## Kun Zhou

## List of Publications by Year in descending order

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460 papers 21,987 citations

70 h-index 123 g-index

463 all docs

463 docs citations

463 times ranked 20634 citing authors

| #  | Article   | IF           | CITATIONS |
|----|---|--------------|-----------|
| 1  | Two-dimensional metallic tantalum ditelluride with an intrinsic basal-plane activity for oxygen reduction: A microkinetic modeling study. Green Energy and Environment, 2022, 7, 525-532.   | 8.7          | 5         |
| 2  | Prediction of stratum deformation during the excavation of a foundation pit in composite formation based on the artificial bee colony–back-propagation model. Engineering Optimization, 2022, 54, 1217-1235.  | 2.6          | 9         |
| 3  | 2D Pentagonal Pdâ€Based Janus Transition Metal Dichalcogenides for Photocatalytic Water Splitting.<br>Physica Status Solidi - Rapid Research Letters, 2022, 16, 2100344.  | 2.4          | 17        |
| 4  | Partial Auxeticity of Laterally Compressed Carbon Nanotube Bundles. Physica Status Solidi - Rapid Research Letters, 2022, 16, 2100189.  | 2.4          | 9         |
| 5  | Interface formation and deformation behaviors of an additively manufactured<br>nickel-aluminum-bronze/15-5ÂPH multimaterial via laser-powder directed energy deposition. Materials<br>Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022,<br>829. 142101. | 5.6          | 49        |
| 6  | Engineering nano-structures with controllable dimensional features on micro-topographical titanium surfaces to modulate the activation degree of M1 macrophages and their osteogenic potential. Journal of Materials Science and Technology, 2022, 96, 167-178.                                       | 10.7         | 12        |
| 7  | 3Dâ€Printed Anisotropic Polymer Materials for Functional Applications. Advanced Materials, 2022, 34, e2102877.  | 21.0         | 92        |
| 8  | Selective laser sintering of carbon nanotube–coated thermoplastic polyurethane: Mechanical, electrical, and piezoresistive properties. Composites Part C: Open Access, 2022, 7, 100212.   | 3.2          | 14        |
| 9  | Machine Learningâ€Evolutionary Algorithm Enabled Design for 4Dâ€Printed Active Composite Structures.<br>Advanced Functional Materials, 2022, 32, 2109805.   | 14.9         | 47        |
| 10 | Static, free vibration, and buckling analyses of laminated composite plates via an isogeometric meshfree collocation approach. Composite Structures, 2022, 285, 115011.   | 5 <b>.</b> 8 | 23        |
| 11 | Hydrogen-passivation modulation on the friction behavior of graphene with vacancy defects under strain engineering. Applied Surface Science, 2022, 579, 152055.   | 6.1          | 9         |
| 12 | Strong Edge Stress in Molecularly Thin Organic–Inorganic Hybrid Ruddlesden–Popper Perovskites and Modulations of Their Edge Electronic Properties. ACS Nano, 2022, 16, 261-270.   | 14.6         | 7         |
| 13 | Highly stable electronic properties of rippled antimonene under compressive deformation. Physical Review B, 2022, 105, .  | 3.2          | 5         |
| 14 | Improvement in the mechanical performance of Multi Jet Fusion–printed aramid fiber/polyamide 12 composites by fiber surface modification. Additive Manufacturing, 2022, 51, 102576.   | 3.0          | 11        |
| 15 | Application of molecular dynamics simulation in thermal problems. , 2022, , 183-235.  |              | O         |
| 16 | Application of molecular dynamics simulation in mass transport problems. , 2022, , 237-314.   |              | 0         |
