MXene-based materials for electrochemical energy stor

Journal of Energy Chemistry
27, 73-85
DOI: 10.1016/j.jechem.2017.08.004

Citation Report

#	Article	IF	Citations
1	Theoretical prediction of MXene-like structured Ti₃C₄as a high capacity electrode material for Na ion batteries. Physical Chemistry Chemical Physics, 2017, 19, 29106-29113.	1.3	51
2	Few-Layer MXenes Delaminated via High-Energy Mechanical Milling for Enhanced Sodium-Ion Batteries Performance. ACS Applied Materials & Interfaces, 2017, 9, 39610-39617.	4.0	152
3	Understanding of Electrochemical Mechanisms for CO₂ Capture and Conversion into Hydrocarbon Fuels in Transition-Metal Carbides (MXenes). ACS Nano, 2017, 11, 10825-10833.	7.3	359
4	Understanding the MXene Pseudocapacitance. Journal of Physical Chemistry Letters, 2018, 9, 1223-1228.	2.1	231
5	Effect of glycine functionalization of 2D titanium carbide (MXene) on charge storage. Journal of Materials Chemistry A, 2018, 6, 4617-4622.	5.2	103
6	Selective Etching of Silicon from Ti₃SiC₂ (MAX) To Obtain 2D Titanium Carbide (MXene). Angewandte Chemie - International Edition, 2018, 57, 5444-5448.	7.2	299
7	Mesoporous MXene powders synthesized by acid induced crumpling and their use as Na-ion battery anodes. Materials Research Letters, 2018, 6, 230-235.	4.1	115
8	Boosting the Photocatalytic Activity of P25 for Carbon Dioxide Reduction by using a Surfaceâ€Alkalinized Titanium Carbide MXene as Cocatalyst. ChemSusChem, 2018, 11, 1606-1611.	3.6	239
9	Bipolar magnetic semiconductors among intermediate states during the conversion from Sc₂C(OH)₂to Sc₂CO₂MXene. Nanoscale, 2018, 10, 8763-8771.	2.8	27
10	Computational Screening of 2D Materials and Rational Design of Heterojunctions for Water Splitting Photocatalysts. Small Methods, 2018, 2, 1700359.	4.6	151
11	All-MXene-Based Integrated Electrode Constructed by Ti₃C₂ Nanoribbon Framework Host and Nanosheet Interlayer for High-Energy-Density Liâ€“S Batteries. ACS Nano, 2018, 12, 2381-2388.	7.3	340
12	Improving the electrochemical properties of MXene Ti3C2 multilayer for Li-ion batteries by vacuum calcination. Electrochimica Acta, 2018, 265, 140-150.	2.6	99
13	Two-Dimensional Molybdenum Carbide (MXene) with Divacancy Ordering for Brackish and Seawater Desalination via Cation and Anion Intercalation. ACS Sustainable Chemistry and Engineering, 2018, 6, 3739-3747.	3.2	183
14	Porous Ti₃C₂T_x MXene for Ultrahigh-Rate Sodium-Ion Storage with Long Cycle Life. ACS Applied Nano Materials, 2018, 1, 505-511.	2.4	132
15	Two-dimensional MXenes for energy storage. Chemical Engineering Journal, 2018, 338, 27-45.	6.6	252
16	MoS₂â€onâ€MXene Heterostructures as Highly Reversible Anode Materials for Lithiumâ€Ion Batteries. Angewandte Chemie, 2018, 130, 1864-1868.	1.6	67
17	MoS₂â€onâ€MXene Heterostructures as Highly Reversible Anode Materials for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2018, 57, 1846-1850.	7.2	520
18	Single Pd atomic catalyst on Mo₂CO₂ monolayer (MXene): unusual activity for CO oxidation by trimolecular Eleyâ€“Rideal mechanism. Physical Chemistry Chemical Physics, 2018, 20, 3504-3513.	1.3	82

#	Article	IF	Citations
19	3D assembly of Ti₃C₂-MXene directed by water/oil interfaces. Nanoscale, 2018, 10, 3621-3625.	2.8	98
20	2D Titanium Carbide/Reduced Graphene Oxide Heterostructures for Supercapacitor Applications. Batteries and Supercaps, 2018, 1, 33-38.	2.4	72
21	Surface Functional Groups and Interlayer Water Determine the Electrochemical Capacitance of Ti₃C₂T_x MXene. ACS Nano, 2018, 12, 3578-3586.	7.3	353
22	Bismuth Oxychloride/MXene symmetric supercapacitor with high volumetric energy density. Electrochimica Acta, 2018, 271, 351-360.	2.6	144
23	Fe₃O₄@Ti₃C₂ MXene hybrids with ultrahigh volumetric capacity as an anode material for lithium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 11189-11197.	5.2	229
24	SiP monolayers: New 2D structures of group IVâ€“V compounds for visible-light photohydrolytic catalysts. Frontiers of Physics, 2018, 13, 1.	2.4	30
25	Selective Etching of Silicon from Ti₃SiC₂ (MAX) To Obtain 2D Titanium Carbide (MXene). Angewandte Chemie, 2018, 130, 5542-5546.	1.6	127
26	Improved sodium-ion storage performance of Ti₃C₂T_xMXenes by sulfur doping. Journal of Materials Chemistry A, 2018, 6, 1234-1243.	5.2	158
27	MXene-coated silk-derived carbon cloth toward flexible electrode for supercapacitor application. Journal of Energy Chemistry, 2018, 27, 161-166.	7.1	122
28	Polypyrroleâ€“MXene coated textile-based flexible energy storage device. RSC Advances, 2018, 8, 39742-39748.	1.7	90
29	Two-Dimensional Titanium Carbonitride Mxene for High-Performance Sodium Ion Batteries. ACS Applied Nano Materials, 2018, 1, 6854-6863.	2.4	71
30	A Cellulose Derived Nanotubular MoO₃/SnO₂ Composite with Superior Lithium Storage Properties. ChemistrySelect, 2018, 3, 12469-12477.	0.7	6
31	Enhanced reversible Li-ion storage in Si@Ti3C2 MXene nanocomposite. Electrochemistry Communications, 2018, 97, 16-21.	2.3	66
32	MXene Ti ₃ C ₂ T _x saturable absorber for pulsed laser at 1.3 Î¼m. Chinese Physics B, 2018, 27, 094214.	0.7	37
33	Superior role of MXene nanosheet as hybridization matrix over graphene in enhancing interfacial electronic coupling and functionalities of metal oxide. Nano Energy, 2018, 53, 841-848.	8.2	36
34	2D Metal Carbides and Nitrides (MXenes) as Highâ€Performance Electrode Materials for Lithiumâ€Based Batteries. Advanced Energy Materials, 2018, 8, 1801897.	10.2	341
35	Beyond Graphene Anode Materials for Emerging Metal Ion Batteries and Supercapacitors. Nano-Micro Letters, 2018, 10, 70.	14.4	95
36	Enhancing the Photocatalytic Performance of MXenes via Stoichiometry Engineering of Their Electronic and Optical Properties. ACS Applied Materials & Interfaces, 2018, 10, 39879-39889.	4.0	37

#	Article	IF	Citations
37	Insight into the catalytic activity of MXenes for hydrogen evolution reaction. Science Bulletin, 2018, 63, 1397-1403.	4.3	61
38	Further surface modification by carbon coating for in-situ growth of Fe3O4 nanoparticles on MXene Ti3C2 multilayers for advanced Li-ion storage. Electrochimica Acta, 2018, 289, 228-237.	2.6	51
39	Transition metal anchored C₂N monolayers as efficient bifunctional electrocatalysts for hydrogen and oxygen evolution reactions. Journal of Materials Chemistry A, 2018, 6, 11446-11452.	5.2	223
40	Partially Etched Ti₃AlC₂ as a Promising Highâ€Capacity Lithiumâ€Ion Battery Anode. ChemSusChem, 2018, 11, 2677-2680.	3.6	22
41	Functional MXene Materials: Progress of Their Applications. Chemistry - an Asian Journal, 2018, 13, 2742-2757.	1.7	162
42	Aggregation-Resistant 3D MXene-Based Architecture as Efficient Bifunctional Electrocatalyst for Overall Water Splitting. ACS Nano, 2018, 12, 8017-8028.	7.3	425
43	Two-Dimensional MXene (Ti₃C₂)-Integrated Cellulose Hydrogels: Toward Smart Three-Dimensional Network Nanoplatforms Exhibiting Light-Induced Swelling and Bimodal Photothermal/Chemotherapy Anticancer Activity. ACS Applied Materials & Interfaces, 2018, 10, 27631-27643.	4.0	346
44	Recent progress on confinement of polysulfides through physical and chemical methods. Journal of Energy Chemistry, 2018, 27, 1555-1565.	7.1	101
45	Fabrication of high-performance MXene-based all-solid-state flexible microsupercapacitor based on a facile scratch method. Nanotechnology, 2018, 29, 445401.	1.3	44
46	Recent advances in the preparation, characterization, and applications of two-dimensional heterostructures for energy storage and conversion. Journal of Materials Chemistry A, 2018, 6, 21747-21784.	5.2	85
47	MXene: An emerging material for sensing and biosensing. TrAC - Trends in Analytical Chemistry, 2018, 105, 424-435.	5.8	465
48	Double transition metal MXenes with wide band gaps and novel magnetic properties. Nanoscale, 2018, 10, 11962-11968.	2.8	88
49	2D titanium carbide (MXene) electrodes with lower-F surface for high performance lithium-ion batteries. Journal of Energy Chemistry, 2019, 31, 148-153.	7.1	97
50	Facile synthesis of Li3V2(PO4)3/C cathode material for lithium-ion battery via freeze-drying. Journal of Energy Chemistry, 2019, 32, 159-165.	7.1	16
51	Highâ€throughput computational screening of layered and twoâ€dimensional materials. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2019, 9, e1385.	6.2	43
52	Monitoring the electronic, thermal and optical properties of two-dimensional MoO₂ under strain via vibrational spectroscopies: a first-principles investigation. Physical Chemistry Chemical Physics, 2019, 21, 19904-19914.	1.3	24
53	Superfast high-energy storage hybrid device composed of MXene and Chevrel-phase electrodes operated in saturated LiCl electrolyte solution. Journal of Materials Chemistry A, 2019, 7, 19761-19773.	5.2	32
54	Rapid synthesis of MXenes at room temperature. Materials Science and Technology, 2019, 35, 1904-1907.	0.8	13

