materials</i> , <b>2015</b> , 466, 12-20  | 3.3  | 72        |
| 115 | Shape memory effect and pseudoelasticity behavior in tetragonal zirconia polycrystals: A phase field study. <i>International Journal of Plasticity</i> , <b>2014</b> , 60, 71-86   | 7.6  | 59        |
| 114 | Phase Exploration and Identification of Multinary Transition-Metal Selenides as High-Efficiency Oxygen Evolution Electrocatalysts through Combinatorial Electrodeposition. <i>ACS Catalysis</i> , <b>2018</b> , 8, 8273-8289             | 13.1 | 57        |
| 113 | Understanding homogeneous nucleation in solidification of aluminum by molecular dynamics simulations. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2018</b> , 26, 025007                                    | 2    | 55        |
| 112 | Comparison of Cellular Automaton and Phase Field Models to Simulate Dendrite Growth in Hexagonal Crystals. <i>Journal of Materials Science and Technology</i> , <b>2012</b> , 28, 137-146  | 9.1  | 54        |
| 111 | Modeling dendritic solidification of Al <sub>3</sub> Cu using cellular automaton and phase-field methods. <i>Applied Mathematical Modelling</i> , <b>2013</b> , 37, 3495-3503  | 4.5  | 51        |
| 110 | Quantitative modeling of the equilibration of two-phase solid-liquid Fe by atomistic simulations on diffusive time scales. <i>Physical Review B</i> , <b>2015</b> , 91,  | 3.3  | 50        |
| 109 | Investigating the effects of grain boundary energy anisotropy and second-phase particles on grain growth using a phase-field model. <i>Computational Materials Science</i> , <b>2011</b> , 50, 2488-2492                                 | 3.2  | 46        |
| 108 | Effect of resistance spot welding parameters on weld pool properties in a DP600 dual-phase steel: A parametric study using thermomechanically-coupled finite element analysis. <i>Materials &amp; Design</i> , <b>2014</b> , 56, 387-397 |      | 45        |

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| 107 | Effective mechanical properties of multilayer nano-heterostructures. <i>Scientific Reports</i> , <b>2017</b> , 7, 15818  | 4.9  | 44 |
| 106 | Probing the shear modulus of two-dimensional multiplanar nanostructures and heterostructures. <i>Nanoscale</i> , <b>2018</b> , 10, 5280-5294   | 7.7  | 40 |
| 105 | A Review of Quantitative Phase-Field Crystal Modeling of Solid-Liquid Structures. <i>Jom</i> , <b>2015</b> , 67, 186-201   | 2.1  | 36 |
| 104 | Prediction of welding buckling distortion in a thin wall aluminum T joint. <i>Computational Materials Science</i> , <b>2007</b> , 38, 588-594  | 3.2  | 36 |
| 103 | Transformations and cracks in zirconia films leading to breakaway oxidation of Zircaloy. <i>Acta Materialia</i> , <b>2013</b> , 61, 3923-3935  | 8.4  | 35 |
| 102 | Finite element method for conserved phase fields: Stress-mediated diffusional phase transformation. <i>Journal of Computational Physics</i> , <b>2010</b> , 229, 9135-9149   | 4.1  | 33 |
| 101 | A cyclic forward-backward extrusion process as a novel severe plastic deformation for production of ultrafine grains materials. <i>Materials Letters</i> , <b>2012</b> , 68, 204-208   | 3.3  | 32 |
| 100 | Formation path of $\eta$ -hydrides in zirconium by multiphase field modeling. <i>Acta Materialia</i> , <b>2017</b> , 123, 235-244  | 3.4  | 30 |
| 99  | Effect of variant strain accommodation on the three-dimensional microstructure formation during martensitic transformation: Application to zirconia. <i>Acta Materialia</i> , <b>2015</b> , 87, 45-55                        | 8.4  | 30 |
| 98  | Morphological instabilities in thin films: Evolution maps. <i>Computational Materials Science</i> , <b>2011</b> , 50, 1030-1036  | 3.1  | 30 |
