# Babak Anasori

List of Publications by Year
in descending order

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|---|---|---|---|
| 158 papers | 45,772 citations | 4136 87 h-index | 7152 153 g-index |
| 164 all docs | 164 docs citations | 164 times ranked | 21574 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 2D metal carbides and nitrides (MXenes) for energy storage. Nature Reviews Materials, 2017, 2, . | 23.3 | 5,261 |
| 2 | Electromagnetic interference shielding with 2D transition metal carbides (MXenes). Science, 2016, 353, 1137-1140. | 6.0 | 3,688 |
| 3 | Guidelines for Synthesis and Processing of Two-Dimensional Titanium Carbide (Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene). Chemistry of Materials, 2017, 29, 7633-7644. | 3.2 | 3,129 |
| 4 | The Rise of MXenes. ACS Nano, 2019, 13, 8491-8494. | 7.3 | 1,399 |
| 5 | Two-Dimensional, Ordered, Double Transition Metals Carbides (MXenes). ACS Nano, 2015, 9, 9507-9516. | 7.3 | 1,395 |
| 6 | Flexible MXene/Graphene Films for Ultrafast Supercapacitors with Outstanding Volumetric Capacitance. Advanced Functional Materials, 2017, 27, 1701264. | 7.8 | 1,354 |
| 7 | Metallic Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene Gas Sensors with Ultrahigh Signal-to-Noise Ratio. ACS Nano, 2018, 12, 986-993. | 7.3 | 1,153 |
| 8 | Oxidation Stability of Colloidal Two-Dimensional Titanium Carbides (MXenes). Chemistry of Materials, 2017, 29, 4848-4856. | 3.2 | 1,120 |
| 9 | Two-Dimensional Molybdenum Carbide (MXene) as an Efficient Electrocatalyst for Hydrogen Evolution. ACS Energy Letters, 2016, 1, 589-594. | 8.8 | 1,100 |
| 10 | Thickness-independent capacitance of vertically aligned liquid-crystalline MXenes. Nature, 2018, 557, 409-412. | 13.7 | 965 |
| 11 | Synthesis of two-dimensional titanium nitride Ti<sub>4</sub>N<sub>3</sub> (MXene). Nanoscale, 2016, 8, 11385-11391. | 2.8 | 878 |
| 12 | Pseudocapacitive Electrodes Produced by Oxidantâ€Free Polymerization of Pyrrole between the Layers of 2D Titanium Carbide (MXene). Advanced Materials, 2016, 28, 1517-1522. | 11.1 | 850 |
| 13 | Hollow MXene Spheres and 3D Macroporous MXene Frameworks for Naâ€ion Storage. Advanced Materials, 2017, 29, 1702410. | 11.1 | 757 |
| 14 | Transparent, Flexible, and Conductive 2D Titanium Carbide (MXene) Films with High Volumetric Capacitance. Advanced Materials, 2017, 29, 1702678. | 11.1 | 756 |
| 15 | Control of MXenesâ€™ electronic properties through termination and intercalation. Nature Communications, 2019, 10, 522. | 5.8 | 721 |
| 16 | Porous heterostructured MXene/carbon nanotube composite paper with high volumetric capacity for sodium-based energy storage devices. Nano Energy, 2016, 26, 513-523. | 8.2 | 710 |
| 17 | Additive-free MXene inks and direct printing of micro-supercapacitors. Nature Communications, 2019, 10, 1795. | 5.8 | 649 |
| 18 | Elastic properties of 2D Ti <sub>3</sub> C <sub>2</sub> T <sub> x </sub> MXene monolayers and bilayers. Science Advances, 2018, 4, eaat0491. | 4.7 | 637 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Fabrication of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene Transparent Thin Films with Tunable Optoelectronic Properties. Advanced Electronic Materials, 2016, 2, 1600050. | 2.6 | 587 |
| 20 | All-MXene (2D titanium carbide) solid-state microsupercapacitors for on-chip energy storage. Energy and Environmental Science, 2016, 9, 2847-2854. | 15.6 | 551 |
| 21 | MoS<sub>2</sub>â€onâ€MXene Heterostructures as Highly Reversible Anode Materials for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2018, 57, 1846-1850. | 7.2 | 520 |