#	Article	IF	Citations
55	Enhanced low-temperature Li-ion storage in MXene titanium carbide by surface oxygen termination. 2D Materials, 2019, 6, 045025.	2.0	46
56	Properties of two-dimensional Ti3C2 MXene/thermoplastic polyurethane nanocomposites with effective reinforcement via melt blending. Composites Science and Technology, 2019, 181, 107710.	3.8	139
57	A hierarchically porous and hydrophilic 3D nickelâ€“iron/MXene electrode for accelerating oxygen and hydrogen evolution at high current densities. Nano Energy, 2019, 63, 103880.	8.2	275
58	Metallic Nb₂S₂C Monolayer: A Promising Two-Dimensional Anode Material for Metal-Ion Batteries. Journal of Physical Chemistry C, 2019, 123, 26803-26811.	1.5	49
59	Flexible Ti₃C₂T_x/PEDOT:PSS films with outstanding volumetric capacitance for asymmetric supercapacitors. Dalton Transactions, 2019, 48, 1747-1756.	1.6	119
60	2D Metal Carbides and Nitrides (MXenes). , 2019, , .		240
61	Rational Design of Flexible Two-Dimensional MXenes with Multiple Functionalities. Chemical Reviews, 2019, 119, 11980-12031.	23.0	242
62	Delaminating Vanadium Carbides for Zincâ€Ion Storage: Hydrate Precipitation and H⁺/Zn²⁺ Coâ€Action Mechanism. Small Methods, 2019, 3, 1900495.	4.6	97
63	One-step synthesis of few-layer niobium carbide MXene as a promising anode material for high-rate lithium ion batteries. Dalton Transactions, 2019, 48, 14433-14439.	1.6	45
64	2D MXenes as Co-catalysts in Photocatalysis: Synthetic Methods. Nano-Micro Letters, 2019, 11, 79.	14.4	160
65	Sulfur Redox Reactions at Working Interfaces in Lithiumâ€“Sulfur Batteries: A Perspective. Advanced Materials Interfaces, 2019, 6, 1802046.	1.9	128
66	Employing MXene as a matrix for loading amorphous Si generated upon lithiation towards enhanced lithium-ion storage. Journal of Energy Chemistry, 2019, 38, 50-54.	7.1	28
67	Recent advances in MXenes: From fundamentals to applications. Current Opinion in Solid State and Materials Science, 2019, 23, 164-178.	5.6	247
68	Electrospun MXene/carbon nanofibers as supercapacitor electrodes. Journal of Materials Chemistry A, 2019, 7, 269-277.	5.2	464
69	Hydrochromic full-color MXene quantum dots through hydrogen bonding toward ultrahigh-efficiency white light-emitting diodes. Applied Materials Today, 2019, 16, 90-101.	2.3	86
70	Nonlinear Fewâ€Layer MXeneâ€Assisted Allâ€Optical Wavelength Conversion at Telecommunication Band. Advanced Optical Materials, 2019, 7, 1801777.	3.6	86
71	Polar and Nonpolar Matrix Consisting of Twined Multiwalled Carbon Nanotube and High Nitrogenâ€Doped Porous Carbon Derived from Ionic Liquid for Stable Liâ€S Battery. Energy Technology, 2019, 7, 1900470.	1.8	2
72	Synthesis, structure, properties and applications of MXenes: Current status and perspectives. Ceramics International, 2019, 45, 18167-18188.	2.3	371

#	Article	IF	Citations
74	Faradaic reactions in capacitive deionization for desalination and ion separation. Journal of Materials Chemistry A, 2019, 7, 15999-16027.	5.2	135
75	Surface Modified MXeneâ€Based Nanocomposites for Electrochemical Energy Conversion and Storage. Small, 2019, 15, e1901503.	5.2	159
76	Synthesis and lithium ion storage performance of two-dimensional V4C3 MXene. Chemical Engineering Journal, 2019, 373, 203-212.	6.6	136
77	Topological semimetal porous carbon as a high-performance anode for Li-ion batteries. Journal of Materials Chemistry A, 2019, 7, 14253-14259.	5.2	36
78	Novel MAB phases and insights into their exfoliation into 2D MBenes. Nanoscale, 2019, 11, 11305-11314.	2.8	120
79	Effect of Ti₃AlC₂ MAX Phase on Structure and Properties of Resultant Ti₃C₂T_x MXene. ACS Applied Nano Materials, 2019, 2, 3368-3376.	2.4	210
80	Computational Discovery and Design of MXenes for Energy Applications: Status, Successes, and Opportunities. ACS Applied Materials & Interfaces, 2019, 11, 24885-24905.	4.0	105
81	Structural prediction and multilayer Li⁺ storage in two-dimensional VC₂ carbide studied by first-principles calculations. Journal of Materials Chemistry A, 2019, 7, 8873-8881.	5.2	34
82	A review of graphene-based 3D van der Waals hybrids and their energy applications. Nano Today, 2019, 25, 27-37.	6.2	59
83	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
84	Capture and Catalytic Conversion of Polysulfides by In Situ Built TiO₂â€MXene Heterostructures for Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1900219.	10.2	481
85	Ionic liquid pre-intercalated MXene films for ionogel-based flexible micro-supercapacitors with high volumetric energy density. Journal of Materials Chemistry A, 2019, 7, 9478-9485.	5.2	120
86	MXeneâ€Based Composites: Synthesis and Applications in Rechargeable Batteries and Supercapacitors. Advanced Materials Interfaces, 2019, 6, 1802004.	1.9	214
87	Porous LiF layer fabricated by a facile chemical method toward dendrite-free lithium metal anode. Journal of Energy Chemistry, 2019, 37, 197-203.	7.1	116
88	MXenes and ultrasonication. Journal of Materials Chemistry A, 2019, 7, 10843-10857.	5.2	230
89	Preparation and characterization of Ti3C2Tx with SERS properties. Science China Technological Sciences, 2019, 62, 1202-1209.	2.0	21
90	Li₅Cr₇Ti₆O₂₅/Multiwalled Carbon Nanotubes Composites with Fast Charge-Discharge Performance as Negative Electrode Materials for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A626-A634.	1.3	17
91	Magazineâ€Bendingâ€Inspired Architecting Antiâ€T of MXene Flakes with Vertical Ion Transport for Highâ€Performance Supercapacitors. Advanced Materials Interfaces, 2019, 6, 1900160.	1.9	24

#	Article	IF	Citations
92	Breathable and Wearable MXene-Decorated Air-Laid Paper With Superior Folding Endurance and Electromagnetic Interference-Shielding Performances. Frontiers in Materials, 2019, 6, .	1.2	17
93	Carbonâ€“metal compound composite electrodes for capacitive deionization: synthesis, development and applications. Journal of Materials Chemistry A, 2019, 7, 26693-26743.	5.2	77
94	Layer-by-Layer Assembly of Polyaniline Nanofibers and MXene Thin-Film Electrodes for Electrochemical Energy Storage. ACS Applied Materials & Interfaces, 2019, 11, 47929-47938.	4.0	38
95	Two Dimensional Ti3C2Tx MXene Electrode For Supercapacitor Application. , 2019, , .		1
96	Modulation engineering of 2D MXene-based compounds for metal-ion batteries. Nanoscale, 2019, 11, 23092-23104.	2.8	36
97	Applications of 2D MXenes in energy conversion and storage systems. Chemical Society Reviews, 2019, 48, 72-133.	18.7	1,354
98	2D MXenes: Electromagnetic property for microwave absorption and electromagnetic interference shielding. Chemical Engineering Journal, 2019, 359, 1265-1302.	6.6	715
99	MZIâ€Based Allâ€Optical Modulator Using MXene Ti₃C₂T_x (T =) Tj ETQq1 1 0.784314	3.6	87
100	Termination Effects of Pt/v-Ti_{n+1}C_nT₂ MXene Surfaces for Oxygen Reduction Reaction Catalysis. ACS Applied Materials & Interfaces, 2019, 11, 1638-1644.	4.0	88
101	Fabricating high-performance sodium ion capacitors with P2-Na0.67Co0.5Mn0.5O2 and MOF-derived carbon. Journal of Energy Chemistry, 2019, 28, 79-84.	7.1	31
102	Graphene and MXene-based transparent conductive electrodes and supercapacitors. Energy Storage Materials, 2019, 16, 102-125.	9.5	313
103	Carbon nanotubes enhance flexible MXene films for high-rate supercapacitors. Journal of Materials Science, 2020, 55, 1148-1156.	1.7	71
104	Controlling electronic structure of single-layered $${hbox {HfX}}_{3}$$ ($$hbox {X=S}$$, Se) trichalcogenides through systematic Zr doping. Journal of Materials Science, 2020, 55, 660-669.	1.7	12
105	Self-reduction bimetallic nanoparticles on ultrathin MXene nanosheets as functional platform for pesticide sensing. Journal of Hazardous Materials, 2020, 384, 121358.	6.5	160
106	Pressure-induced band engineering, work function and optical properties of surface F-functionalized Sc2C MXene. Journal of Physics and Chemistry of Solids, 2020, 137, 109218.	1.9	28
107	Mechanical properties and frictional resistance of Al composites reinforced with Ti3C2T MXene. Chinese Chemical Letters, 2020, 31, 996-999.	4.8	74
108	2â€‰D MXeneâ€based Energy Storage Materials: Interfacial Structure Design and Functionalization. ChemSusChem, 2020, 13, 1409-1419.	3.6	63
109	Uncovering the electrochemical mechanisms for hydrogen evolution reaction of heteroatom doped M2C MXene (Mâ€²=â€²Ti, Mo). Applied Surface Science, 2020, 500, 143987.	3.1	93