| 97  | Stone-Wales Defect Induced Performance Improvement of BC <sub>3</sub> Monolayer for High Capacity Lithium-Ion Rechargeable Battery Anode Applications. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 5910-5919 | 2.8  | 29 |
| 96  | Phase-Field Crystal Model for Fe Connected to MEAM Molecular Dynamics Simulations. <i>Jom</i> , <b>2014</b> , 66, 429-436  | 2.1  | 29 |
| 95  | In Situ Bottom-up Synthesis of Porphyrin-Based Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 19560-19564   | 16.4 | 29 |
| 94  | Competing mechanisms between dislocation and phase transformation in plastic deformation of single crystalline yttria-stabilized tetragonal zirconia nanopillars. <i>Acta Materialia</i> , <b>2016</b> , 120, 337-347        | 8.4  | 28 |
| 93  | The anisotropy of hexagonal close-packed and liquid interface free energy using molecular dynamics simulations based on modified embedded-atom method. <i>Acta Materialia</i> , <b>2016</b> , 107, 337-344                   | 8.4  | 28 |
| 92  | Investigating phase formations in cast AlFeCoNiCu high entropy alloys by combination of computational modeling and experiments. <i>Materials and Design</i> , <b>2017</b> , 127, 224-232                                     | 8.1  | 27 |
| 91  | A modified two-mode phase-field crystal model applied to face-centered cubic and body-centered cubic orderings. <i>Computational Materials Science</i> , <b>2015</b> , 105, 110-113  | 3.2  | 25 |
| 90  | Effective elastic properties of two dimensional multiplanar hexagonal nanostructures. <i>2D Materials</i> , <b>2017</b> , 4, 025006  | 5.9  | 23 |

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|----|---|-----|----|
| 89 | An elastic phase field model for thermal oxidation of metals: Application to zirconia. <i>Computational Materials Science</i> , <b>2014</b> , 89, 122-129   | 3.2 | 23 |
| 88 | Effect of the Compositional Strain on the Diffusive Interface Thickness and on the Phase Transformation in a Phase-Field Model for Binary Alloys. <i>Journal of Phase Equilibria and Diffusion</i> , <b>2011</b> , 32, 302-308                      | 1   | 23 |
| 87 | Creation of bioactive glass (13-93) scaffolds for structural bone repair using a combined finite element modeling and rapid prototyping approach. <i>Materials Science and Engineering C</i> , <b>2016</b> , 68, 651-662                            | 8.3 | 23 |
| 86 | Effects of internal stresses and intermediate phases on the coarsening of coherent precipitates: A phase-field study. <i>Current Applied Physics</i> , <b>2012</b> , 12, 570-580  | 2.6 | 22 |
| 85 | Combined molecular dynamics and phase field simulation investigations of crystal-melt interfacial properties and dendritic solidification of highly undercooled titanium. <i>Computational Materials Science</i> , <b>2019</b> , 163, 218-229       | 3.2 | 21 |
| 84 | Strain-induced work function in h-BN and BCN monolayers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2020</b> , 123, 114180   | 3   | 19 |
| 83 | Investigation of Phase Transformation in Thin Film Using Finite Element Method. <i>Solid State Phenomena</i> , <b>2009</b> , 150, 29-41   | 0.4 | 18 |
| 82 | Evolution of solidification defects in deformation of nano-polycrystalline aluminum. <i>Computational Materials Science</i> , <b>2019</b> , 163, 176-185  | 3.2 | 17 |
| 81 | Producing ultrafine-grained aluminum rods by cyclic forward-backward extrusion: Study the microstructures and mechanical properties. <i>Materials Letters</i> , <b>2012</b> , 74, 147-150   | 3.3 | 17 |
| 80 | Effect of vacancy defects on generalized stacking fault energy of fcc metals. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 115404   | 1.8 | 17 |
| 79 | Metastable phase transformation and deformation twinning induced hardening-stiffening mechanism in compression of silicon nanoparticles. <i>Acta Materialia</i> , <b>2018</b> , 145, 8-18   | 8.4 | 17 |