| 17 | Application of molecular dynamics simulation in mechanical problems. , 2022, , 129-181.   |              | 2         |
| 18 | Molecular dynamics study on the strengthening mechanisms of Cr–Fe–Co–Ni high-entropy alloys based on the generalized stacking fault energy. Journal of Alloys and Compounds, 2022, 905, 164137.   | 5 <b>.</b> 5 | 37        |

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|----|--|------|-----------|
| 19 | A review on qualification and certification for metal additive manufacturing. Virtual and Physical Prototyping, 2022, 17, 382-405.   | 10.4 | 62        |
| 20 | High-strength light-weight aramid fibre/polyamide 12 composites printed by Multi Jet Fusion. Virtual and Physical Prototyping, 2022, 17, 295-307.  | 10.4 | 11        |
| 21 | Effects of build positions on the thermal history, crystallization, and mechanical properties of polyamide 12 parts printed by Multi Jet Fusion. Virtual and Physical Prototyping, 2022, 17, 631-648.                                  | 10.4 | 14        |
| 22 | Oxygenâ€Rich Cobalt–Nitrogen–Carbon Porous Nanosheets for Bifunctional Oxygen Electrocatalysis.<br>Advanced Functional Materials, 2022, 32, .  | 14.9 | 55        |
| 23 | Modelling of Lowâ€dimensional Functional Nanomaterials. Physica Status Solidi - Rapid Research<br>Letters, 2022, 16, .   | 2.4  | 2         |
| 24 | Multi phase-field modeling of anisotropic crack propagation in 3D fiber-reinforced composites based on an adaptive isogeometric meshfree collocation method. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114794. | 6.6  | 31        |
| 25 | Recent Advances on Highâ€Performance Polyaryletherketone Materials for Additive Manufacturing.<br>Advanced Materials, 2022, 34, e2200750.  | 21.0 | 21        |
| 26 | Effect of the fibre length on the mechanical anisotropy of glass fibre–reinforced polymer composites printed by Multi Jet Fusion. Virtual and Physical Prototyping, 2022, 17, 734-748.   | 10.4 | 15        |
| 27 | Contact mechanics in tribological and contact damage-related problems: A review. Tribology<br>International, 2022, 171, 107534.  | 5.9  | 41        |
| 28 | Chemical Synthesis of Antibody–Hapten Conjugates Capable of Recruiting the Endogenous Antibody to Magnify the Fc Effector Immunity of Antibody for Cancer Immunotherapy. Journal of Medicinal Chemistry, 2022, 65, 323-332.            | 6.4  | 8         |
| 29 | Unexpected Intrinsic Catalytic Function of Porous Boron Nitride Nanorods for Highly Efficient<br>Peroxymonosulfate Activation in Water Treatment. ACS Applied Materials & Samp; Interfaces, 2022, 14,<br>18409-18419.                  | 8.0  | 14        |
| 30 | Three-dimensional phase-field modeling of temperature-dependent thermal shock-induced fracture in ceramic materials. Engineering Fracture Mechanics, 2022, 268, 108444.  | 4.3  | 15        |
| 31 | Rapid access to 9-arylfluorene and spirobifluorene through Pd-catalysed C–H arylation/deaminative annulation. Chemical Communications, 2022, 58, 6280-6283.  | 4.1  | 5         |
| 32 | Sequential activation of M $1$ Âand M $2$ phenotypes in macrophages by Mg degradation from Ti-Mg alloy for enhanced osteogenesis. Biomaterials Research, 2022, 26, 17.   | 6.9  | 19        |
| 33 | Phase-field modeling of interfacial debonding in multi-phase materials via an adaptive isogeometric-meshfree approach. Engineering Fracture Mechanics, 2022, 269, 108481.  | 4.3  | 13        |
| 34 | Highâ€Throughput Method–Accelerated Design of Niâ€Based Superalloys. Advanced Functional Materials, 2022, 32, .  | 14.9 | 17        |