#	Article	IF	Citations
110	Co0.85Se@C/Ti3C2Tx MXene hybrids as anode materials for lithium-ion batteries. Journal of Alloys and Compounds, 2020, 816, 152566.	2.8	26
111	A review on preparing new energy ultrafine powder materials by freeze-drying. Drying Technology, 2020, 38, 1544-1564.	1.7	18
112	Electrostatic self-assembly of MXene and edge-rich CoAl layered double hydroxide on molecular-scale with superhigh volumetric performances. Journal of Energy Chemistry, 2020, 46, 105-113.	7.1	97
113	Free-standing Ti3C2Tx MXene film as binder-free electrode in capacitive deionization with an ultrahigh desalination capacity. Chemical Engineering Journal, 2020, 384, 123329.	6.6	160
114	Nanostructured Ni/Ti3C2T MXene hybrid as cathode for lithium-oxygen battery. Chinese Chemical Letters, 2020, 31, 1000-1003.	4.8	25
115	Synthesis, properties and performance evaluation of vanadium carbide MXene as supercapacitor electrodes. Ceramics International, 2020, 46, 5323-5330.	2.3	47
116	Machine-learning-assisted screening of pure-silica zeolites for effective removal of linear siloxanes and derivatives. Journal of Materials Chemistry A, 2020, 8, 3228-3237.	5.2	14
117	Magnetron-sputtering deposited molybdenum carbide MXene thin films as a saturable absorber for passively Q-switched lasers. Journal of Materials Chemistry C, 2020, 8, 1608-1613.	2.7	40
118	2â€‰D Materials for Electrochemical Energy Storage: Design, Preparation, and Application. ChemSusChem, 2020, 13, 1155-1171.	3.6	77
119	Highly conductive dodecaborate/MXene composites for high performance supercapacitors. Nano Research, 2020, 13, 196-202.	5.8	52
120	Efficient day-night photocatalysis performance of 2D/2D Ti3C2/Porous g-C3N4 nanolayers composite and its application in the degradation of organic pollutants. Chemosphere, 2020, 246, 125760.	4.2	89
121	MXeneâ€Based Anodes for Metalâ€Ion Batteries. Batteries and Supercaps, 2020, 3, 214-235.	2.4	75
122	Recent Advances and Challenges of Twoâ€Dimensional Materials for Highâ€Energy and Highâ€Power Lithiumâ€Ion Capacitors. Batteries and Supercaps, 2020, 3, 10-29.	2.4	48
123	Nonprecious anodic catalysts for low-molecular-hydrocarbon fuel cells: Theoretical consideration and current progress. Progress in Energy and Combustion Science, 2020, 77, 100805.	15.8	107
124	Substrateâ€Free and Shapeless Planar Microâ€Supercapacitors. Advanced Functional Materials, 2020, 30, 1908758.	7.8	57
125	Borophene: A Metalâ€free and Metallic Electrocatalyst for Efficient Converting CO₂ into CH₄. ChemCatChem, 2020, 12, 1483-1490.	1.8	29
126	Twoâ€Dimensional Transition Metal Carbides and Nitrides (MXenes): Synthesis, Properties, and Electrochemical Energy Storage Applications. Energy and Environmental Materials, 2020, 3, 29-55.	7.3	319
127	Remarkable differences in the voltammetric response towards hydrogen peroxide, oxygen and Ru(NH3)63+ of electrode interfaces modified with HF or LiF-HCl etched Ti3C2Tx MXene. Mikrochimica Acta, 2020, 187, 52.	2.5	20

#	Article	IF	Citations
128	Highly safe and ionothermal synthesis of Ti3C2 MXene with expanded interlayer spacing for enhanced lithium storage. Journal of Energy Chemistry, 2020, 47, 203-209.	7.1	91
129	Delaminated Ti3C2Tx flake as an effective UV-protective material for living cells. Materials Letters, 2020, 260, 126972.	1.3	2
130	Power Ready for Driving Catalysis and Sensing: Nanomaterials Designed for Renewable Energy Storage. , 2020, , 307-346.		3
131	MXene Tunable Lamellae Architectures for Supercapacitor Electrodes. ACS Applied Energy Materials, 2020, 3, 411-422.	2.5	46
132	First-principles study of high performance lithium/sodium storage of Ti₃C₂T₂ nanosheets as electrode materials*. Chinese Physics B, 2020, 29, 016802.	0.7	8
133	High-quality rGO/MoS2 composite via a facile â€œprereduction-microwaveâ€•strategy for enhanced lithium and sodium storage. Journal of Alloys and Compounds, 2020, 821, 153207.	2.8	22
134	MXenesâ€”A new class of 2D layered materials: Synthesis, properties, applications as supercapacitor electrode and beyond. Applied Materials Today, 2020, 18, 100509.	2.3	82
135	Template-Free Preparation of Hierarchical Porous Carbon Nanosheets for Lithiumâ€“Sulfur Battery. Langmuir, 2020, 36, 14507-14513.	1.6	22
136	Three dimensional Ti₃C₂ MXene nanoribbon frameworks with uniform potassiophilic sites for the dendrite-free potassium metal anodes. Nanoscale Advances, 2020, 2, 4212-4219.	2.2	39
137	Emerging 2D MXenes for supercapacitors: status, challenges and prospects. Chemical Society Reviews, 2020, 49, 6666-6693.	18.7	466
138	Mechanotribological Aspects of MXeneâ€Reinforced Nanocomposites. Advanced Materials, 2020, 32, e2003154.	11.1	160
139	Vertically Aligned Nanopatterns of Amineâ€Functionalized Ti₃C₂ MXene via Soft Lithography. Advanced Materials Interfaces, 2020, 7, 2000424.	1.9	20
140	Synthesis and recent applications of MXenes with Mo, V or Nb transition metals: a review. Tungsten, 2020, 2, 176-193.	2.0	20
141	Recent Advances in Nanostructured Transition Metal Carbide- and Nitride-Based Cathode Electrocatalysts for Liâ€“O2 Batteries (LOBs): A Brief Review. Nanomaterials, 2020, 10, 2106.	1.9	14
142	Minimizing two-dimensional Ti₃C₂T_x MXene nanosheet loading in carbon-free silicon anodes. Nanoscale, 2020, 12, 20699-20709.	2.8	18
143	State of the art recent progress in two dimensional MXenes based gas sensors and biosensors: A comprehensive review. Coordination Chemistry Reviews, 2020, 424, 213514.	9.5	169
144	A sustainable technique to solve growing energy demand: porous carbon nanoparticles as electrode materials for high-performance supercapacitors. Journal of Applied Electrochemistry, 2020, 50, 1243-1255.	1.5	24
145	Tailoring MXene-Based Materials for Sodium-Ion Storage: Synthesis, Mechanisms, and Applications. Electrochemical Energy Reviews, 2020, 3, 766-792.	13.1	86

#	Article	IF	Citations
146	Electrocatalysts Derived from 2D Mxenes for Oxygen Reduction and Hydrogen Evolution Reactions. ACS Symposium Series, 2020, , 167-189.	0.5	0
147	Recent Advances in 2D MXene Integrated Smart-Textile Interfaces for Multifunctional Applications. Chemistry of Materials, 2020, 32, 10296-10320.	3.2	101
148	MXenes and MXenes-based Composites. Engineering Materials, 2020, , .	0.3	8
149	Composition Engineeringâ€"Triggered Bifunctionality of Freeâ€Standing Coralâ€Like 1Tâ€MoS₂ for Highly Efficient Overall Water Splitting. Energy Technology, 2020, 8, 2000268.	1.8	7
150	Intercalation in Twoâ€Dimensional Transition Metal Carbides and Nitrides (MXenes) toward Electrochemical Capacitor and Beyond. Energy and Environmental Materials, 2020, 3, 306-322.	7.3	66
151	H2O2 assisted hydrothermal oxidation of partially etched vanadium carbides (MXene) and their electrochemical properties as anode for Li-ion batteries. Applied Surface Science, 2020, 523, 146387.	3.1	37
152	Ultrasound supported synthesis of tantalum carbide integrated functionalized carbon composite for the voltammetric determination of theÂantibacterial drug nitrofurantoin in pharmaceutical samples. Mikrochimica Acta, 2020, 187, 342.	2.5	17
153	Defect Engineering of 2D Materials for Electrochemical Energy Storage. Advanced Materials Interfaces, 2020, 7, 2000494.	1.9	19
154	Twoâ€Dimensional Metalâ€Containing Nanomaterials for Battery Anode Applications. ChemElectroChem, 2020, 7, 3193-3210.	1.7	2
155	A Î²-FeOOH/MXene sandwich for high-performance anodes in lithium-ion batteries. Dalton Transactions, 2020, 49, 9268-9273.	1.6	16
156	Raman spectra of MXenes Zr₂X(X=C and N). Nanotechnology, 2020, 31, 405708.	1.3	7
157	Computational predictions of twoâ€dimensional anode materials of metalâ€ion batteries. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2020, 10, e1473.	6.2	30
158	Pore-making ionic liquid drived carbon as polar mixture for carbon/sulfur composite cathodes. Ionics, 2020, 26, 2949-2957.	1.2	0
159	K+ alkalization promoted Ca2+ intercalation in V2CT MXene for enhanced Li storage. Journal of Energy Chemistry, 2020, 49, 358-364.	7.1	54
160	Facile Synthesis of FePS3 Nanosheets@MXene Composite as a High-Performance Anode Material for Sodium Storage. Nano-Micro Letters, 2020, 12, 54.	14.4	62
161	NiCo-LDH/Ti3C2 MXene hybrid materials for lithium ion battery with high-rate capability and long cycle life. Journal of Energy Chemistry, 2020, 50, 143-153.	7.1	118
162	Sulfur functions as the activity centers for high-capacity lithium ion batteries in S- and O-bifunctionalized MXenes: A density functional theory (DFT) study. Applied Surface Science, 2020, 525, 146501.	3.1	26
163	Assessing electrochemical properties and diffusion dynamics of metal ions (Na, K, Ca, Mg, Al and Zn) on a C₂N monolayer as an anode material for non-lithium ion batteries. Physical Chemistry Chemical Physics, 2020, 22, 21208-21221.	1.3	30