| 78 | Two-Dimensional Boron Phosphorus Monolayer for Reversible NO <sub>2</sub> Gas Sensing. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 10073-10081   | 5.6 | 17 |
| 77 | A review of computational modeling techniques in study and design of shape memory ceramics. <i>Computational Materials Science</i> , <b>2019</b> , 160, 120-136   | 3.2 | 16 |
| 76 | Quantifying a two-mode phase-field crystal model for BCC metals at melting point. <i>Computational Materials Science</i> , <b>2015</b> , 105, 101-109   | 3.2 | 15 |
| 75 | A modified phase-field model for quantitative simulation of crack propagation in single-phase and multi-phase materials. <i>Engineering Fracture Mechanics</i> , <b>2018</b> , 200, 339-354   | 4.2 | 15 |
| 74 | Effects of SiC, SiO <sub>2</sub> and CNTs nanoadditives on the properties of porous alumina-zirconia ceramics produced by a hybrid freeze casting-space holder method. <i>Journal of the European Ceramic Society</i> , <b>2017</b> , 37, 1635-1642 | 6   | 15 |
| 73 | A new planar BCN lateral heterostructure with outstanding strength and defect-mediated superior semiconducting to metallic properties. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 22066-22077                                   | 3.6 | 15 |
| 72 | Tough and strong porous bioactive glass-PLA composites for structural bone repair. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 9039-9054  | 4.3 | 14 |

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|----|--|------|----|
| 71 | Nanoscale self-healing mechanisms in shape memory ceramics. <i>Npj Computational Materials</i> , <b>2019</b> , 5,  | 10.9 | 14 |
| 70 | Revisiting phase diagrams of two-mode phase-field crystal models. <i>Computational Materials Science</i> , <b>2016</b> , 123, 139-147  | 3.2  | 14 |
| 69 | Investigating thermal effects on morphological evolution during crystallisation of hcp metals: three-dimensional phase field study. <i>Materials Technology</i> , <b>2012</b> , 27, 355-363  | 2.1  | 13 |
| 68 | Effects of specimen size and yttria concentration on mechanical properties of single crystalline yttria-stabilized tetragonal zirconia nanopillars. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 014302  | 2.5  | 12 |
| 67 | Competition between formation of Al <sub>2</sub> O <sub>3</sub> and Cr <sub>2</sub> O <sub>3</sub> in oxidation of Al <sub>0.3</sub> CoCrCuFeNi high entropy alloy: A first-principles study. <i>Scripta Materialia</i> , <b>2019</b> , 168, 139-143                 | 5.6  | 12 |
| 66 | Comparison of CFD Simulations with Experimental Measurements of Nozzle Clogging in Continuous Casting of Steels. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2016</b> , 47, 3384-3393                | 2.5  | 12 |
| 65 | Review of Peritectic Solidification Mechanisms and Effects in Steel Casting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2020</b> , 51, 1875-1903  | 2.5  | 12 |
| 64 | Role of grain boundaries in determining strength and plastic deformation of yttria-stabilized tetragonal zirconia bicrystals. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 5706-5718  | 4.3  | 11 |
| 63 | Effects of solidification defects on nanoscale mechanical properties of rapid directionally solidified Al-Cu Alloy: A large scale molecular dynamics study. <i>Journal of Crystal Growth</i> , <b>2019</b> , 527, 125255   | 1.6  | 11 |
| 62 | Modified embedded-atom method potential for high-temperature crystal-melt properties of TiNi alloys and its application to phase field simulation of solidification. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2020</b> , 28, 015006 | 2    | 11 |