| 35 | Modeling of Surface Nuclear Magnetic Resonance Based on Prepolarization and Its Application in Urban Shallow Measurements. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-10.   | 6.3  | 72        |
| 36 | A Molecular Dynamics Study into Zeolitic Imidazolate Frameworks-Based Capacitive Deionization Electrodes for Mg <sup>2+</sup> Removal and Seawater Desalination., 2022,,.  |      | 0         |

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| 37 | Simultaneous Fractionation, Desalination, and Dye Removal of Dye/Salt Mixtures by Carbon Cloth-Modified Flow-electrode Capacitive Deionization. Environmental Science & Enviro | 10.0 | 15         |
| 38 | Effect of the stiffness of interparticle bonds on properties of delocalized nonlinear vibrational modes in an fcc lattice. Physical Review E, 2022, $105$ , .  | 2.1  | 6          |
| 39 | Highâ€Precision and Highâ€Flux Separation by Rationally Designing the Nanochannels and Surface<br>Nanostructure of Polyamide Nanofiltration Membranes. Small Science, 2022, 2, .   | 9.9  | 6          |
| 40 | Refined microstructure and ultrahigh mechanical strength of (TiNÂ+ÂTiB)/Ti composites in situ synthesized via laser powder bed fusion. Additive Manufacturing Letters, 2022, 3, 100082.  | 2.1  | 6          |
| 41 | Recent Advances in Stimuliâ€Responsive Shapeâ€Morphing Hydrogels. Advanced Functional Materials, 2022, 32, .   | 14.9 | 49         |
| 42 | 2D CuBDC and IRMOF-1 as reverse osmosis membranes for seawater desalination: A molecular dynamics study. Applied Surface Science, 2022, 601, 154088.   | 6.1  | 5          |
| 43 | Enhanced photocatalytic degradation of organic contaminants over CaFe2O4 under visible LED light irradiation mediated by peroxymonosulfate. Journal of Materials Science and Technology, 2021, 62, 34-43.  | 10.7 | 78         |
| 44 | Stimulation of in vitro and in vivo osteogenesis by Ti-Mg alloys with the sustained-release function of magnesium ions. Colloids and Surfaces B: Biointerfaces, 2021, 197, 111360.   | 5.0  | 37         |
| 45 | Using MgO nanoparticles as a potential platform to precisely load and steadily release Ag ions for enhanced osteogenesis and bacterial killing. Materials Science and Engineering C, 2021, 119, 111399.  | 7.3  | 13         |
| 46 | Comparative study on 3D printing of polyamide 12 by selective laser sintering and multi jet fusion. Journal of Materials Processing Technology, 2021, 288, 116882.   | 6.3  | 155        |
| 47 | Submerged and non-submerged 3D bioprinting approaches for the fabrication of complex structures with the hydrogel pair GelMA and alginate/methylcellulose. Additive Manufacturing, 2021, 37, 101640.   | 3.0  | 21         |
| 48 | Comparative study on the selective laser sintering of polypropylene homopolymer and copolymer: processability, crystallization kinetics, crystal phases and mechanical properties. Additive Manufacturing, 2021, 37, 101610.   | 3.0  | 14         |
| 49 | Recent advances in lithium-based batteries using metal organic frameworks as electrode materials. Electrochemistry Communications, 2021, 122, 106881.  | 4.7  | <b>7</b> 5 |
| 50 | Vacancies and dopants in two-dimensional tin monoxide: An ab initio study. Applied Surface Science, 2021, 538, 147988.   | 6.1  | 11         |
| 51 | A debris layer evolution-based model for predicting both fretting wear and fretting fatigue lifetime. International Journal of Fatigue, 2021, 142, 105928.   | 5.7  | 17         |
| 52 | Regioselective C(sp <sup>3</sup> )â€"H fluorination of ketones: from methyl to the monofluoromethyl group. Chemical Communications, 2021, 57, 765-768.   | 4.1  | 9          |