#	Article	IF	Citations
164	A Mini-Review: MXene composites for sodium/potassium-ion batteries. Nanoscale, 2020, 12, 15993-16007.	2.8	102
165	A 3D porous honeycomb carbon as Na-ion battery anode material with high capacity, excellent rate performance, and robust stability. Carbon, 2020, 168, 163-168.	5.4	25
166	Graphene-MoS₂ vertically anchored on an MXene-derived accordion-like TiO₂/C skeleton: an ultrastable HER catalyst. Journal of Materials Chemistry A, 2020, 8, 14223-14233.	5.2	28
167	Nb₂Se₂C: a new compound as a combination of transition metal dichalcogenide and MXene for oxygen evolution reaction. Chemical Communications, 2020, 56, 9036-9039.	2.2	19
168	Titanium Monocarbide. , 2020, , 11-514.		0
169	Deepâ€Learningâ€Enabled MXeneâ€Based Artificial Throat: Toward Sound Detection and Speech Recognition. Advanced Materials Technologies, 2020, 5, 2000262.	3.0	45
170	There is plenty of space in the MXene layers: The confinement and fillings. Journal of Energy Chemistry, 2020, 48, 344-363.	7.1	72
171	Modulation of nearly free electron states in hydroxyl-functionalized MXenes: a first-principles study. Journal of Materials Chemistry C, 2020, 8, 5211-5221.	2.7	21
172	Facile synthesis of CuS/MXene nanocomposites for efficient photocatalytic hydrogen generation. CrystEngComm, 2020, 22, 2060-2066.	1.3	21
173	The Role of Cation Vacancies in Electrode Materials for Enhanced Electrochemical Energy Storage: Synthesis, Advanced Characterization, and Fundamentals. Advanced Energy Materials, 2020, 10, 1903780.	10.2	138
174	Covalent conductive polymer chain and organic ligand ethylenediamine modified MXene-like-{AlW₁₂O₄₀} compounds for fully symmetric supercapacitors, electrochemical sensors and photocatalysis mechanisms. Journal of Materials Chemistry A, 2020, 8, 5709-5720.	5.2	40
175	Vanadium Carbide-Entrapped Graphitic Carbon Nitride Nanocomposites: Synthesis and Electrochemical Platforms for Accurate Detection of Furazolidone. ACS Applied Nano Materials, 2020, 3, 2554-2561.	2.4	68
176	In situ decoration of nanosized metal oxide on highly conductive MXene nanosheets as efficient catalyst for Li-O2 battery. Journal of Energy Chemistry, 2020, 47, 272-280.	7.1	31
177	The Assembly of MXenes from 2D to 3D. Advanced Science, 2020, 7, 1903077.	5.6	231
178	Recent Advances of Twoâ€Dimensional Nanomaterials for Electrochemical Capacitors. ChemSusChem, 2020, 13, 1093-1113.	3.6	40
179	Pillar-free TiO2/Ti3C2 composite with expanded interlayer spacing for high-capacity sodium ion batteries. Journal of Power Sources, 2020, 451, 227756.	4.0	64
180	Two-dimensional fluorine-free mesoporous Mo2C MXene via UV-induced selective etching of Mo2Ga2C for energy storage. Sustainable Materials and Technologies, 2020, 25, e00156.	1.7	89
181	Two-dimensional MXenes: From morphological to optical, electric, and magnetic properties and applications. Physics Reports, 2020, 848, 1-58.	10.3	594

#	Article	IF	Citations
182	The effect of thickness on the Li-ion adsorption behaviors of 2D Ti1C multi-layers from first-principles calculations. Thin Solid Films, 2020, 704, 138019.	0.8	1
183	Surface reformation of 2D MXene by in situ LaF3-decorated and enhancement of energy storage in lithium-ion batteries. Journal of Materials Science: Materials in Electronics, 2020, 31, 6735-6743.	1.1	12
184	Two-dimensional transition metal carbide and nitride (MXene) derived quantum dots (QDs): synthesis, properties, applications and prospects. Journal of Materials Chemistry A, 2020, 8, 7508-7535.	5.2	201
185	Thermal reduction of sulfur-containing MAX phase for MXene production. Chemical Engineering Journal, 2020, 395, 125111.	6.6	116
186	MXeneâ€Based Nanocomposites for Energy Conversion and Storage Applications. Chemistry - A European Journal, 2020, 26, 6342-6359.	1.7	66
187	Recent Advances and Promise of MXeneâ€Based Nanostructures for Highâ€Performance Metal Ion Batteries. Advanced Functional Materials, 2020, 30, 2000706.	7.8	192
188	Flexible Nb₄C₃T_x Film with Large Interlayer Spacing for Highâ€Performance Supercapacitors. Advanced Functional Materials, 2020, 30, 2000815.	7.8	92
189	Graphene/TiO2 nanocomposite electrodes sensitized with tin sulfide quantum dots for energy issues. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 121, 114121.	1.3	19
190	Interface Engineering of MXene Composite Separator for Highâ€Performance Liâ€“Se and Naâ€“Se Batteries. Advanced Energy Materials, 2020, 10, 2000446.	10.2	94
191	Ti₃C₂T_x-Based Electrodes with Enhanced Pseudocapacitance for High-Performance Lithium-ion Batteries. Nano, 2020, 15, 2050051.	0.5	6
192	MXenes for Nonâ€Lithiumâ€Ion (Na, K, Ca, Mg, and Al) Batteries and Supercapacitors. Advanced Energy Materials, 2021, 11, 2000681.	10.2	183
193	High and ultra-stable energy storage from all-carbon sodium-ion capacitor with 3D framework carbon as cathode and carbon nanosheet as anode. Journal of Energy Chemistry, 2021, 55, 304-312.	7.1	25
194	MXene/Polymer Nanocomposites: Preparation, Properties, and Applications. Polymer Reviews, 2021, 61, 80-115.	5.3	123
195	MXenes: Advanced materials in potassium ion batteries. Chemical Engineering Journal, 2021, 404, 126565.	6.6	71
196	Subsize Ti3C2T derived from molten-salt synthesized Ti3AlC2 for enhanced capacitive deionization. Ceramics International, 2021, 47, 3665-3670.	2.3	25
197	2D titanium carbide(MXene) nanosheets and 1D hydroxyapatite nanowires into free standing nanocomposite membrane: in vitro and in vivo evaluations for bone regeneration. Materials Science and Engineering C, 2021, 118, 111367.	3.8	53
198	2D filler-reinforced polymer nanocomposite dielectrics for high-k dielectric and energy storage applications. Energy Storage Materials, 2021, 34, 260-281.	9.5	93
199	Redox MXene Artificial Synapse with Bidirectional Plasticity and Hypersensitive Responsibility. Advanced Functional Materials, 2021, 31, .	7.8	53

#	Article	IF	Citations
200	Two-dimensional transition metal borides as highly efficient N2 fixation catalysts. Applied Surface Science, 2021, 536, 147742.	3.1	58
201	Nano friction and adhesion properties on Ti3C2 and Nb2C MXene studied by AFM. Tribology International, 2021, 153, 106646.	3.0	48
202	Accordion-like composite of carbon-coated Fe3O4 nanoparticle decorated Ti3C2 MXene with enhanced electrochemical performance. Journal of Materials Science, 2021, 56, 2486-2496.	1.7	25
203	Boosting ion/eâ" transfer of Ti3C2 via interlayered and interfacial co-modification for high-performance Li-ion capacitors. Chemical Engineering Journal, 2021, 404, 127116.	6.6	32
204	Electrochemically Exfoliating MoS₂ into Atomically Thin Planarâ€Stacking Through a Selective Lateral Reaction Pathway. Advanced Functional Materials, 2021, 31, 2007840.	7.8	23
205	Recent Advances and Perspectives on Calciumâ€Ion Storage: Key Materials and Devices. Advanced Materials, 2021, 33, e2005501.	11.1	101
206	MXenes for Rechargeable Batteries Beyond the Lithiumâ€Ion. Advanced Materials, 2021, 33, e2004039.	11.1	224
207	Application of two-dimensional materials as anodes for rechargeable metal-ion batteries: A comprehensive perspective from density functional theory simulations. Energy Storage Materials, 2021, 35, 203-282.	9.5	84
208	Enhanced catalytic activity of MXene for nitrogen electoreduction reaction by carbon doping. Journal of Colloid and Interface Science, 2021, 588, 1-8.	5.0	29
209	Synthesis of Chl@Ti3C2 composites as an anode material for lithium storage. Frontiers of Chemical Science and Engineering, 2021, 15, 709-716.	2.3	10
210	Photocatalytic CO2 reduction over g-C3N4 based heterostructures: Recent progress and prospects. Journal of Environmental Chemical Engineering, 2021, 9, 104631.	3.3	57
211	Highly Sensitive Surface Plasmon Resonance Sensor Modified With 2D Tiâ„C MXene for Solution Detection. IEEE Sensors Journal, 2021, 21, 347-352.	2.4	16
212	Non-noble metal single-atom catalyst of Co1/MXene (Mo2CS2) for CO oxidation. Science China Materials, 2021, 64, 651-663.	3.5	44
213	Nanoengineering of 2D MXeneâ€Based Materials for Energy Storage Applications. Small, 2021, 17, e1902085.	5.2	398
214	Collaborative compromise of two-dimensional materials in sodium ion capacitors: mechanisms and designing strategies. Journal of Materials Chemistry A, 2021, 9, 8129-8159.	5.2	13
215	Recent progress on strategies for the preparation of 2D/2D MXene/g-C₃N₄ nanocomposites for photocatalytic energy and environmental applications. Catalysis Science and Technology, 2021, 11, 1222-1248.	2.1	75
216	Remarkably Elevated Permittivity Achieved in PVDF/1D La2TiO5 Composite Film Materials with Low-Level Dielectric Loss by Adding 2D V2C MXene Phase. Journal of Electronic Materials, 2021, 50, 2182-2189.	1.0	2
217	Theoretical assessment of Raman spectra on MXene Ti₂C: from monolayer to bilayer. Physical Chemistry Chemical Physics, 2021, 23, 19884-19891.	1.3	9