| 22 | Beyond Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub>: MXenes for Electromagnetic Interference Shielding. ACS Nano, 2020, 14, 5008-5016. | 7.3 | 489 |
| 23 | Metallic MXene Saturable Absorber for Femtosecond Modeâ€Locked Lasers. Advanced Materials, 2017, 29, 1702496. | 11.1 | 475 |
| 24 | Selfâ€Assembly of Transition Metal Oxide Nanostructures on MXene Nanosheets for Fast and Stable Lithium Storage. Advanced Materials, 2018, 30, e1707334. | 11.1 | 467 |
| 25 | Porous Twoâ€Dimensional Transition Metal Carbide (MXene) Flakes for Highâ€Performance Liâ€Ion Storage. ChemElectroChem, 2016, 3, 689-693. | 1.7 | 452 |
| 26 | Synthesis of Mo<sub>4</sub>VAlC<sub>4</sub> MAX Phase and Two-Dimensional Mo<sub>4</sub>VC<sub>4</sub> MXene with Five Atomic Layers of Transition Metals. ACS Nano, 2020, 14, 204-217. | 7.3 | 429 |
| 27 | Stamping of Flexible, Coplanar Microâ€Supercapacitors Using MXene Inks. Advanced Functional Materials, 2018, 28, 1705506. | 7.8 | 427 |
| 28 | Control of electronic properties of 2D carbides (MXenes) by manipulating their transition metal layers. Nanoscale Horizons, 2016, 1, 227-234. | 4.1 | 394 |
| 29 | MXene-Bonded Activated Carbon as a Flexible Electrode for High-Performance Supercapacitors. ACS Energy Letters, 2018, 3, 1597-1603. | 8.8 | 389 |
| 30 | 2D titanium carbide (MXene) for wireless communication. Science Advances, 2018, 4, eaau0920. | 4.7 | 381 |
| 31 | Rational Design of Two-Dimensional Transition Metal Carbide/Nitride (MXene) Hybrids and Nanocomposites for Catalytic Energy Storage and Conversion. ACS Nano, 2020, 14, 10834-10864. | 7.3 | 349 |
| 32 | Saturable Absorption in 2D Ti<sub>3</sub>C<sub>2</sub> MXene Thin Films for Passive Photonic Diodes. Advanced Materials, 2018, 30, 1705714. | 11.1 | 332 |
| 33 | 2D molybdenum and vanadium nitrides synthesized by ammoniation of 2D transition metal carbides (MXenes). Nanoscale, 2017, 9, 17722-17730. | 2.8 | 327 |
| 34 | Asymmetric Flexible MXeneâ€Reduced Graphene Oxide Microâ€Supercapacitor. Advanced Electronic Materials, 2018, 4, 1700339. | 2.6 | 324 |
| 35 | Laminated and Two-Dimensional Carbon-Supported Microwave Absorbers Derived from MXenes. ACS Applied Materials & Interfaces, 2017, 9, 20038-20045. | 4.0 | 323 |
| 36 | MXene Composite and Coaxial Fibers with High Stretchability and Conductivity for Wearable Strain Sensing Textiles. Advanced Functional Materials, 2020, 30, 1910504. | 7.8 | 308 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Tuning the Basal Plane Functionalization of Two-Dimensional Metal Carbides (MXenes) To Control Hydrogen Evolution Activity. ACS Applied Energy Materials, 2018, 1, 173-180. | 2.5 | 304 |
| 38 | High-Temperature Behavior and Surface Chemistry of Carbide MXenes Studied by Thermal Analysis. Chemistry of Materials, 2019, 31, 3324-3332. | 3.2 | 296 |
| 39 | 2D titanium carbide and transition metal oxides hybrid electrodes for Li-ion storage. Nano Energy, 2016, 30, 603-613. | 8.2 | 293 |
| 40 | Rheological Characteristics of 2D Titanium Carbide (MXene) Dispersions: A Guide for Processing MXenes. ACS Nano, 2018, 12, 2685-2694. | 7.3 | 288 |
| 41 | A Critical Review of the Oxidation of Ti<sub>2</sub>AlC, Ti<sub>3</sub>AlC<sub>2</sub>and Cr<sub>2</sub>AlC in Air. Materials Research Letters, 2013, 1, 115-125. | 4.1 | 286 |
| 42 | 2D MXenes: Tunable Mechanical and Tribological Properties. Advanced Materials, 2021, 33, e2007973. | 11.1 | 278 |
