Tao Hu

List of Publications by Year
in descending order

37 papers	3,962 citations	201385 27 h-index	329751 37 g-index
38 all docs	38 docs citations	38 times ranked	4237 citing authors

#	Article	IF	Citations
1	Sandwiching Phosphorene with Iron Porphyrin Monolayer for High Stability and Its Biomimetic Sensor to Sensitively Detect Living Cell Released NO. Advanced Science, 2022, 9, e2104066.	5.6	13
2	Functionalized MXenes for efficient electrocatalytic nitrate reduction to ammonia. Journal of Materials Chemistry A, 2022, 10, 8923-8931.	5.2	41
3	Single-Atom Cobalt-Based Electrochemical Biomimetic Uric Acid Sensor with Wide Linear Range and Ultralow Detection Limit. Nano-Micro Letters, 2021, 13, 7.	14.4	76
4	Understanding charge storage in Nb₂CT_x MXene as an anode material for lithium ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 23173-23183.	1.3	12
5	Metasequoiaâ€like Nanocrystal of Ironâ€Doped Copper for Efficient Electrocatalytic Nitrate Reduction into Ammonia in Neutral Media. ChemSusChem, 2021, 14, 1825-1829.	3.6	75
6	Unraveling surface functionalization of Cr2B2T2 (TÂ=ÂOH, O, Cl, H) MBene by first-principles calculations. Computational Materials Science, 2021, 199, 110810.	1.4	14
7	Theoretical Insights into Superior Nitrate Reduction to Ammonia Performance of Copper Catalysts. ACS Catalysis, 2021, 11, 14417-14427.	5.5	150
8	Structural defects in MAX phases and their derivative MXenes: A look forward. Journal of Materials Science and Technology, 2020, 38, 205-220.	5.6	55
9	MXenes induce epitaxial growth of size-controlled noble nanometals: A case study for surface enhanced Raman scattering (SERS). Journal of Materials Science and Technology, 2020, 40, 119-127.	5.6	73
10	Interlayer engineering of Ti₃C₂T_x MXenes towards high capacitance supercapacitors. Nanoscale, 2020, 12, 763-771.	2.8	73
11	Quantifying the rigidity of 2D carbides (MXenes). Physical Chemistry Chemical Physics, 2020, 22, 2115-2121.	1.3	52
12	Metal-free photo- and electro-catalysts for hydrogen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 23674-23698.	5.2	59
13	Emerging 2D MXenes for supercapacitors: status, challenges and prospects. Chemical Society Reviews, 2020, 49, 6666-6693.	18.7	466
14	Metal-free heterojunction of black phosphorus/oxygen-enriched porous g-C₃N₄ as an efficient photocatalyst for Fenton-like cascade water purification. Journal of Materials Chemistry A, 2020, 8, 19484-19492.	5.2	51
15	One-Step Incorporation of Nitrogen and Vanadium between Ti₃C₂T_x MXene Interlayers Enhances Lithium Ion Storage Capability. Journal of Physical Chemistry C, 2020, 124, 6012-6021.	1.5	24
16	Totally Waterborne and Highly Durable Superamphiphobic Coatings for Antiâ€Icing and Anticorrosion. Advanced Materials Interfaces, 2019, 6, 1901255.	1.9	71
17	Atomic Repartition in MXenes by Electron Probes. Chemistry of Materials, 2019, 31, 4385-4391.	3.2	17
18	Understanding the Lithium Storage Mechanism of Ti₃C₂T_x MXene. Journal of Physical Chemistry C, 2019, 123, 1099-1109.	1.5	115

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19	Host sensitization of Mn⁴⁺ in selfâ€activated Na₂WO₂F₄:Mn⁴⁺. Journal of the American Ceramic Society, 2018, 101, 3437-3442.	1.9	23
20	Surface Functional Groups and Interlayer Water Determine the Electrochemical Capacitance of Ti₃C₂T_x MXene. ACS Nano, 2018, 12, 3578-3586.	7.3	353
21	MXene-coated silk-derived carbon cloth toward flexible electrode for supercapacitor application. Journal of Energy Chemistry, 2018, 27, 161-166.	7.1	122
22	Screening Surface Structure of MXenes by High-Throughput Computation and Vibrational Spectroscopic Confirmation. Journal of Physical Chemistry C, 2018, 122, 18501-18509.	1.5	130
23	Precursorâ€Directed Nucleation and Selfâ€Assembly Growth: From Hollow Microprisms to Nanoplatelets. ChemNanoMat, 2017, 3, 292-297.	1.5	3
24	Allâ€Solidâ€State Flexible Fiberâ€Based MXene Supercapacitors. Advanced Materials Technologies, 2017, 2, 1700143.	3.0	156
25	Chemical Origin of Termination-Functionalized MXenes: Ti₃C₂T₂ as a Case Study. Journal of Physical Chemistry C, 2017, 121, 19254-19261.	1.5	194
26	Carbon vacancies in Ti₂CT₂MXenes: defects or a new opportunity?. Physical Chemistry Chemical Physics, 2017, 19, 31773-31780.	1.3	81
27	Influence of ordered carbonâ€vacancy networks on the electronic structures and elastic properties of Nb₄AlC_{3â^’x}. Journal of the American Ceramic Society, 2017, 100, 724-731.	1.9	14
28	On the small angle twist sub-grain boundaries in Ti3AlC2. Scientific Reports, 2016, 6, 23943.	1.6	8
29	Interlayer coupling in two-dimensional titanium carbide MXenes. Physical Chemistry Chemical Physics, 2016, 18, 20256-20260.	1.3	120
30	High-Capacitance Mechanism for Ti₃C₂T_x MXene by in Situ Electrochemical Raman Spectroscopy Investigation. ACS Nano, 2016, 10, 11344-11350.	7.3	455
31	[100]-Oriented LiFePO₄ Nanoflakes toward High Rate Li-Ion Battery Cathode. Nano Letters, 2016, 16, 795-799.	4.5	81
32	Anisotropic electronic conduction in stacked two-dimensional titanium carbide. Scientific Reports, 2015, 5, 16329.	1.6	107
33	Discovery of carbon-vacancy ordering in Nb4AlC3â€“x under the guidance of first-principles calculations. Scientific Reports, 2015, 5, 14192.	1.6	37
34	On the Faceted and Inclined Twin Boundary of Titanium Carbide Derived from Nanolaminated Ti₃AlC₂. Journal of the American Ceramic Society, 2015, 98, 1664-1667.	1.9	4
35	Covalency-Dependent Vibrational Dynamics in Two-Dimensional Titanium Carbides. Journal of Physical Chemistry A, 2015, 119, 12977-12984.	1.1	34
36	Self-assembled Ti₃C₂T_xMXene film with high gravimetric capacitance. Chemical Communications, 2015, 51, 13531-13533.	2.2	148

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37	Vibrational properties of Ti₃C₂and Ti₃C₂T₂(T = O, F, OH) monosheets by first-principles calculations: a comparative study. Physical Chemistry Chemical Physics, 2015, 17, 9997-10003.	1.3	455