#	Article	IF	Citations
218	First-principles study of a topological phase transition induced by image potential states in MXenes. Physical Review B, 2021, 103, .	1.1	6
219	Recent progress of MXenes and MXene-based nanomaterials for the electrocatalytic hydrogen evolution reaction. Journal of Materials Chemistry A, 2021, 9, 6089-6108.	5.2	128
220	Applications of MXene-based composite fibers in smart textiles. Journal of Physics: Conference Series, 2021, 1790, 012066.	0.3	3
221	Role of MXene surface terminations in electrochemical energy storage: A review. Chinese Chemical Letters, 2021, 32, 2648-2658.	4.8	62
222	A review on optoelectronic device applications of 2D transition metal carbides and nitrides. Materials and Design, 2021, 200, 109452.	3.3	43
223	Solvent Co-intercalation into Few-layered Ti₃C₂T_x MXenes in Lithium Ion Batteries Induced by Acidic or Basic Post-treatment. ACS Nano, 2021, 15, 3295-3308.	7.3	35
224	Microstructure and Mechanical Properties of Alumina Composites with Addition of Structurally Modified 2D Ti3C2 (MXene) Phase. Materials, 2021, 14, 829.	1.3	27
225	MXenes: An Emerging Platform for Wearable Electronics and Looking Beyond. Matter, 2021, 4, 377-407.	5.0	125
226	2D Materials Bridging Experiments and Computations for Electro/Photocatalysis. Advanced Energy Materials, 2022, 12, 2003841.	10.2	116
227	Theoretical Prediction of P-Triphenylene-Graphdiyne as an Excellent Anode Material for Li, Na, K, Mg, and Ca Batteries. Applied Sciences (Switzerland), 2021, 11, 2308.	1.3	7
228	MXene materials based printed flexible devices for healthcare, biomedical and energy storage applications. Materials Today, 2021, 43, 99-131.	8.3	107
229	MXenes and the progress of Liâ€“S battery developmentâ€”a perspective. JPhys Energy, 2021, 3, 021002.	2.3	10
230	A Review on MXene: Synthesis, Properties and Applications on Alkali Metal Ion Batteries. IOP Conference Series: Earth and Environmental Science, 2021, 714, 042030.	0.2	20
231	Perspectives on solution processing of two-dimensional MXenes. Materials Today, 2021, 48, 214-240.	8.3	178
232	Atomically Thin Nanosheets Confined in 2D Heterostructures: Metalâ€Ion Batteries Prospective. Advanced Energy Materials, 2021, 11, 2100451.	10.2	35
233	Progress in energy recovery and graphene usage in capacitive deionization. Critical Reviews in Environmental Science and Technology, 2022, 52, 3080-3136.	6.6	15
234	Exploring MXene-based materials for next-generation rechargeable batteries. JPhys Energy, 2021, 3, 032009.	2.3	22
235	Cationic intermediates assisted self-assembly two-dimensional Ti3C2T /rGO hybrid nanoflakes for advanced lithium-ion capacitors. Science Bulletin, 2021, 66, 914-924.	4.3	161

#	Article	IF	Citations
236	Emerging MXenes for Functional Memories. Small Science, 2021, 1, 2100006.	5.8	50
237	Recent advances in MXene-based nanoarchitectures as electrode materials for future energy generation and conversion applications. Coordination Chemistry Reviews, 2021, 435, 213806.	9.5	97
238	Reinforced dielectric response in polymer/V2C MXene composite high-insulation films enabled through dispersing ionic liquid. Journal of Electroceramics, 2021, 46, 124-130.	0.8	3
239	Strategies for Fabricating Highâ€Performance Electrochemical Energyâ€Storage Devices by MXenes. ChemElectroChem, 2021, 8, 1948-1987.	1.7	16
240	2D MXene Materials for Sodium Ion Batteries: A review on Energy Storage. Journal of Energy Storage, 2021, 37, 102478.	3.9	62
241	Strain-tunable electronic and optical properties of Zr2CO2 MXene and MoSe2 van der Waals heterojunction: A first principles calculation. Applied Surface Science, 2021, 548, 149249.	3.1	33
242	Two-dimensional vanadium carbide for simultaneously tailoring the hydrogen sorption thermodynamics and kinetics of magnesium hydride. Journal of Magnesium and Alloys, 2022, 10, 1051-1065.	5.5	55
243	Scalable Synthesis of MAX Phase Precursors toward Titanium-Based MXenes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 26074-26083.	4.0	32
244	Electophoretically Deposition of Ti3C2 on Titanium Surface for Hard Tissue Implant Applications. Coatings, 2021, 11, 761.	1.2	4
245	Printed flexible supercapacitor: Ink formulation, printable electrode materials and applications. Applied Physics Reviews, 2021, 8, .	5.5	67
246	Electromagnetic wave absorption properties of N-PyC/Ti3C2Tx hybrids. Journal of Materials Science: Materials in Electronics, 2021, 32, 26105-26115.	1.1	3
247	Highly Efficient Adsorption of Bilirubin by Ti₃C₂T_x MXene. Chemistry - an Asian Journal, 2021, 16, 1949-1955.	1.7	19
248	Potential anodic applications of 2D MoS2 for K-ion batteries. Journal of Alloys and Compounds, 2021, 865, 158782.	2.8	38
249	A theoretical investigation of quantum spin Hall state in ordered Mâ€²2Mâ€³2C3 MXenes (Mâ€² = V, Nb, Ta and Mâ€³) Tj ETQq1 1 0.7	0.7	3
250	Lamellar MXene: A novel 2D nanomaterial for electrochemical sensors. Journal of Applied Electrochemistry, 2021, 51, 1509-1522.	1.5	27
251	Sandwich-like N-doped carbon nanotube@Nb2C MXene composite for high performance alkali ion batteries. Ceramics International, 2021, 47, 20610-20616.	2.3	18
252	2D Hydrogen-Bonded Molecular Crystals Showing Terminal-Group-Triggered Phase Transitions and Dielectric Responses. Crystal Growth and Design, 2021, 21, 5342-5348.	1.4	4
253	Lattice-Coupled Si/MXene Confined by Hard Carbon for Fast Sodium-Ion Conduction. ACS Applied Energy Materials, 2021, 4, 7268-7277.	2.5	29

#	Article	IF	Citations
254	Electroanalytical overview: utilising micro- and nano-dimensional sized materials in electrochemical-based biosensing platforms. Mikrochimica Acta, 2021, 188, 268.	2.5	28
255	Recent Advances in the Synthesis and Energy Applications of 2D MXenes. ChemElectroChem, 2021, 8, 3804-3826.	1.7	18
256	A theoretical investigation of topological phase modulation in carbide MXenes: Role of image potential states. Carbon, 2021, 181, 370-378.	5.4	6
257	MXene Core-Shell Nanosheets: Facile Synthesis, Optical Properties, and Versatile Photonics Applications. Nanomaterials, 2021, 11, 1995.	1.9	4
258	Electronic and Optical Properties of Atomic-Scale Heterostructure Based on MXene and MN (M = Al,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.9	33
259	Computational study of mechanical stability and phonon properties of MXenes Mo2ScC2T2 (Tâ€‰=â€‰O and) Tj ETQq1 1 0.784314	1.1	2
260	Recent advances in materials and device technologies for aqueous hybrid supercapacitors. Science China Materials, 2022, 65, 10-31.	3.5	25
261	Highly Conductive Tellurium and Telluride in Energy Storage. ChemElectroChem, 2021, 8, 4412-4426.	1.7	20
262	Novel electrodes for supercapacitor: Conducting polymers, metal oxides, chalcogenides, carbides, nitrides, MXenes, and their composites with graphene. Journal of Alloys and Compounds, 2022, 893, 161998.	2.8	129
263	Interfacial assembly of two-dimensional MXenes. Journal of Energy Chemistry, 2021, 60, 417-434.	7.1	104
264	Recent advances and prospects of MXene-based materials for electrocatalysis and energy storage. Materials Today Physics, 2021, 20, 100469.	2.9	34
265	Ti₃C₂T_x/PEDOT:PSS Composite Interface Enables over 17% Efficiency Non-fullerene Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 45789-45797.	4.0	19
266	Achieving Highâ€Performance 3D K⁺â€Preâ€intercalated Ti₃C₂T_x MXene for Potassiumâ€Ion Hybrid Capacitors via Regulating Electrolyte Solvation Structure. Angewandte Chemie, 2021, 133, 26450-26457.	1.6	3
267	Achieving Highâ€Performance 3D K⁺â€Preâ€intercalated Ti₃C₂T_x MXene for Potassiumâ€Ion Hybrid Capacitors via Regulating Electrolyte Solvation Structure. Angewandte Chemie - International Edition, 2021, 60, 26246-26253.	7.2	50
268	MnCo2S4 â€“ MXene: A novel hybrid electrode material for high performance long-life asymmetric supercapattery. Journal of Colloid and Interface Science, 2021, 600, 264-277.	5.0	57
269	Graphene-like BSi as a promising anode material for Li- and Mg-ion batteries: A first principle study. Applied Surface Science, 2021, 563, 150278.	3.1	35
270	Two-dimensional materials and their derivatives for high performance phase change materials: emerging trends and challenges. Energy Storage Materials, 2021, 42, 845-870.	9.5	47
271	Insights into different dimensional MXenes for photocatalysis. Chemical Engineering Journal, 2021, 424, 130340.	6.6	60