| 43 | Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene-Reduced Graphene Oxide Composite Electrodes for Stretchable Supercapacitors. ACS Nano, 2020, 14, 3576-3586. | 7.3 | 277 |
| 44 | Tunable Magnetism and Transport Properties in Nitride MXenes. ACS Nano, 2017, 11, 7648-7655. | 7.3 | 276 |
| 45 | Size-Dependent Physical and Electrochemical Properties of Two-Dimensional MXene Flakes. ACS Applied Materials & Interfaces, 2018, 10, 24491-24498. | 4.0 | 275 |
| 46 | Thermoelectric Properties of Two-Dimensional Molybdenum-Based MXenes. Chemistry of Materials, 2017, 29, 6472-6479. | 3.2 | 270 |
| 47 | Capacitance of Ti3C2Tx MXene in ionic liquid electrolyte. Journal of Power Sources, 2016, 326, 575-579. | 4.0 | 250 |
| 48 | Anisotropic MXene Aerogels with a Mechanically Tunable Ratio of Electromagnetic Wave Reflection to Absorption. Advanced Optical Materials, 2019, 7, 1900267. | 3.6 | 245 |
| 49 | Experimental and theoretical characterization of ordered MAX phases Mo2TiAlC2 and Mo2Ti2AlC3. Journal of Applied Physics, 2015, 118, . | 1.1 | 217 |
| 50 | MXeneâ€Bonded Flexible Hard Carbon Film as Anode for Stable Na/Kâ€Ion Storage. Advanced Functional Materials, 2019, 29, 1906282. | 7.8 | 214 |
| 51 | Electrode materialâ€“ionic liquid coupling for electrochemical energy storage. Nature Reviews Materials, 2020, 5, 787-808. | 23.3 | 210 |
| 52 | Antimicrobial Mode-of-Action of Colloidal Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene Nanosheets. ACS Sustainable Chemistry and Engineering, 2018, 6, 16586-16596. | 3.2 | 205 |
| 53 | Two-Dimensional Titanium Carbide MXene As a Cathode Material for Hybrid Magnesium/Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 4296-4300. | 4.0 | 188 |
| 54 | Prediction of Synthesis of 2D Metal Carbides and Nitrides (MXenes) and Their Precursors with Positive and Unlabeled Machine Learning. ACS Nano, 2019, 13, 3031-3041. | 7.3 | 187 |

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|---|---|---|---|
| 55 | Layer-by-layer assembly of MXene and carbon nanotubes on electrospun polymer films for flexible energy storage. Nanoscale, 2018, 10, 6005-6013. | 2.8 | 184 |
| 56 | 2H-MoS<sub>2</sub> on Mo<sub>2</sub>CT<sub>x</sub> MXene Nanohybrid for Efficient and Durable Electrocatalytic Hydrogen Evolution. ACS Nano, 2020, 14, 16140-16155. | 7.3 | 180 |
| 57 | Lithium-ion capacitors with 2D Nb2CTx (MXene) â€“ carbon nanotube electrodes. Journal of Power Sources, 2016, 326, 686-694. | 4.0 | 175 |
| 58 | MXene Sorbents for Removal of Urea from Dialysate: A Step toward the Wearable Artificial Kidney. ACS Nano, 2018, 12, 10518-10528. | 7.3 | 174 |
| 59 | Two-Dimensional Ti<sub>3</sub>C<sub>2</sub> MXene for High-Resolution Neural Interfaces. ACS Nano, 2018, 12, 10419-10429. | 7.3 | 173 |
| 60 | Naâ€ion Intercalation and Charge Storage Mechanism in 2D Vanadium Carbide. Advanced Energy Materials, 2017, 7, 1700959. | 10.2 | 168 |
| 61 | Reduced graphene oxide as a multi-functional conductive binder for supercapacitor electrodes. Energy Storage Materials, 2018, 12, 128-136. | 9.5 | 167 |
| 62 | Rational Design of Two-Dimensional Metallic and Semiconducting Spintronic Materials Based on Ordered Double-Transition-Metal MXenes. Journal of Physical Chemistry Letters, 2017, 8, 422-428. | 2.1 | 165 |
| 63 | High-Entropy 2D Carbide MXenes: TiVNbMoC<sub>3</sub> and TiVCrMoC<sub>3</sub>. ACS Nano, 2021, 15, 12815-12825. | 7.3 | 162 |
| 64 | Effects of Synthesis and Processing on Optoelectronic Properties of Titanium Carbonitride MXene. Chemistry of Materials, 2019, 31, 2941-2951. | 3.2 | 160 |