| 53 | Combustion synthesis of mesoporous CoAl2O4 for peroxymonosulfate activation to degrade organic pollutants. Chinese Chemical Letters, 2021, 32, 2828-2832.  | 9.0  | 24         |
| 54 | Laserâ€Assisted Printing of Electrodes Using Metal–Organic Frameworks for Microâ€Supercapacitors. Advanced Functional Materials, 2021, 31, 2009057.  | 14.9 | 75         |

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| 55 | An Improved Air-Core Coil Sensor With a Fast Switch and Differential Structure for Prepolarization Surface Nuclear Magnetic Resonance. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.   | 4.7  | 1         |
| 56 | Rationally constructing a hierarchical two-dimensional NiCo metal–organic framework/graphene hybrid for highly efficient Li <sup>+</sup> ion storage. Materials Chemistry Frontiers, 2021, 5, 4589-4595.   | 5.9  | 16        |
| 57 | A novel crack-free Ti-modified Al-Cu-Mg alloy designed for selective laser melting. Additive Manufacturing, 2021, 38, 101829.  | 3.0  | 44        |
| 58 | Pentadiamond: A Highly Efficient Electron Transport Layer for Perovskite Solar Cells. Journal of Physical Chemistry C, 2021, 125, 5372-5379.   | 3.1  | 18        |
| 59 | Nanotwins-containing microstructure and superior mechanical strength of a Cuâ€'9Alâ€'5Feâ€'5Ni alloy additively manufactured by laser metal deposition. Additive Manufacturing, 2021, 39, 101825.  | 3.0  | 25        |
| 60 | Partial slip contact of materials with vertically aligned cracks near surface. Engineering Fracture Mechanics, 2021, 245, 107557.  | 4.3  | 9         |
| 61 | Progress in fabrication and characterization of mullite whiskers. Journal of Micromechanics and Molecular Physics, 2021, 06, 2150003.  | 1.2  | 2         |
| 62 | Recent Progress on Wearâ€Resistant Materials: Designs, Properties, and Applications. Advanced Science, 2021, 8, e2003739.  | 11.2 | 199       |
| 63 | Solvent-less Dehydrogenative C–H Etherification with Alcohols Using Mechanochemistry. ACS Sustainable Chemistry and Engineering, 2021, 9, 4433-4439.   | 6.7  | 10        |
| 64 | Effects of sub-atmospheric pressure on keyhole dynamics and porosity in products fabricated by selective laser melting. Journal of Manufacturing Processes, 2021, 64, 816-827.   | 5.9  | 31        |
| 65 | Zeolitic imidazolate frameworks as capacitive deionization electrodes for water desalination and Cr(VI) adsorption: A molecular simulation study. Applied Surface Science, 2021, 546, 149080.  | 6.1  | 27        |
| 66 | Exendin 4-Hapten Conjugate Capable of Binding with Endogenous Antibodies for Peptide Half-life Extension and Exerting Long-Acting Hypoglycemic Activity. Journal of Medicinal Chemistry, 2021, 64, 4947-4959.  | 6.4  | 8         |
| 67 | Capillaryâ€Forceâ€Driven Selfâ€Assembly of 4Dâ€Printed Microstructures. Advanced Materials, 2021, 33, e2100332.  | 21.0 | 32        |
| 68 | Discrete breathers in a triangular <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi><math>\hat{l}^2</math></mml:mi></mml:math> -Fermi-Pasta-Ulam-Tsingou lattice. Physical Review E, 2021, 103, 052202.                                  | 2.1  | 24        |
| 69 | A numerical study on the packing quality of fibre/polymer composite powder for powder bed fusion additive manufacturing. Virtual and Physical Prototyping, 2021, 16, S1-S18.   | 10.4 | 35        |
| 70 | Facile Synthesis of AgFeO <sub>2</sub> â€Decorated CaCO <sub>3</sub> with Enhanced Catalytic Activity in Activation of Peroxymonosulfate for Efficient Degradation of Organic Pollutants. Advanced Energy and Sustainability Research, 2021, 2, 2100038. | 5.8  | 16        |