#	Article	IF	Citations
272	Piezoelectricity in monolayer MXene for nanogenerators and piezotronics. Nano Energy, 2021, 90, 106528.	8.2	43
273	Ultrafast photonics applications based on evanescent field interactions with 2D molybdenum carbide (Mo₂C). Journal of Materials Chemistry C, 0, , .	2.7	11
274	High performance 2D MXene based conducting polymer hybrids: synthesis to emerging applications. Journal of Materials Chemistry C, 2021, 9, 10193-10215.	2.7	31
275	Synthesis of new M-layer solid-solution 312 MAX phases (Ta_{1â^'x}Ti_x)₃AlC₂ (x = 0.4, 0.62,) Tj ETQq1 1 0.784314 rgBT /O	1.7	21
276	Horizons for Modern Electrochemistry Related to Energy Storage and Conversion, a Review. Israel Journal of Chemistry, 2021, 61, 11-25.	1.0	6
277	Nb₂CT_x MXene as High-Performance Energy Storage Material with Na, K, and Liquid Kâ€“Na Alloy Anodes. Langmuir, 2021, 37, 1102-1109.	1.6	22
278	Modulating the electronic structure of nanomaterials to enhance polysulfides confinement for advanced lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 18927-18946.	5.2	62
279	Synthesis of Ultrathin MnO₂ Nanowire-Intercalated 2D-MXenes for High-Performance Hybrid Supercapacitors. Energy & Fuels, 2021, 35, 3469-3478.	2.5	96
280	Recent progress of dimensionally designed electrode nanomaterials in aqueous electrochemical energy storage. Journal of Materials Chemistry A, 2021, 9, 9535-9572.	5.2	54
281	MXenes for Environmental and Water Treatment Applications. , 2019, , 417-444.		11
282	2D MXene-Based Materials for Electrocatalysis. Transactions of Tianjin University, 2020, 26, 149-171.	3.3	65
283	Ti₃C₂T_x MXene decorated black phosphorus nanosheets with improved visible-light photocatalytic activity: experimental and theoretical studies. Journal of Materials Chemistry A, 2020, 8, 5171-5185.	5.2	168
284	MXene and MBene as efficient catalysts for energy conversion: roles of surface, edge and interface. JPhys Energy, 2021, 3, 012002.	2.3	31
285	Harnessing the unique properties of MXenes for advanced rechargeable batteries. JPhys Energy, 2021, 3, 012005.	2.3	14
286	Nonlinear optical absorption features in few-layered hybrid Ti₃C₂(OH)₂/Ti₃C₂F₂ MXene for optical pulse generation in the NIR region. Optics Express, 2020, 28, 31499.	1.7	22
287	Degradable and Dissolvable Thin-Film Materials for the Applications of New-Generation Environmental-Friendly Electronic Devices. Applied Sciences (Switzerland), 2020, 10, 1320.	1.3	15
288	Surface functionalization of MXenes. Materials Advances, 2021, 2, 7277-7307.	2.6	73
289	A review on MXenes: new-generation 2D materials for supercapacitors. Sustainable Energy and Fuels, 2021, 5, 5672-5693.	2.5	55

#	Article	IF	Citations
290	Solvent Coâ€Intercalationâ€Induced Activation and Capacity Fade Mechanism of Fewâ€Multiâ€Layered MXenes in Lithium Ion Batteries. Small, 2021, 17, e2104130.	5.2	12
291	Double transition metal-containing M₂TiAlC₂ o-MAX phases as Li-ion batteries anodes: a theoretical screening. Materials Research Letters, 2021, 9, 516-522.	4.1	7
292	Nanostructured V2O5 and its nanohybrid with MXene as an efficient electrode material for electrochemical capacitor applications. Ceramics International, 2022, 48, 2345-2354.	2.3	42
293	Energy Related Applications. Engineering Materials, 2020, , 207-302.	0.3	0
294	Cobalt Nanoparticles Encapsulated in N-Doped Carbon on the Surface of MXene (Ti₃C₂) Play a Key Role for Electroreduction of Oxygen. Energy & Fuels, 2021, 35, 17909-17918.	2.5	17
295	Unique Arrangement of Atoms Leads to Low Thermal Conductivity: A Comparative Study of Monolayer Mg₂C. Journal of Physical Chemistry Letters, 2021, 12, 10353-10358.	2.1	7
296	Artificial Neurons Based on Ag/V2C/W Threshold Switching Memristors. Nanomaterials, 2021, 11, 2860.	1.9	21
297	Vanadium Monocarbide. , 2020, , 515-707.		0
298	Functional 2D MXene Inks for Wearable Electronics. Materials, 2021, 14, 6603.	1.3	16
299	Peapod-like architectures with CuO microspheres encapsulated within MXene as a conversion electrode for lithium-ion batteries. Chemical Communications, 2022, 58, 1195-1198.	2.2	6
300	MoS2@Ti3C2 nanohybrid-based photoelectrochemical biosensor: A platform for ultrasensitive detection of cancer biomarker exosomal miRNA. Talanta, 2022, 238, 123077.	2.9	22
301	Vacuumâ€Assisted Layerâ€byâ€Layer Carbon Nanotube/Ti₃C₂T_X MXene Films for Detecting Human Movements. Advanced Materials Technologies, 2022, 7, 2101096.	3.0	6
302	Mechanically Robust Flexible Multilayer Aramid Nanofibers and MXene Film for High-Performance Electromagnetic Interference Shielding and Thermal Insulation. Nanomaterials, 2021, 11, 3041.	1.9	9
303	Ultrahigh-rate and high-frequency MXene micro-supercapacitors for kHz AC line-filtering. Journal of Energy Chemistry, 2022, 69, 1-8.	7.1	13
304	Synthesis of SDS-Modified Pt/Ti3C2Tx Nanocomposite Catalysts and Electrochemical Performance for Ethanol Oxidation. Nanomaterials, 2021, 11, 3174.	1.9	3
305	From structural ceramics to 2D materials with multi-applications: A review on the development from MAX phases to MXenes. Journal of Advanced Ceramics, 2021, 10, 1194-1242.	8.9	122
306	MXenes nanocomposites for energy storage and conversion. Rare Metals, 2022, 41, 1101-1128.	3.6	47
307	Halogenated Ti₃C₂ MXene as High Capacity Electrode Material for Li-ion Batteries. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2022, 37, 660.	0.6	4

#	Article	IF	Citations
308	Characterizing the Chemical Structure of Ti3C2Tx MXene by Angle-Resolved XPS Combined with Argon Ion Etching. Materials, 2022, 15, 307.	1.3	27
309	All-Optical Modulation Technology Based on 2D Layered Materials. Micromachines, 2022, 13, 92.	1.4	20
310	Two-dimensional MXenes for electrochemical energy storage applications. Journal of Materials Chemistry A, 2022, 10, 1105-1149.	5.2	63
311	MXene-polypyrrole electrodes for asymmetric supercapacitors. Electrochimica Acta, 2022, 406, 139843.	2.6	23
312	Surface functionalization of Ta4C3 MXene for broadband ultrafast photonics in the near-infrared region. Applied Materials Today, 2022, 26, 101341.	2.3	17
313	Novel synthesis methods and applications of MXene-based nanomaterials (MBNs) for hazardous pollutants degradation: Future perspectives. Chemosphere, 2022, 293, 133542.	4.2	34
314	Rational construction of densely packed Si/MXene composite microspheres enables favorable sodium storage. Rare Metals, 2022, 41, 1626-1636.	3.6	20
315	MXenes as an emerging class of two-dimensional materials for advanced energy storage devices. Journal of Materials Chemistry A, 2022, 10, 4558-4584.	5.2	33
316	High-performance MnO2@MXene/carbon nanotube fiber electrodes with internal and external construction for supercapacitors. Journal of Materials Science, 2022, 57, 3613-3628.	1.7	20
317	3D Porous MXene (Ti3C2Tx) Prepared by Alkaline-Induced Flocculation for Supercapacitor Electrodes. Materials, 2022, 15, 925.	1.3	6
318	New insights on MXene and its advanced hybrid materials for lithium-ion batteries. Sustainable Energy and Fuels, 2022, 6, 971-1013.	2.5	18
319	Timeâ€Dependent Cation Selectivity of Titanium Carbide MXene in Aqueous Solution. Advanced Sustainable Systems, 2022, 6, .	2.7	4
320	Insights into 2D/2D MXene Heterostructures for Improved Synergy in Structure toward Nextâ€Generation Supercapacitors: A Review. Advanced Functional Materials, 2022, 32, .	7.8	152
321	Preparation and electrochemical properties of high yield pomelo peel carbon materials. Journal of Materials Science: Materials in Electronics, 2022, 33, 3595-3605.	1.1	2
322	First-Principles Study of Transition Metal Ti-Based MXenes (Ti₂MC₂T_x and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 182 Td (M₂TiC₂ ACS Applied Nano Materials, 2022, 5, 2358-2366.	2.4	8
323	TiO2 encrusted MXene as a High-Performance anode material for Li-ion batteries. Applied Surface Science, 2022, 583, 152441.	3.1	29
324	Na2CO3 promoted CaO-based heat carrier for thermochemical energy storage in concentrated solar power plants. Chemical Engineering Journal, 2022, 435, 134852.	6.6	28
325	The roles of MXenes in developing advanced lithium metal anodes. Journal of Energy Chemistry, 2022, 69, 132-149.	7.1	24

#	Article	IF	Citations
326	Antiferromagnetic Weyl semimetals and Quantum Anomalous Hall effect in 2D half-metallic Mn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e704" altimg="si34.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>NT<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e712" altimg="si34.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:ms	1.3	4
327	Friction between MXenes and Other Two-Dimensional Materials at the Nanoscale. SSRN Electronic Journal, 0, , .	0.4	0
328	A fast response cataluminescence ether gas sensor based on GO/Mo₂TiC₂T_x at low working temperature. RSC Advances, 2022, 12, 8361-8367.	1.7	2
329	From 0D to 3D MXenes: their diverse syntheses, morphologies and applications. Materials Chemistry Frontiers, 2022, 6, 818-842.	3.2	24
330	Highly Sensitive Photothermal Fiber Sensor Based on MXene Device and Vernier Effect. Nanomaterials, 2022, 12, 766.	1.9	14
331	Novel Trends in MXene/Conducting Polymeric Hybrid Nanoclusters. Journal of Cluster Science, 2023, 34, 45-76.	1.7	23
332	Roles of MXene in Pressure Sensing: Preparation, Composite Structure Design, and Mechanism. Advanced Materials, 2022, 34, e2110608.	11.1	90
333	Surface Functionalized MXenes for Wastewater Treatmentâ€"A Comprehensive Review. Global Challenges, 2022, 6, .	1.8	14
334	Coexistence of multiple Weyl fermions and quantum anomalous Hall effect in 2D half-metallic Cr2NT2. Materials Chemistry and Physics, 2022, 282, 125940.	2.0	2
335	A Facile Etching Route for Preparing Ti₃C₂ MXene with Enhanced Electrochemical Performance in Silver Nitrate Solution. Journal of the Electrochemical Society, 2022, 169, 043506.	1.3	2
336	Biomedical engineering of two-dimensional MXenes. Advanced Drug Delivery Reviews, 2022, 184, 114178.	6.6	69
337	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
338	Wearable superhydrophobic PPy/MXene pressure sensor based on cotton fabric with superior sensitivity for human detection and information transmission. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 642, 128676.	2.3	36
339	Rapid electrochemical dual-target biosensor composed of an Aptamer/MXene hybrid on Au microgap electrodes for cytokines detection. Biosensors and Bioelectronics, 2022, 207, 114159.	5.3	36
340	Skin-inspired flexible and high-performance MXene@polydimethylsiloxane piezoresistive pressure sensor for human motion detection. Journal of Colloid and Interface Science, 2022, 617, 478-488.	5.0	66
341	Bandgap engineering of strained S-terminated MXene and its promising application as NOx gas sensor. Applied Surface Science, 2022, 592, 153296.	3.1	14
342	2D porous Nb₄N₅@Nb₂C heterojunctions for high-performance Li-ion batteries. 2D Materials, 2022, 9, 015029.	2.0	9
343	Applications of 2D MXenes for Electrochemical Energy Conversion and Storage. Energies, 2021, 14, 8183.	1.6	9