| 65 | Enhanced Terahertz Shielding of MXenes with Nanoâ€Metamaterials. Advanced Optical Materials, 2018, 6, 1701076. | 3.6 | 157 |
| 66 | Inkjet Printing of Selfâ€Assembled 2D Titanium Carbide and Protein Electrodes for Stimuliâ€Responsive Electromagnetic Shielding. Advanced Functional Materials, 2018, 28, 1801972. | 7.8 | 157 |
| 67 | Mo2TiAlC2: A new ordered layered ternary carbide. Scripta Materialia, 2015, 101, 5-7. | 2.6 | 153 |
| 68 | Cold Sintered Ceramic Nanocomposites of 2D MXene and Zinc Oxide. Advanced Materials, 2018, 30, e1801846. | 11.1 | 149 |
| 69 | High-Throughput Survey of Ordering Configurations in MXene Alloys Across Compositions and Temperatures. ACS Nano, 2017, 11, 4407-4418. | 7.3 | 146 |
| 70 | Vertically aligned MoS<sub>2</sub> on Ti<sub>3</sub>C<sub>2</sub> (MXene) as an improved HER catalyst. Journal of Materials Chemistry A, 2018, 6, 16882-16889. | 5.2 | 146 |
| 71 | Charge transfer induced polymerization of EDOT confined between 2D titanium carbide layers. Journal of Materials Chemistry A, 2017, 5, 5260-5265. | 5.2 | 142 |
| 72 | Mo<sub>2</sub>Ga<sub>2</sub>C: a new ternary nanolaminated carbide. Chemical Communications, 2015, 51, 6560-6563. | 2.2 | 141 |

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|---|---|---|---|
| 73 | Double transition-metal MXenes: Atomistic design of two-dimensional carbides and nitrides. MRS Bulletin, 2020, 45, 850-861. | 1.7 | 138 |
| 74 | Electrochemical and in-situ X-ray diffraction studies of Ti 3 C 2 T x MXene in ionic liquid electrolyte. Electrochemistry Communications, 2016, 72, 50-53. | 2.3 | 134 |
| 75 | Surface Modification of a MXene by an Aminosilane Coupling Agent. Advanced Materials Interfaces, 2020, 7, 1902008. | 1.9 | 134 |
| 76 | Porous Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene for Ultrahigh-Rate Sodium-Ion Storage with Long Cycle Life. ACS Applied Nano Materials, 2018, 1, 505-511. | 2.4 | 132 |
| 77 | Surface-Engineered MXenes: Electric Field Control of Magnetism and Enhanced Magnetic Anisotropy. ACS Nano, 2019, 13, 2831-2839. | 7.3 | 126 |
| 78 | In situ atomistic insight into the growth mechanisms of single layer 2D transition metal carbides. Nature Communications, 2018, 9, 2266. | 5.8 | 125 |
| 79 | Superior Wear-Resistance of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> Multilayer Coatings. ACS Nano, 2021, 15, 8216-8224. | 7.3 | 125 |
| 80 | Two-Dimensional Titanium and Molybdenum Carbide MXenes as Electrocatalysts for CO2 Reduction. IScience, 2020, 23, 101181. | 1.9 | 123 |
| 81 | Ultra-microporous carbons encapsulate small sulfur molecules for high performance lithium-sulfur battery. Nano Energy, 2017, 33, 402-409. | 8.2 | 120 |
| 82 | Antimicrobial Properties of 2D MnO<sub>2</sub> and MoS<sub>2</sub> Nanomaterials Vertically Aligned on Graphene Materials and Ti<sub>3</sub>C<sub>2</sub> MXene. Langmuir, 2018, 34, 7192-7200. | 1.6 | 111 |
| 83 | Effects of Applied Potential and Water Intercalation on the Surface Chemistry of Ti<sub>2</sub>C and Mo<sub>2</sub>C MXenes. Journal of Physical Chemistry C, 2016, 120, 28432-28440. | 1.5 | 104 |
| 84 | Effect of glycine functionalization of 2D titanium carbide (MXene) on charge storage. Journal of Materials Chemistry A, 2018, 6, 4617-4622. | 5.2 | 103 |
| 85 | Voltage-Gated Ions Sieving through 2D MXene Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> Membranes. ACS Applied Nano Materials, 2018, 1, 3644-3652. | 2.4 | 102 |
| 86 | Tuning Noncollinear Spin Structure and Anisotropy in Ferromagnetic Nitride MXenes. ACS Nano, 2018, 12, 6319-6325. | 7.3 | 101 |