| 61 | Effects of twin boundaries and pre-existing defects on mechanical properties and deformation mechanisms of yttria-stabilized tetragonal zirconia. <i>Journal of the European Ceramic Society</i> , <b>2020</b> , 40, 108-114   | 6    | 11 |
| 60 | A phase-field model for non-isothermal phase transformation and plasticity in polycrystalline yttria-stabilized tetragonal zirconia. <i>Acta Materialia</i> , <b>2020</b> , 191, 111-123   | 8.4  | 11 |
| 59 | Quantitative phase-field modeling of solute trapping in rapid solidification. <i>Acta Materialia</i> , <b>2021</b> , 205, 116562   | 8.4  | 11 |
| 58 | Understanding specimen- and grain-size effects on nanoscale plastic deformation mechanisms and mechanical properties of polycrystalline yttria-stabilized tetragonal zirconia nanopillars. <i>European Journal of Mechanics, A/Solids</i> , <b>2019</b> , 76, 80-90  | 3.7  | 10 |
| 57 | Producing high strength aluminum alloy by combination of equal channel angular pressing and bake hardening. <i>Materials Letters</i> , <b>2015</b> , 140, 196-199  | 3.3  | 10 |
| 56 | Predicting effective fracture toughness of ZrB <sub>2</sub> -based ultra-high temperature ceramics by phase-field modeling. <i>Materials and Design</i> , <b>2020</b> , 192, 108713  | 8.1  | 10 |
| 55 | Phase-field modeling of crack propagation in polycrystalline materials. <i>Computational Materials Science</i> , <b>2021</b> , 186, 110057   | 3.2  | 10 |
| 54 | Formation of chromium-iron carbide by carbon diffusion in AlXCoCrFeNiCu high-entropy alloys. <i>Materials Research Letters</i> , <b>2018</b> , 6, 321-326  | 7.4  | 9  |

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| 53 | An Asymmetric Elasto-Plastic Phase-Field Model for Shape Memory Effect, Pseudoelasticity and Thermomechanical Training in Polycrystalline Shape Memory Alloys. <i>Acta Materialia</i> , <b>2020</b> , 201, 580-595   | 8.4 | 9 |
| 52 | A phase-field model to study the effects of temperature change on shape evolution of hydrides in zirconium. <i>Journal Physics D: Applied Physics</i> , <b>2016</b> , 49, 405302   | 3   | 9 |
| 51 | On the elastocaloric effect in CuAlBe shape memory alloys: A quantitative phase-field modeling approach. <i>Computational Materials Science</i> , <b>2020</b> , 183, 109808  | 3.2 | 8 |
| 50 | Computational Fluid Dynamics Study of Molten Steel Flow Patterns and Particle-Wall Interactions Inside a Slide-Gate Nozzle by a Hybrid Turbulent Model. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2016</b> , 47, 3056-3065 | 2.5 | 8 |
| 49 | Ca <sub>2</sub> C MXene monolayer as a superior anode for metal-ion batteries. <i>2D Materials</i> , <b>2021</b> , 8, 035015   | 5.9 | 8 |
| 48 | Phosgene Gas Sensing of Ti <sub>2</sub> CT <sub>2</sub> (T = F, O, OH) MXenes. <i>Advanced Theory and Simulations</i> , <b>2021</b> , 4, 2000250   | 3.5 | 8 |
| 47 | Thermodynamic and kinetic behavior of low-alloy steels: An atomic level study using an Fe-Mn-Si-C modified embedded atom method (MEAM) potential. <i>Materialia</i> , <b>2019</b> , 8, 100473  | 3.2 | 7 |
| 46 | Modified embedded-atom method interatomic potentials for Al-Cu, Al-Fe and Al-Ni binary alloys: From room temperature to melting point. <i>Computational Materials Science</i> , <b>2022</b> , 201, 110902  | 3.2 | 7 |
| 45 | Unveiling the role of atomic defects on the electronic, mechanical and elemental diffusion properties in CuS. <i>Scripta Materialia</i> , <b>2021</b> , 192, 94-99   | 5.6 | 7 |
| 44 | Quantitative phase-field crystal modeling of solid-liquid interfaces for FCC metals. <i>Computational Materials Science</i> , <b>2017</b> , 127, 236-243   | 3.2 | 6 |
| 43 | Size effect in molecular dynamics simulation of nucleation process during solidification of pure metals: investigating modified embedded atom method interatomic potentials. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2019</b> , 27, 085015                 | 2   | 6 |