#	Article	IF	Citations
344	Piezoelectricity in Monolayer and Multilayer Ti₃C₂Tx MXenes: Implications for Piezoelectric Devices. ACS Applied Nano Materials, 2022, 5, 1034-1046.	2.4	19
345	Recent Progress in Ti₃C₂T_x MXene-Based Flexible Pressure Sensors. ACS Nano, 2021, 15, 18880-18894.	7.3	77
346	MXene-based composite double-network multifunctional hydrogels as highly sensitive strain sensors. Journal of Materials Chemistry C, 2022, 10, 7604-7613.	2.7	49
347	CO oxidation on MXene (Mo2CS2) supported single-atom catalyst: A termolecular Eley-Rideal mechanism. Chinese Chemical Letters, 2023, 34, 107412.	4.8	13
348	Alkali preparation and ions detection of Ti3C2 quantum dots. Ceramics International, 2022, 48, 21118-21124.	2.3	2
351	2h-Mos2/Ti3c2tx Mxene Composites for Enhanced No2 Gas Sensing Properties at Room Temperature. SSRN Electronic Journal, 0, , .	0.4	0
352	Surface engineering of MXenes for energy and environmental applications. Journal of Materials Chemistry A, 2022, 10, 10265-10296.	5.2	41
353	Synergistic lubrication of few-layer Ti3C2Tx/MoS2 heterojunction as a lubricant additive. Friction, 2022, 10, 2018-2032.	3.4	23
354	Ultrasensitive aptasensor using electrospun MXene/polyvinylidene fluoride nanofiber composite for Ochratoxin A detection. Food Chemistry, 2022, 390, 133105.	4.2	29
355	A Glimpse on the plethora of applications of prodigious material MXene. Sustainable Materials and Technologies, 2022, 32, e00439.	1.7	9
356	Friction between MXenes and other two-dimensional materials at the nanoscale. Carbon, 2022, 196, 774-782.	5.4	17
357	2H-MoS2/Ti3C2Tx MXene composites for enhanced NO2 gas sensing properties at room temperature. Sensors and Actuators Reports, 2022, 4, 100103.	2.3	11
358	Structural evolution of MXenes and their composites for electromagnetic interference shielding applications. Nanoscale, 2022, 14, 9218-9247.	2.8	31
359	Multilayer MXene Heterostructures and Nanohybrids for Multifunctional Applications: A Review. , 2022, 4, 1174-1206.		25
360	The Emergence of 2D MXenes Based Znâ€ion Batteries: Recent Development and Prospects. Small, 2022, 18, .	5.2	76
361	Heterostructured MXene-derived oxides as superior photocatalysts for MB degradation. Journal of Alloys and Compounds, 2022, 919, 165629.	2.8	11
362	Recent progress in Ti3C2Tx-based materials: From fundamentals to emerging applications. Materials Science in Semiconductor Processing, 2022, 148, 106835.	1.9	9
363	3D MXenes as promising alternatives for potential electrocatalysis applications: opportunities and challenges. Journal of Materials Chemistry C, 2022, 10, 9669-9690.	2.7	8

#	Article	IF	Citations
364	Reviewâ€"The Synthesis and Characterization of Recent Two-Dimensional Materials for Energy Storage Applications. ECS Journal of Solid State Science and Technology, 2022, 11, 063015.	0.9	2
365	DFT practice in MXene-based materials for electrocatalysis and energy storage: From basics to applications. Ceramics International, 2022, 48, 27217-27239.	2.3	8
366	Approaching intrinsic dynamics of MXenes hybrid hydrogel for 3D printed multimodal intelligent devices with ultrahigh superelasticity and temperature sensitivity. Nature Communications, 2022, 13, .	5.8	103
367	High-efficiency ultraviolet shielding and high transparency of Ti3C2T MXene/poly(vinyl alcohol) nanocomposite films. Composites Communications, 2022, 33, 101235.	3.3	14
368	Resonance Phenomena in MXene on PCL Nanocomposite. , 2022, , .		0
369	Architecture design of MXene-based materials for sodium-chemistry based batteries. Nano Energy, 2022, 101, 107590.	8.2	13
370	Removal and recovery of ammonia from simulated wastewater using Ti3C2Tx MXene in flow electrode capacitive deionization. Npj Clean Water, 2022, 5, .	3.1	9
371	Surface-Termination Groupsâ€™ Tuning to Improve the Lithium-Ion-Storage Performance of Ti3C2Tx MXene. Coatings, 2022, 12, 1005.	1.2	3
372	Application of MXenes in lithium-sulfur batteries. Science China Technological Sciences, 2022, 65, 2259-2273.	2.0	8
373	Recent status and future perspectives of 2D MXene for micro-supercapacitors and micro-batteries. Energy Storage Materials, 2022, 51, 500-526.	9.5	58
374	Influence of surfaces and interfaces on MXene and MXene hybrid polymeric nanoarchitectures, properties, and applications. Journal of Materials Science, 2022, 57, 14579-14619.	1.7	24
375	3D printing quasi-solid-state micro-supercapacitors with ultrahigh areal energy density based on high concentration MXene sediment. Chemical Engineering Journal, 2023, 451, 138686.	6.6	18
376	Preparation of hierarchical porous carbon derived by edible fungus residues for high performance supercapacitors. Journal of Porous Materials, 0, , .	1.3	0
377	Raman spectrum of MXene Ti ₂ C under planar symmetrical strain: Firstâ€principles calculations. Journal of Raman Spectroscopy, 0, , .	1.2	0
378	Advancements in MXene-Polymer Nanocomposites in Energy Storage and Biomedical Applications. Polymers, 2022, 14, 3433.	2.0	28
379	Integrated Selfâ€Powered Sensors Based on 2D Material Devices. Advanced Functional Materials, 2022, 32, .	7.8	42
380	Research Progress on MXene-Based Flexible Supercapacitors: A Review. Crystals, 2022, 12, 1099.	1.0	6
381	Introduction of Nanomaterials to Biosensors for Exosome Detection: Case Study for Cancer Analysis. Biosensors, 2022, 12, 648.	2.3	7

#	Article	IF	Citations
382	Flexible quasi-solid-state supercapacitors based on Ti3C2-Polypyrrole nanocomposites. Electrochimica Acta, 2022, 429, 141051.	2.6	10
383	In situ constructing amorphous V2O5@Ti3C2Tx heterostructure for high-performance aqueous zinc-ion batteries. Journal of Power Sources, 2022, 544, 231883.	4.0	25
384	A facile preparation of submicro-sized Ti2AlC precursor toward Ti2CT MXene for lithium storage. Electrochimica Acta, 2022, 432, 141152.	2.6	3
385	Confining homogeneous Ni0.5Co0.5Se2 nanoparticles in Ti3C2T MXene architectures for enhanced sodium storage performance. Applied Surface Science, 2022, 605, 154847.	3.1	18
386	MXene quantum dots of Ti3C2: Properties, synthesis, and energy-related applications. Chinese Journal of Catalysis, 2022, 43, 2484-2499.	6.9	33
387	Hierarchical MXene/transition metal oxide heterostructures for rechargeable batteries, capacitors, and capacitive deionization. Nanoscale, 2022, 14, 11923-11944.	2.8	28
388	Weaving a magnificent world: 1D fibrous electrodes and devices for stretchable and wearable electronics. Journal of Materials Chemistry C, 2022, 10, 14027-14052.	2.7	16
389	Effect of hydrochloric acid and hydrofluoric acid treatment on the morphology, structure and gamma permeability of 2D MXene Ti₃C₂T_x electrodes. Canadian Metallurgical Quarterly, 0, , 1-22.	0.4	0
390	An Efficient Structure Manipulation Strategy of Preparing Vanadium Carbide, V8C7/C, for Improving Lithium and Zinc Storage. Journal of Electronic Materials, 2022, 51, 6047-6055.	1.0	0
391	MXenes in polymer electrolyte membrane hydrogen fuel and electrolyzer cells. Ceramics International, 2022, 48, 34190-34198.	2.3	9
392	Anchoring Oxidized MXene Nanosheets on Porous Carbon Nanotube Sponge for Enhancing Ion Transport and Pseudocapacitive Performance. ACS Applied Materials & Interfaces, 2022, 14, 41997-42006.	4.0	6
393	Directed Stabilization by Air-Milling and Catalyzed Decomposition by Layered Titanium Carbide Toward Low-Temperature and High-Capacity Hydrogen Storage of Aluminum Hydride. ACS Applied Materials & Interfaces, 2022, 14, 42102-42112.	4.0	9
394	Boosting nitrogen reduction reaction with boron sites supported by defective Mo2B2O2 MBene. Applied Catalysis A: General, 2022, 646, 118866.	2.2	5
395	Two-dimensional double transition metal carbides as superior bifunctional electrocatalysts for overall water splitting. Electrochimica Acta, 2022, 434, 141257.	2.6	20
396	Recent advances in titanium carbide MXene-based nanotextures with influential effect of synthesis parameters for solar CO2 reduction and H2 production: A critical review. Journal of Energy Chemistry, 2023, 76, 295-331.	7.1	36
397	Headway towards contemporary 2D MXene-based hybrid electrodes for alkali-ion batteries. Energy Advances, 2022, 1, 950-979.	1.4	3
398	Applications of MXene-Containing Polypyrrole Nanocomposites in Electrochemical Energy Storage and Conversion. ACS Omega, 2022, 7, 39498-39519.	1.6	16
399	A facile and almost HF-free synthesis of Ti3C2@CuCl composite for supercapacitors. Electrochemistry Communications, 2022, 143, 107388.	2.3	6