| 71 | Fretting contact of layered materials with vertical cracks near surfaces. International Journal of Mechanical Sciences, 2021, 198, 106361.   | 6.7  | 17        |
| 72 | Laserâ€Induced Annealing of Metal–Organic Frameworks on Conductive Substrates for Electrochemical Water Splitting. Advanced Functional Materials, 2021, 31, 2102648.   | 14.9 | 47        |

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| 73 | A real-time TEM study of the deformation mechanisms in $\hat{l}^2$ -Ti reinforced bulk metallic glass composites. Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 818, 141427.   | 5.6  | 12        |
| 74 | A Comprehensive Investigation on 3D Printing of Polyamide 11 and Thermoplastic Polyurethane via Multi Jet Fusion. Polymers, 2021, 13, 2139.   | 4.5  | 22        |
| 75 | Influence of Substitutional Defects in ZIF-8 Membranes on Reverse Osmosis Desalination: A Molecular Dynamics Study. Molecules, 2021, 26, 3392.  | 3.8  | 8         |
| 76 | High carrier mobility and remarkable photovoltaic performance of two-dimensional Ruddlesden–Popper organic–inorganic metal halides (PA)2(MA)2M3I10 for perovskite solar cell applications. Materials Today, 2021, 47, 45-52.  | 14.2 | 12        |
| 77 | Dinitrophenolâ€Hyaluronan Conjugates as Multivalent Antibodyâ€Recruiting Glycopolymers for Targeted Cancer Immunotherapy. ChemMedChem, 2021, 16, 2960-2968.   | 3.2  | 7         |
| 78 | Modeling the temperature, crystallization, and residual stress for selective laser sintering of polymeric powder. Acta Mechanica, 2021, 232, 3635-3653.   | 2.1  | 21        |
| 79 | Buckling analysis of cracked orthotropic 3D plates and shells via an isogeometric-reproducing kernel particle method. Theoretical and Applied Fracture Mechanics, 2021, 114, 102993.  | 4.7  | 20        |
| 80 | Experimental and modeling investigation on the viscoelastic-viscoplastic deformation of polyamide 12 printed by Multi Jet Fusion. International Journal of Plasticity, 2021, 143, 103029.   | 8.8  | 14        |
| 81 | Oxygen vacancy induced peroxymonosulfate activation by Mg-doped Fe2O3 composites for advanced oxidation of organic pollutants. Chemosphere, 2021, 279, 130482.  | 8.2  | 60        |
| 82 | Synergetic effects of Bi5+ and oxygen vacancies in Bismuth(V)-rich Bi4O7 nanosheets for enhanced near-infrared light driven photocatalysis. Journal of Materials Science and Technology, 2021, 85, 1-10.  | 10.7 | 41        |
| 83 | The tripartite role of 2D covalent organic frameworks in graphene-based organic solvent nanofiltration membranes. Matter, 2021, 4, 2953-2969.   | 10.0 | 24        |
| 84 | Phase-field modeling of hydro-thermally induced fracture in thermo-poroelastic media. Engineering Fracture Mechanics, 2021, 254, 107887.  | 4.3  | 23        |
| 85 | Enhancing the mechanical strength of Multi Jet Fusion–printed polyamide 12 and its glass fiber-reinforced composite via high-temperature annealing. Additive Manufacturing, 2021, 46, 102205.   | 3.0  | 16        |
| 86 | Design for the reduction of volume shrinkage-induced distortion in digital light processing 3D printing. Extreme Mechanics Letters, 2021, 48, 101403.   | 4.1  | 25        |
| 87 | Laser powder bed fusion of Mo2C/Ti-6Al-4V composites with alternately laminated α′/β phases for enhanced mechanical properties. Additive Manufacturing, 2021, 46, 102134.   | 3.0  | 13        |
| 88 | 3D printing of a titanium-tantalum Gyroid scaffold with superb elastic admissible strain, bioactivity and in-situ bone regeneration capability. Additive Manufacturing, 2021, 47, 102223.   | 3.0  | 30        |