| 87 | Ti<sub>3</sub>C<sub>2</sub>MXeneâ€“polymer nanocomposites and their applications. Journal of Materials Chemistry A, 2021, 9, 8051-8098. | 5.2 | 92 |
| 88 | Scalable Manufacturing of Large and Flexible Sheets of MXene/Graphene Heterostructures. Advanced Materials Technologies, 2019, 4, 1800639. | 3.0 | 90 |
| 89 | Synthesis and electrochemical properties of 2D molybdenum vanadium carbides â€“ solid solution MXenes. Journal of Materials Chemistry A, 2020, 8, 8957-8968. | 5.2 | 90 |
| 90 | Magnesium-Ion Storage Capability of MXenes. ACS Applied Energy Materials, 2019, 2, 1572-1578. | 2.5 | 89 |

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| 91 | Electrochemical in Situ Tracking of Volumetric Changes in Two-Dimensional Metal Carbides (MXenes) in Ionic Liquids. ACS Applied Materials & Interfaces, 2016, 8, 32089-32093. | 4.0 | 87 |
| 92 | Role of acid mixtures etching on the surface chemistry and sodium ion storage in Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene. Chemical Communications, 2020, 56, 6090-6093. | 2.2 | 76 |
| 93 | 2D Titanium Carbide/Reduced Graphene Oxide Heterostructures for Supercapacitor Applications. Batteries and Supercaps, 2018, 1, 33-38. | 2.4 | 72 |
| 94 | Influence of operating conditions on the desalination performance of a symmetric pre-conditioned Ti3C2T -MXene membrane capacitive deionization system. Desalination, 2020, 477, 114267. | 4.0 | 71 |
| 95 | Electrically conductive 3D printed Ti3C2T MXene-PEG composite constructs for cardiac tissue engineering. Acta Biomaterialia, 2022, 139, 179-189. | 4.1 | 70 |
| 96 | MoS<sub>2</sub>â€onâ€MXene Heterostructures as Highly Reversible Anode Materials for Lithiumâ€Ion Batteries. Angewandte Chemie, 2018, 130, 1864-1868. | 1.6 | 67 |
| 97 | Reactivity of Zircaloy-4 with Ti3SiC2 and Ti2AlC in the 1100â€“1300 Â°C temperature range. Journal of Nuclear Materials, 2015, 460, 122-129. | 1.3 | 65 |
| 98 | Interface binding and mechanical properties of MXene-epoxy nanocomposites. Composites Science and Technology, 2020, 192, 108124. | 3.8 | 64 |
| 99 | Solid Solubility and Magnetism upon Mn Incorporation in the Bulk Ternary Carbides Cr<sub>2</sub>AlC and Cr<sub>2</sub>GaC. Materials Research Letters, 2015, 3, 16-22. | 4.1 | 62 |
| 100 | Nanoindentation of monolayer Ti C T MXenes via atomistic simulations: The role of composition and defects on strength. Computational Materials Science, 2019, 157, 168-174. | 1.4 | 61 |
| 101 | Enhanced Ionic Accessibility of Flexible MXene Electrodes Produced by Natural Sedimentation. Nano-Micro Letters, 2020, 12, 89. | 14.4 | 61 |
| 102 | Oxidized Ti<sub>3</sub>C<sub>2</sub>MXene nanosheets for dye-sensitized solar cells. New Journal of Chemistry, 2018, 42, 16446-16450. | 1.4 | 60 |
| 103 | Fabrication and mechanical properties of pressureless melt infiltrated magnesium alloy composites reinforced with TiC and Ti 2 AlC particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 618, 511-522. | 2.6 | 59 |
| 104 | Effect of Synthesis on Performance of MXene/Iron Oxide Anode Material for Lithium-Ion Batteries. Langmuir, 2018, 34, 11325-11334. | 1.6 | 58 |
| 105 | Demonstration of Li-Ion Capacity of MAX Phases. ACS Energy Letters, 2016, 1, 1094-1099. | 8.8 | 57 |
| 106 | Micromechanical response of two-dimensional transition metal carbonitride (MXene) reinforced epoxy composites. Composites Part B: Engineering, 2020, 182, 107603. | 5.9 | 55 |
