Mohamed Alhabeb

List of Publications by Year
in descending order

49 papers	16,187 citations	109321 35 h-index	302126 39 g-index
49 all docs	49 docs citations	49 times ranked	12041 citing authors

#	Article	IF	Citations
1	Electromagnetic interference shielding with 2D transition metal carbides (MXenes). Science, 2016, 353, 1137-1140.	12.6	3,688
2	Guidelines for Synthesis and Processing of Two-Dimensional Titanium Carbide (Ti₃C₂T_x MXene). Chemistry of Materials, 2017, 29, 7633-7644.	6.7	3,129
3	Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer Ti₃C₂ MXene Flakes. Advanced Electronic Materials, 2016, 2, 1600255.	5.1	1,160
4	Atomic Defects in Monolayer Titanium Carbide (Ti₃C₂T_x) MXene. ACS Nano, 2016, 10, 9193-9200.	14.6	785
5	All Pseudocapacitive MXeneâ€RuO₂ Asymmetric Supercapacitors. Advanced Energy Materials, 2018, 8, 1703043.	19.5	757
6	Charge- and Size-Selective Ion Sieving Through Ti₃C₂T_x MXene Membranes. Journal of Physical Chemistry Letters, 2015, 6, 4026-4031.	4.6	743
7	Elastic properties of 2D Ti ₃ C ₂ T _x MXene monolayers and bilayers. Science Advances, 2018, 4, eaat0491.	10.3	637
8	All-MXene (2D titanium carbide) solid-state microsupercapacitors for on-chip energy storage. Energy and Environmental Science, 2016, 9, 2847-2854.	30.8	551
9	Electrospun MXene/carbon nanofibers as supercapacitor electrodes. Journal of Materials Chemistry A, 2019, 7, 269-277.	10.3	464
10	Layerâ€byâ€Layer Assembly of Crossâ€Functional Semiâ€transparent MXeneâ€Carbon Nanotubes Composite Films for Nextâ€Generation Electromagnetic Interference Shielding. Advanced Functional Materials, 2018, 28, 1803360.	14.9	407
11	Asymmetric Flexible MXeneâ€Reduced Graphene Oxide Microâ€Supercapacitor. Advanced Electronic Materials, 2018, 4, 1700339.	5.1	324
12	Selective Etching of Silicon from Ti₃SiC₂ (MAX) To Obtain 2D Titanium Carbide (MXene). Angewandte Chemie - International Edition, 2018, 57, 5444-5448.	13.8	299
13	High-Temperature Behavior and Surface Chemistry of Carbide MXenes Studied by Thermal Analysis. Chemistry of Materials, 2019, 31, 3324-3332.	6.7	296
14	Highly Broadband Absorber Using Plasmonic Titanium Carbide (MXene). ACS Photonics, 2018, 5, 1115-1122.	6.6	252
15	Knittable and Washable Multifunctional MXeneâ€Coated Cellulose Yarns. Advanced Functional Materials, 2019, 29, 1905015.	14.9	239
16	Two-dimensional vanadium carbide (V2C) MXene as electrode for supercapacitors with aqueous electrolytes. Electrochemistry Communications, 2018, 96, 103-107.	4.7	191
17	Additive-Free MXene Liquid Crystals and Fibers. ACS Central Science, 2020, 6, 254-265.	11.3	182
18	SnO₂â€“Ti₃C₂ MXene electron transport layers for perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 5635-5642.	10.3	173