| 89 | Two Birds with One Stone: Surface Functionalization and Delamination of Multilayered Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene by Grafting a Ruthenium(II) Complex to Achieve Conductivity-Enhanced Electrochemiluminescence. Analytical Chemistry, 2021, 93, 1834-1841. | 6.5  | 39        |
| 90 | Pd-Catalysed direct C(sp <sup>2</sup> )â€"H fluorination of aromatic ketones: concise access to anacetrapib. Chemical Communications, 2021, 57, 4544-4547.  | 4.1  | 14        |

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| 91  | Development of an Ultrastretchable Double-Network Hydrogel for Flexible Strain Sensors. ACS Applied Materials & Samp; Interfaces, 2021, 13, 12814-12823.  | 8.0  | 97        |
| 92  | Selective Laser Sintering-Based 4D Printing of Magnetism-Responsive Grippers. ACS Applied Materials & Samp; Interfaces, 2021, 13, 12679-12688.  | 8.0  | 49        |
| 93  | Origin of the N-coordinated single-atom Ni sites in heterogeneous electrocatalysts for CO <sub>2</sub> reduction reaction. Chemical Science, 2021, 12, 14065-14073.   | 7.4  | 35        |
| 94  | 3D Printing and Chemical Dealloying of a Hierarchically Micro- and Nanoporous Catalyst for Wastewater Purification. ACS Applied Materials & Samp; Interfaces, 2021, 13, 48709-48719.  | 8.0  | 40        |
| 95  | Non-isothermal crystallization behaviour of polyamide 12 analogous to multi-jet fusion additive manufacturing process. Polymer, 2021, 235, 124256.  | 3.8  | 8         |
| 96  | A Finite Element Model for Non-Newtonian Starved Thermal-Elastohydrodynamic Lubrication of 3D Line Contact. International Journal of Applied Mechanics, 2021, 13, .   | 2.2  | 7         |
| 97  | Scalable and Sustainable Synthesis of Carbon Dots from Biomass as Efficient Friction Modifiers for Polyethylene Glycol Synthetic Oil. ACS Sustainable Chemistry and Engineering, 2021, 9, 14997-15007.                      | 6.7  | 27        |
| 98  | Hierarchical MXene/transition metal chalcogenide heterostructures for electrochemical energy storage and conversion. Nanoscale, 2021, 13, 19740-19770.  | 5.6  | 41        |
| 99  | A new method for the dynamic deformation characterization of thin-film stacked structures. MRS Communications, 2021, 11, 917-923.   | 1.8  | 0         |
| 100 | Modelling of Non-Newtonian Starved Thermal-elastohydrodynamic Lubrication of Heterogeneous Materials in Impact Motion. Acta Mechanica Solida Sinica, 2021, 34, 954-976.   | 1.9  | 8         |
| 101 | Adaptive analysis of crack propagation in thin-shell structures via an isogeometric-meshfree moving least-squares approach. Computer Methods in Applied Mechanics and Engineering, 2020, 358, 112613.                       | 6.6  | 33        |
| 102 | Materials development and potential applications of transparent ceramics: A review. Materials Science and Engineering Reports, 2020, 139, 100518.   | 31.8 | 221       |
| 103 | Scalable synthesis of Ca-doped $\hat{l}$ ±-Fe2O3 with abundant oxygen vacancies for enhanced degradation of organic pollutants through peroxymonosulfate activation. Applied Catalysis B: Environmental, 2020, 262, 118250. | 20.2 | 343       |
| 104 | Atomistic simulation study of GO/HKUST-1 MOF membranes for seawater desalination via pervaporation. Applied Surface Science, 2020, 503, 144198.   | 6.1  | 48        |
| 105 | Metal-organic framework-derived nanocomposites for electrocatalytic hydrogen evolution reaction. Progress in Materials Science, 2020, 108, 100618.  | 32.8 | 220       |