| 107 | Sculpting Liquids with Two-Dimensional Materials: The Assembly of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene Sheets at Liquidâ€“Liquid Interfaces. ACS Nano, 2019, 13, 12385-12392. | 7.3 | 52 |
| 108 | Evidence of a magnetic transition in atomically thin Cr<sub>2</sub>TiC<sub>2</sub>T<sub>x</sub> MXene. Nanoscale Horizons, 2020, 5, 1557-1565. | 4.1 | 51 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | 2D Titanium Carbide (MXene) Based Films: Expanding the Frontier of Functional Film Materials. Advanced Functional Materials, 2021, 31, 2105043. | 7.8 | 50 |
| 110 | All-Printed MXeneâ€“Graphene Nanosheet-Based Bimodal Sensors for Simultaneous Strain and Temperature Sensing. ACS Applied Electronic Materials, 2021, 3, 2341-2348. | 2.0 | 48 |
| 111 | Nacre-Mimetic, Mechanically Flexible, and Electrically Conductive Silk Fibroin-MXene Composite Foams as Piezoresistive Pressure Sensors. ACS Applied Materials & Interfaces, 2021, 13, 34996-35007. | 4.0 | 47 |
| 112 | Nanocrystalline Mgâ€“MAX composites: Mechanical behavior characterization via acoustic emission monitoring. Acta Materialia, 2011, 59, 5716-5727. | 3.8 | 46 |
| 113 | Enhancement of Ti<sub>3</sub>C<sub>2</sub> MXene Pseudocapacitance after Urea Intercalation Studied by Soft X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 5079-5086. | 1.5 | 46 |
| 114 | Introduction to 2D Transition Metal Carbides and Nitrides (MXenes). , 2019, , 3-12. | | 43 |
| 115 | Colloidal Gelation in Liquid Metals Enables Functional Nanocomposites of 2D Metal Carbides (MXenes) and Lightweight Metals. ACS Nano, 2019, 13, 12415-12424. | 7.3 | 41 |
| 116 | Electrocatalytic CO<sub>2</sub> reduction on earth abundant 2D Mo<sub>2</sub>C and Ti<sub>3</sub>C<sub>2</sub> MXenes. Chemical Communications, 2021, 57, 1675-1678. | 2.2 | 40 |
| 117 | Graphene â€“ transition metal oxide hybrid materials. Materials Today, 2014, 17, 253-254. | 8.3 | 39 |
| 118 | Tensile creep of Ti2AlC in air in the temperature range 1000â€“1150Â°C. Scripta Materialia, 2012, 66, 805-808. | 2.6 | 37 |
| 119 | Covalent Surface Modification of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene with Chemically Active Polymeric Ligands Producing Highly Conductive and Ordered Microstructure Films. ACS Nano, 2021, 15, 19600-19612. | 7.3 | 37 |
| 120 | Temperature-dependent mechanical properties of Ti<sub>n+1</sub>C<sub>n</sub>O<sub>2</sub> (n = 1, 2) MXene monolayers: a first-principles study. Physical Chemistry Chemical Physics, 2020, 22, 3414-3424. | 1.3 | 35 |
| 121 | 2D transition metal carbides (MXenes) in metal and ceramic matrix composites. Nano Convergence, 2021, 8, 16. | 6.3 | 33 |
| 122 | Enhanced electrochemical performance of vanadium carbide MXene composites for supercapacitors. APL Materials, 2022, 10, . | 2.2 | 32 |
| 123 | Distinguishing electronic contributions of surface and sub-surface transition metal atoms in Ti-based MXenes. 2D Materials, 2020, 7, 025015. | 2.0 | 31 |
| 124 | Oxidized 2D titanium carbide MXene. Materials Today, 2018, 21, 1064-1065. | 8.3 | 30 |
| 125 | Al2O3 â€œself-coatedâ€•iron powder composites via mechanical milling. Journal of Alloys and Compounds, 2015, 653, 61-68. | 2.8 | 29 |
| 126 | Ti3C2T solid lubricant coatings in rolling bearings with remarkable performance beyond state-of-the-art materials. Applied Materials Today, 2021, 25, 101202. | 2.3 | 28 |

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| 127 | In situ neutron diffraction evidence for fully reversible dislocation motion in highly textured polycrystalline Ti2AlC samples. Acta Materialia, 2015, 98, 51-63. | 3.8 | 27 |