#	Article	IF	Citations
19	Effects of Synthesis and Processing on Optoelectronic Properties of Titanium Carbonitride MXene. Chemistry of Materials, 2019, 31, 2941-2951.	6.7	160
20	Enhanced Terahertz Shielding of MXenes with Nanoâ€Metamaterials. Advanced Optical Materials, 2018, 6, 1701076.	7.3	157
21	Bistacked Titanium Carbide (MXene) Anodes for Hybrid Sodium-Ion Capacitors. ACS Energy Letters, 2018, 3, 2094-2100.	17.4	145
22	Electrical and Elastic Properties of Individual Singleâ€Layer Nb₄C₃T_x MXene Flakes. Advanced Electronic Materials, 2020, 6, 1901382.	5.1	134
23	Selective Etching of Silicon from Ti₃SiC₂ (MAX) To Obtain 2D Titanium Carbide (MXene). Angewandte Chemie, 2018, 130, 5542-5546.	2.0	127
24	In situ atomistic insight into the growth mechanisms of single layer 2D transition metal carbides. Nature Communications, 2018, 9, 2266.	12.8	125
25	Direct Writing of Additiveâ€Free MXeneâ€inâ€Water Ink for Electronics and Energy Storage. Advanced Materials Technologies, 2019, 4, 1800256.	5.8	112
26	Electrochemical Actuators Based on Two-Dimensional Ti₃C₂T_x (MXene). Nano Letters, 2019, 19, 7443-7448.	9.1	108
27	Voltage-Gated Ions Sieving through 2D MXene Ti₃C₂T_x Membranes. ACS Applied Nano Materials, 2018, 1, 3644-3652.	5.0	102
28	Tracking ion intercalation into layered Ti₃C₂ MXene films across length scales. Energy and Environmental Science, 2020, 13, 2549-2558.	30.8	100
29	Graphene-containing flowable electrodes for capacitive energy storage. Carbon, 2015, 92, 142-149.	10.3	98
30	Magnesium-Ion Storage Capability of MXenes. ACS Applied Energy Materials, 2019, 2, 1572-1578.	5.1	89
31	Electrochemical in Situ Tracking of Volumetric Changes in Two-Dimensional Metal Carbides (MXenes) in Ionic Liquids. ACS Applied Materials & Interfaces, 2016, 8, 32089-32093.	8.0	87
32	Mechanically strong and electrically conductive multilayer MXene nanocomposites. Nanoscale, 2019, 11, 20295-20300.	5.6	81
33	Titanium Carbide (MXene) as a Current Collector for Lithium-Ion Batteries. ACS Omega, 2018, 3, 12489-12494.	3.5	77
34	Role of acid mixtures etching on the surface chemistry and sodium ion storage in Ti₃C₂T_x MXene. Chemical Communications, 2020, 56, 6090-6093.	4.1	76
35	High-density freestanding graphene/carbide-derived carbon film electrodes for electrochemical capacitors. Carbon, 2017, 118, 642-649.	10.3	47
36	Humidity Exposure Enhances Microscopic Mobility in a Room-Temperature Ionic Liquid in MXene. Journal of Physical Chemistry C, 2018, 122, 27561-27566.	3.1	20

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37	MXene Materials: Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer Ti₃C₂ MXene Flakes (Adv. Electron. Mater. 12/2016). Advanced Electronic Materials, 2016, 2, .	5.1	18
38	Top-Down MXene Synthesis (Selective Etching). , 2019, , 69-87.		16
39	Optical Properties of MXenes. , 2019, , 327-346.		12
40	Atomic Defects and Edge Structure in Single-layer Ti₃C₂T_x MXene. Microscopy and Microanalysis, 2017, 23, 1704-1705.	0.4	7
41	Active Metamaterials Based on Monolayer Titanium Carbide MXene for Random Lasing. , 2017, , .		4
42	MXenes for Plasmonic and Metamaterial Devices. , 2018, , .		3
43	Plasmonic Resonances in Nanostructured MXene: Highly Broadband Absorber. , 2017, , .		2
44	Effect of Synthesis Methods on the Structure and Defects of Two-Dimensional MXenes. , 2019, , 111-123.		1
45	Highly Broadband Absorber Using Plasmonic Titanium Carbide (MXene). , 0, .		1
46	Dynamically controlled random lasing with colloidal titanium carbide MXene. Optical Materials Express, 2020, 10, 2304.	3.0	1
47	Mxene As A Novel Material For Next Generation Desalination Membranes. , 2014, , .		0
48	MXenes for nanophotonic and metamaterial devices (Conference Presentation). , 2018, , .		0
49	New materials and approaches for tailorable nanophotonics (Conference Presentation). , 2019, , .		0