#	Article	IF	Citations
400	Recent developments in photocatalytic water treatment technology with MXene material: A review. Chemical Engineering Journal Advances, 2022, 12, 100418.	2.4	10
401	Comparative study for electrochemical and Single-Cell performance of a novel MXene-Supported Platinumâ€“Ruthenium catalyst for Direct methanol fuel cell application. Journal of Electroanalytical Chemistry, 2022, 925, 116884.	1.9	3
402	Advances in 2D MXenes-based materials for water purification and disinfection: Synthesis approaches and photocatalytic mechanistic pathways. Journal of Environmental Management, 2022, 324, 116387.	3.8	22
403	MXenes: An exotic material for hybrid supercapacitors and rechargeable batteries. Journal of Energy Storage, 2022, 56, 105914.	3.9	10
404	MXene based 2D-2D heterostructures for Counter Electrode in third generation Dye Sensitized Solar Cells. Chemical Physics Letters, 2022, 808, 140144.	1.2	6
405	Recently emerging trends in MXene hybrid conductive polymer energy storage nanoarchitectures. Polymer-Plastics Technology and Materials, 2022, 61, 861-887.	0.6	16
406	Enhanced electrochemical properties of d-Ti₃C₂T_x anode by h-BN addition for lithium-ion rechargeable battery. Nano, 0, , .	0.5	0
407	Insights into electronic and magnetic properties of MXenes: From a fundamental perspective. Sustainable Materials and Technologies, 2022, 34, e00516.	1.7	4
408	A review of recent progress in 2D MXenes: Synthesis, properties, and applications. Diamond and Related Materials, 2023, 132, 109634.	1.8	8
409	Conductive and antibacterial scaffold with rapid crimping property for application prospect in repair of peripheral nerve injury. Journal of Applied Polymer Science, 2023, 140, .	1.3	1
410	Epitaxial Atomic Substitution for MoS₂â€“MoN Heterostructure Synthesis. ACS Applied Materials & Interfaces, 2022, 14, 57144-57152.	4.0	4
411	Twoâ€Ðimensional MXenes for Energy Storage: Computational and Experimental Approaches. ChemistrySelect, 2022, 7, .	0.7	4
412	MXene-based separators for redox-enhanced electric capacitors with a suppressed shuttle effect and self-discharge: the effect of MXene ageing. New Journal of Chemistry, 2023, 47, 3516-3523.	1.4	1
413	Research progress of functional composite electromagnetic shielding materials. European Polymer Journal, 2023, 185, 111825.	2.6	15
414	Design and construction of poly(benzoquinone-diamine)/Ti3C2TX hybrid electrode toward advanced aqueous zinc-ion batteries. Composites Part B: Engineering, 2023, 252, 110517.	5.9	6
415	Excellent CoO_xH_y/C Oxygen Evolution Catalysts Evolved from the Rapid In Situ Electrochemical Reconstruction of Cobalt Transition Metals Doped into the V₂SnC MAX Phase at A Layers. ACS Applied Energy Materials, 2023, 6, 1116-1125.	2.5	1
416	Two-dimensional-Ti3C2 magnetic nanocomposite for targeted cancer chemotherapy. Frontiers in Bioengineering and Biotechnology, 0, 11, .	2.0	3
417	Polymer Complex Fiber: Property, Functionality, and Applications. ACS Applied Materials & Interfaces, 2023, 15, 7639-7662.	4.0	10

#	Article	IF	Citations
418	Applications of MXene-based memristors in neuromorphic intelligence applications. Contemporary Physics, 0, , 1-19.	0.8	1
419	Development of Electromagnetic-Wave-Shielding Polyvinylidene Fluorideâ€“Ti3C2Tx MXeneâ€“Carbon Nanotube Composites by Improving Impedance Matching and Conductivity. Nanomaterials, 2023, 13, 417.	1.9	5
420	Influence of C-vacancy-line defect on electronic and optical properties and quantum capacitance of Ti2CO2 MXene: A first-principles study. Journal of Physics and Chemistry of Solids, 2023, 176, 111254.	1.9	3
421	Carbon-based materials as anode materials for lithium-ion batteries and lithium-ion capacitors: A review. Journal of Energy Storage, 2023, 61, 106716.	3.9	57
422	Defect engineering of two-dimensional materials for advanced energy conversion and storage. Chemical Society Reviews, 2023, 52, 1723-1772.	18.7	66
423	Latest advances on MXenes in biomedical research and healthÂcare. MRS Bulletin, 2023, 48, 283-290.	1.7	10
424	Toward high-sulfur-content, high-performance lithium-sulfur batteries: Review of materials and technologies. Journal of Energy Chemistry, 2023, 80, 625-657.	7.1	49
425	Laser ablated uniform deposition of bismuth oxide film as efficient anode for zinc based flow battery. Electrochimica Acta, 2023, 451, 142287.	2.6	1
426	All-solid-state Ti3C2Tx neutral symmetric fiber supercapacitors with high energy density and wide temperature range. Journal of Colloid and Interface Science, 2023, 643, 92-101.	5.0	6
427	Insights into the impact of interlayer spacing on MXene-based electrodes for supercapacitors: A review. Journal of Energy Storage, 2023, 65, 107341.	3.9	11
428	Efficient electrocatalytic CO2 reduction on Ti3C2O2 surfaces: The effect of single-atom TM anchoring on product selectivity. Applied Surface Science, 2023, 616, 156492.	3.1	5
429	Emerging trends towards MXene-based electrolytes for electrochemical applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 290, 116355.	1.7	4
430	Efficient degradation of tetracycline by a novel nanoconfinement structure Cu2O/Cu@MXene composite. Journal of Hazardous Materials, 2023, 448, 130995.	6.5	29
431	Tailoring the dâ€Orbital Splitting Manner of Single Atomic Sites for Enhanced Oxygen Reduction. Advanced Materials, 2023, 35, .	11.1	54
432	An overview of 2D metal sulfides and carbides as Na host materials for Na-ion batteries. Chemical Engineering Journal, 2023, 461, 141924.	6.6	15
433	Assessing recent progress in MXene-based nanomaterials for oxygen evolution reactions. International Journal of Hydrogen Energy, 2024, 52, 293-301.	3.8	3
434	Boosting the electrochemical activities of MnO2 for next-generation supercapacitor application: Adaptation of multiple approaches. Fuel, 2023, 343, 127946.	3.4	27
435	3D bioprinting of human mesenchymal stem cells-laden hydrogels incorporating MXene for spontaneous osteodifferentiation. Heliyon, 2023, 9, e14490.	1.4	9

#	Article	IF	Citations
436	Resistive random access memory: introduction to device mechanism, materials and application to neuromorphic computing. , 2023, 18, .		9
437	Recent Advances and Perspectives of Lewis Acidic Etching Route: An Emerging Preparation Strategy for MXenes. Nano-Micro Letters, 2023, 15, .	14.4	24
438	Recent advances in two-dimensional MXenes for zinc-ion batteries. Materials Chemistry Frontiers, 2023, 7, 2373-2404.	3.2	5
439	Recent Advances in MXene-Based Nanocomposites for Wastewater Purification and Water Treatment: A Review. Water (Switzerland), 2023, 15, 1267.	1.2	5
440	Improving the Photocatalytic Activity of Ti3C2 MXene by Surface Modification of N Doped. Materials, 2023, 16, 2836.	1.3	5
442	Three-Dimensional MXene-Based Functional Materials for Water Treatment: Preparation, Functional Tailoring, and Applications. Industrial & Engineering Chemistry Research, 2023, 62, 7297-7335.	1.8	3
445	Minireview on Fluid Manipulation Techniques for the Synthesis and Energy Applications of Two-Dimensional MXenes: Advances, Challenges, and Perspectives. Energy & Fuels, 2023, 37, 6999-7013.	2.5	5
462	The impact of diverse crystalline and morphollogical electrode structures on the performance of electrochemical energy storage devices. , 2023, , .		0
470	Synergistic Overview and Perspectives of Two-Dimensional Heterostructures for Cathodes and Separators in Flexible Liâ€“S Batteries. Energy & Fuels, 0, , .	2.5	1
480	Dimensionality-Dependent Synthesis and Photocatalytic MXenes. ACS Symposium Series, 0, , 237-262.	0.5	0
482	Emerging Trends in Advanced Synthesis and Properties: Mxenes as Super Materials. ACS Symposium Series, 0, , 71-100.	0.5	1
483	Progresses and Challenges in 2D MXenes: Synthesis, Intercalation/Delamination, and Storage. ACS Symposium Series, 0, , 101-141.	0.5	1
484	MXenes: Synthetic Approaches and Sensing Advances. ACS Symposium Series, 0, , 185-212.	0.5	0
485	Amalgamation of MXenes and Polymers for Multifunctional Nanocomposites. ACS Symposium Series, 0, , 27-54.	0.5	0
487	Electrochemical CO₂ Conversion via MXenes: A DFT Perspective. ACS Symposium Series, 0, , 169-184.	0.5	0
490	2D-Transition Metal Carbides and Nitrides: Materials for the Next Generation. ACS Symposium Series, 0, , 1-25.	0.5	0
491	Biosensing Frontiers: MXenes and Their Composites. ACS Symposium Series, 0, , 213-236.	0.5	0
494	Modeling and Simulation of Electrochemical, Thermoelectric, and Magnetic Properties of MXenes. ACS Symposium Series, 0, , 143-168.	0.5	0

#	Article	IF	Citations
497	MXene-Polyoxometalate Hybrid Materials: From Composites to Intercalates. ACS Symposium Series, 0, , 55-70.	0.5	0
498	Technological Features of Creating Hole Structures on the Base of MoS2 and the Electrochemical Behavior of MXene/Holey MoS2 Hybrids in Oxygen Reduction Reactions. IFMBE Proceedings, 2024, , 249-256.	0.2	0
513	Recent advances and promise of MXene-based composites as electrode materials for sodium-ion and potassium-ion batteries. Dalton Transactions, 0, , .	1.6	0
534	Scope, evaluation and current perspectives of MXene synthesis strategies for state of the art applications. Journal of Materials Chemistry A, 2024, 12, 7351-7395.	5.2	2
537	MXenes for sensors. , 2024, , 249-285.		0