| 106 | Molecular dynamics simulations on nanocrystalline super-elastic NiTi shape memory alloy by addressing transformation ratchetting and its atomic mechanism. International Journal of Plasticity, 2020, 125, 374-394.         | 8.8  | 53        |
| 107 | Anti-inflammatory effects of Rhodiola rosea L.: A review. Biomedicine and Pharmacotherapy, 2020, 121, 109552.   | 5.6  | 99        |
| 108 | Water dissociation and hydrogen evolution on the surface of Fe-based bulk metallic glasses. Physical Chemistry Chemical Physics, 2020, 22, 700-708.   | 2.8  | 8         |

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| 109 | An adaptive isogeometric-meshfree coupling approach for the limit analysis of cracked structures. Theoretical and Applied Fracture Mechanics, 2020, 106, 102426.   | 4.7  | 10        |
| 110 | An isogeometric-meshfree collocation approach for two-dimensional elastic fracture problems with contact loading. Engineering Fracture Mechanics, 2020, 223, 106779.   | 4.3  | 21        |
| 111 | Ionised graphene oxide membranes for seawater desalination. Desalination, 2020, 496, 114637.   | 8.2  | 26        |
| 112 | Embedding Ultrafine Metal Oxide Nanoparticles in Monolayered Metal–Organic Framework Nanosheets Enables Efficient Electrocatalytic Oxygen Evolution. ACS Nano, 2020, 14, 1971-1981.  | 14.6 | 109       |
| 113 | Microstructure and mechanical properties of (TiB+TiC)/Ti composites fabricated in situ via selective laser melting of Ti and B4C powders. Additive Manufacturing, 2020, 36, 101466.  | 3.0  | 46        |
| 114 | Incorporation of Core–Shell-Structured Zwitterionic Carbon Dots in Thin-Film Nanocomposite Membranes for Simultaneously Improved Perm-Selectivity and Antifouling Properties. ACS Applied Materials & Diterfaces, 2020, 12, 53215-53229. | 8.0  | 34        |
| 115 | 3D printed hybrid-dimensional electrodes for flexible micro-supercapacitors with superior electrochemical behaviours. Virtual and Physical Prototyping, 2020, 15, 511-519.   | 10.4 | 43        |
| 116 | Recent Progress on Polymer Materials for Additive Manufacturing. Advanced Functional Materials, 2020, 30, 2003062.   | 14.9 | 364       |
| 117 | Phaseâ€field modeling of brittle fracture in a <scp>3D</scp> polycrystalline material via an adaptive isogeometricâ€meshfreeapproach. International Journal for Numerical Methods in Engineering, 2020, 121, 5042-5065.                  | 2.8  | 43        |
| 118 | Adaptive higher-order phase-field modeling of anisotropic brittle fracture in 3D polycrystalline materials. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113434.  | 6.6  | 44        |
| 119 | Excavation influence of triangular-distribution tunnels for wind pavilion group of a metro station. Journal of Central South University, 2020, 27, 3852-3874.  | 3.0  | 4         |
| 120 | Synthesis and Properties of MXenes. Engineering Materials, 2020, , 5-93.   | 0.6  | 1         |
| 121 | Other Applications. Engineering Materials, 2020, , 303-404.  | 0.6  | 1         |
| 122 | Expanding and optimizing 3D bioprinting capabilities using complementary network bioinks. Science Advances, 2020, 6, .   | 10.3 | 156       |
| 123 | The photocatalytic mechanism of organic dithienophosphole derivatives as highly efficient photo-redox catalysts. Physical Chemistry Chemical Physics, 2020, 22, 20721-20731.   | 2.8  | 5         |
| 124 | Tuning the Electronic Structures of Multimetal Oxide Nanoplates to Realize Favorable Adsorption Energies of Oxygenated Intermediates. ACS Nano, 2020, 14, 17640-17651.   | 14.6 | 56        |
| 125 | MXenes and MXenes-based Composites. Engineering Materials, 2020, , .   | 0.6  | 8         |