| 42 | Superior sensing performance of two-dimensional ruthenium carbide (2D-RuC) in detection of NO, NO <sub>2</sub> and NH <sub>3</sub> gas molecules. <i>Applied Surface Science</i> , <b>2021</b> , 563, 150232   | 6.7 | 6 |
| 41 | THE ROLE OF COMPOSITIONAL STRAIN IN THE INSTABILITY OF SOLID-FLUID THIN FILM INTERFACES. <i>Modern Physics Letters B</i> , <b>2011</b> , 25, 1591-1601   | 1.6 | 5 |
| 40 | Rapid Solidification and Phase Transformations in Additive Manufactured Materials. <i>Jom</i> , <b>2016</b> , 68, 928-929  |     | 5 |
| 39 | Nanotwin-induced strengthening in silicon: A molecular dynamics study. <i>International Journal of Mechanical Sciences</i> , <b>2021</b> , 189, 105990   | 5.5 | 5 |
| 38 | Solution processed Ni <sub>2</sub> Co layered double hydroxides for high performance electrochemical sensors. <i>Applied Surface Science</i> , <b>2021</b> , 541, 148270   | 6.7 | 5 |
| 37 | Design of NiTi-based shape memory microcomposites with enhanced elastocaloric performance by a fully thermomechanical coupled phase-field model. <i>Materials and Design</i> , <b>2021</b> , 207, 109898   | 8.1 | 5 |
| 36 | A Review of Multi-Scale Computational Modeling Tools for Predicting Structures and Properties of Multi-Principal Element Alloys. <i>Metals</i> , <b>2019</b> , 9, 254  | 2.3 | 4 |

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| 35 | Quantitative prediction of rapid solidification by integrated atomistic and phase-field modeling. <i>Acta Materialia</i> , <b>2021</b> , 211, 116885   | 8.4 | 4 |
| 34 | Transformation-induced fracture toughening in CuAlBe shape memory alloys: A phase-field study. <i>International Journal of Mechanical Sciences</i> , <b>2021</b> , 192, 106144   | 5.5 | 4 |
| 33 | Hydrogen-induced tunable electronic and optical properties of a two-dimensional penta-PtN monolayer. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 10409-10417  | 3.6 | 4 |
| 32 | Nanoscale flaw tolerance behaviour of polycrystalline tetragonal zirconia nanopillars. <i>International Journal of Mechanical Sciences</i> , <b>2020</b> , 173, 105405   | 5.5 | 3 |
| 31 | Advances in Modeling of Solidification Microstructures. <i>Jom</i> , <b>2015</b> , 67, 1774-1775   | 2.1 | 3 |
| 30 | Implantation of HA into Superplastic Ti-6Al-4V: Kinetics and Mechanical Behaviors of Implanted Layer. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 219-226 | 2.3 | 3 |
| 29 | Liquid ordering induced heterogeneities in homogeneous nucleation during solidification of pure metals. <i>Journal of Materials Science and Technology</i> , <b>2021</b> ,   | 9.1 | 3 |
| 28 | Effects of cleavage plane and material strength on fracture of polycrystalline brittle materials: A phase-field modeling study. <i>Computational Materials Science</i> , <b>2021</b> , 197, 110642                             | 3.2 | 3 |
| 27 | Effects of Crystal Orientation and Pre-existing Defects on Nanoscale Mechanical Properties of Yttria-Stabilized Tetragonal Zirconia Thin Films. <i>Jom</i> , <b>2019</b> , 71, 3869-3875                                       | 2.1 | 2 |
| 26 | Embedment of HA into Superplastic Ti-6Al-4V: Effects of Implantation Temperature. <i>Advanced Materials Research</i> , <b>2010</b> , 97-101, 3905-3909   | 0.5 | 2 |
| 25 | Effects of grain orientations and pre-existing defects on mechanical properties and deformation mechanisms of polycrystalline yttria-stabilized tetragonal zirconia. <i>Materialia</i> , <b>2020</b> , 9, 100553               | 3.2 | 2 |
| 24 | Effects of applied load on formation and reorientation of zirconium hydrides: A multiphase field modeling study. <i>Computational Materials Science</i> , <b>2021</b> , 192, 110367  | 3.2 | 2 |