| 128 | High-temperature stability and phase transformations of titanium carbide (Ti<sub>3</sub>C<sub>2</sub>T<sub> x </sub>) MXene. Journal of Physics Condensed Matter, 2021, 33, 224002. | 0.7 | 26 |
| 129 | On the interactions of Ti2AlC, Ti3AlC2, Ti3SiC2 and Cr2AlC with silicon carbide and pyrolytic carbon at 1300 Â°C. Journal of the European Ceramic Society, 2015, 35, 4107-4114. | 2.8 | 24 |
| 130 | Energy damping in magnesium alloy composites reinforced with TiC or Ti2AlC particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 653, 53-62. | 2.6 | 24 |
| 131 | 2D metal carbides (MXenes) in fibers. Materials Today, 2017, 20, 481-482. | 8.3 | 24 |
| 132 | Spherical nanoindentation study of the deformation micromechanisms of LiTaO3 single crystals. Journal of Applied Physics, 2011, 110, . | 1.1 | 21 |
| 133 | Reactions Between Ti2AlC, B4C, and Al and Phase Equilibria at 1000ÂÂ°C in the Al-Ti-B-C Quaternary System. Journal of Phase Equilibria and Diffusion, 2015, 36, 169-182. | 0.5 | 17 |
| 134 | Synthesis and characterization of the mechanical properties of Ti3SiC2/Mg and Cr2AlC/Mg alloy composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 705, 182-188. | 2.6 | 17 |
| 135 | Fabrication, biodegradation behavior and cytotoxicity of Mg-nanodiamond composites for implant application. Journal of Materials Science: Materials in Medicine, 2015, 26, 110. | 1.7 | 15 |
| 136 | Fabrication of Ti<sub>3</sub>C<sub>2</sub> MXene Microelectrode Arrays for <em>In Vivo</em> Neural Recording. Journal of Visualized Experiments, 2020, , . | 0.2 | 15 |
| 137 | In Situ Nâ€Doped Graphene and Mo Nanoribbon Formation from Mo<sub>2</sub>Ti<sub>2</sub>C<sub>3</sub> MXene Monolayers. Small, 2020, 16, e1907115. | 5.2 | 14 |
| 138 | Mechanical and elastic properties of fine-grained polycrystalline scandia and erbia as determined by indentation techniques. Journal of the European Ceramic Society, 2011, 31, 1703-1712. | 2.8 | 11 |
| 139 | Microscale deformation of (001) and (100) rutile single crystals under spherical nanoindentation. Journal of Materials Research, 2012, 27, 53-63. | 1.2 | 11 |
| 140 | A Tungsten-Based Nanolaminated Ternary Carbide: (W,Ti)<sub>4</sub>C<sub>4â€“x</sub>. Inorganic Chemistry, 2019, 58, 1100-1106. | 1.9 | 9 |
| 141 | Reconstruction of fatigue crack growth in AA2024-T3 and AA2198-T8 fastened lap joints. Theoretical and Applied Fracture Mechanics, 2016, 82, 33-50. | 2.1 | 8 |
| 142 | Microelectronics: Stamping of Flexible, Coplanar Microâ€Supercapacitors Using MXene Inks (Adv. Funct.) Tj ETQq0 0 0 rgBT /Overlock 1 | 7.8 | 8 |
| 143 | Direct Correlation of MXene Surface Chemistry and Electronic Properties. Microscopy and Microanalysis, 2018, 24, 1606-1607. | 0.2 | 8 |
| 144 | Reversible dislocation motion and microcracking in plastically anisotropic solids under cyclic spherical nanoindentation. MRS Communications, 2013, 3, 245-248. | 0.8 | 7 |

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| 145 | Atomic Defects and Edge Structure in Single-layer Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene. Microscopy and Microanalysis, 2017, 23, 1704-1705. | 0.2 | 7 |
| 146 | van der Waals epitaxy of highly (111)-oriented BaTiO3 on MXene. Nanoscale, 2019, 11, 622-630. | 2.8 | 7 |
| 147 | Self-assembly and in-situ characterization of Ti3C2T in Al: A step toward additive manufacturing of MXene-metal composites. Applied Materials Today, 2022, 27, 101451. | 2.3 | 7 |
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