| 126 | Development of organically modified montmorillonite/polypropylene composite powders for selective laser sintering. Powder Technology, 2020, 369, 25-37.  | 4.2  | 27        |

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| 127 | Recent Advances on Highâ€Entropy Alloys for 3D Printing. Advanced Materials, 2020, 32, e1903855.  | 21.0 | 269       |
| 128 | Enhanced Oxygen Evolution Reaction Activity of a Co <sub>2</sub> P@NC–Fe <sub>2</sub> P Composite Boosted by Interfaces Between a N-Doped Carbon Matrix and Fe <sub>2</sub> P Microspheres. ACS Applied Materials & Diterfaces, 2020, 12, 25884-25894.  | 8.0  | 61        |
| 129 | Fine-grain-embedded dislocation-cell structures for high strength and ductility in additively manufactured steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 790, 139736.   | 5.6  | 27        |
| 130 | Emissive Nature and Molecular Behavior of Zero-Dimensional Organic–Inorganic Metal Halides Bmpip <sub>2</sub> MX <sub>4</sub> . Journal of Physical Chemistry Letters, 2020, 11, 5234-5240.   | 4.6  | 33        |
| 131 | A closed-form solution for the 3D steady-state thermoporoelastic field in an infinite transversely isotropic rock weakened by an elliptical crack. International Journal of Rock Mechanics and Minings Sciences, 2020, 129, 104292.   | 5.8  | 10        |
| 132 | Characterization of two carbon allotropes, cyclicgraphene and graphenylene, as semi-permeable materials for membranes. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2020, 259, 114569.   | 3.5  | 29        |
| 133 | 3D printing of cellular materials for advanced electrochemical energy storage and conversion. Nanoscale, 2020, 12, 7416-7432.   | 5.6  | 56        |
| 134 | Acoustic absorptions of multifunctional polymeric cellular structures based on triply periodic minimal surfaces fabricated by stereolithography. Virtual and Physical Prototyping, 2020, 15, 242-249.   | 10.4 | 85        |
| 135 | Simultaneous reduction of Cr(VI) and degradation of tetracycline hydrochloride by a novel iron-modified rectorite composite through heterogeneous photo-Fenton processes. Chemical Engineering Journal, 2020, 393, 124758.  | 12.7 | 150       |
| 136 | Evaporation Kinetics of Nano Water Droplets using Coarse-Grained Molecular Dynamic Simulations. International Journal of Heat and Mass Transfer, 2020, 156, 119884.   | 4.8  | 8         |
| 137 | 3D Printing of Polymeric Multi-Layer Micro-Perforated Panels for Tunable Wideband Sound Absorption. Polymers, 2020, 12, 360.  | 4.5  | 32        |
| 138 | Analysis of Chemical Activity of Bismuthene in the Presence of Environment Gas Molecules by Means of Ab Initio Calculations. Minerals, Metals and Materials Series, 2020, , 983-991.  | 0.4  | 0         |
| 139 | Water Desalination by Flow-Electrode Capacitive Deionization in Overlimiting Current Regimes.<br>Environmental Science & Environmental Science & Environm | 10.0 | 40        |
| 140 | Mechanical Response of Carbon Nanotube Bundle to Lateral Compression. Computation, 2020, 8, 27.   | 2.0  | 18        |
| 141 | Realizing small-flake graphene oxide membranes for ultrafast size-dependent organic solvent nanofiltration. Science Advances, 2020, 6, eaaz9184.  | 10.3 | 177       |
| 142 | Two-Dimensional Black Phosphorus Carbide: Rippling and Formation of Nanotubes. Journal of Physical Chemistry C, 2020, 124, 10235-10243.   | 3.1  | 32        |
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| 460 | Tunable isotropy on the mechanical properties of wavyÂhexachiral metamaterials: Numerical simulationÂand additive manufacturing. , 0, , .  |     | 0         |