| 23 | Interactive Effects of Interfacial Energy Anisotropy and Solute Transport on Solidification Patterns of Al-Cu Alloys. <i>Acta Materialia</i> , <b>2022</b> , 117859  | 8.4 | 2 |
| 22 | Algorithm Development in Computational Materials Science. <i>Jom</i> , <b>2014</b> , 66, 397-398   | 2.1 | 1 |
| 21 | On laser welding of thin steel sheets. <i>Science and Technology of Welding and Joining</i> , <b>2012</b> , 17, 571-580  | 3.7 | 1 |
| 20 | From fundamental to CO and COCl gas sensing properties of pristine and defective SiBN monolayers.. <i>Physical Chemistry Chemical Physics</i> , <b>2022</b> ,  | 3.6 | 1 |
| 19 | A temperature-dependent atomistic-informed phase-field model to study dendritic growth. <i>Journal of Crystal Growth</i> , <b>2022</b> , 579, 126461   | 1.6 | 1 |
| 18 | Phase-Field Crystal Modeling: Integrating Density Functional Theory, Molecular Dynamics, and Phase-Field Modeling49-70   |     | 1 |

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|----|--|-----|---|
| 17 | Unveiling the effect of vacancy defects on structural, mechanical, electronic and diffusion properties of copper (I) iodide. <i>Scripta Materialia</i> , <b>2022</b> , 213, 114634 | 5.6 | 1 |
| 16 | Oxidation Induced Stresses in High-Temperature Oxidation of Steel: A Multiphase Field Study. <i>Metals</i> , <b>2020</b> , 10, 801   | 2.3 | 0 |
| 15 | Superelasticity and shape memory effect in zirconia nanoparticles. <i>Extreme Mechanics Letters</i> , <b>2021</b> , 46, 101301   | 3.9 | 0 |
| 14 | A molecular dynamics study of domain switching in BiFeO <sub>3</sub> nanofilm under DC electric field. <i>Computational Materials Science</i> , <b>2021</b> , 199, 110718          | 3.2 | 0 |
| 13 | Formation energies, electronic properties and elemental diffusion of Cu <sub>3</sub> CrNi (GRCop) alloys. <i>Physica B: Condensed Matter</i> , <b>2022</b> , 413909                | 2.8 | 0 |
| 12 | Design, Fabrication and Testing of Bioactive Glass Scaffolds for Structural Bone Repair. <i>Ceramic Engineering and Science Proceedings</i> , <b>2017</b> , 127-136                | 0.1 |   |
| 11 | Solidification Behavior in Reduced Gravity. <i>Jom</i> , <b>2017</b> , 69, 1258-1260   | 2.1 |   |
| 10 | A Parametric Study of Resistance Spot Welding of a Dual-Phase Steel Using Finite Element Analysis <b>2013</b> , 3073-3080  |     |   |
| 9  | A Phase-Field Finite Element Model for Instabilities in Multilayer Thin Films. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1297, 35                     |     |   |
| 8  | Investigation of Global Buckling Distortion in Welding of a Thin Wall Aluminium T Joint. <i>Materials Science Forum</i> , <b>2006</b> , 519-521, 1187-1192                         | 0.4 |   |
| 7  | Insights on Solidification of Mg and Mg-Al Alloys by Large Scale Atomistic Simulations. <i>Minerals, Metals and Materials Series</i> , <b>2020</b> , 51-53                         | 0.3 |   |
| 6  | Predicting Solidification Properties of Magnesium by Molecular Dynamics Simulations <b>2016</b> , 53-56  |     |   |
| 5  | Fatigue Analysis of Ultrafine Grained Al 1050 Alloy Produced by Cyclic Forward Backward Extrusion. <i>Minerals, Metals and Materials Series</i> , <b>2016</b> , 357-359            | 0.3 |   |
| 4  | Predicting Solidification Properties of Magnesium by Molecular Dynamics Simulations 53-56  |     |   |
| 3  | A Finite Element-Phase Field Study of Solid State Phase Transformation: Coarsening of Coherent Precipitates and Instability of Multilayer Thin Films 341-348                       |     |   |
| 2  | Fatigue Analysis of Ultrafine Grained Al 1050 Alloy Produced by Cyclic Forward Backward Extrusion 357-359  |     |   |
| 1  | Phase Field Modeling of Tetragonal to Monoclinic Phase Transformation at Zirconium Oxide 885-891   |     |   |