Qianku Hu

List of Publications by Year
in descending order

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58 papers	4,898 citations	159585 30 h-index	149698 56 g-index
58 all docs	58 docs citations	58 times ranked	4322 citing authors

#	Article	IF	Citations
1	Synthesis and thermal stability of two-dimensional carbide MXene Ti3C2. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 191, 33-40.	3.5	606
2	Preparation of Ti 3 C 2 and Ti 2 C MXenes by fluoride salts etching and methane adsorptive properties. Applied Surface Science, 2017, 416, 781-789.	6.1	407
3	MXene: A New Family of Promising Hydrogen Storage Medium. Journal of Physical Chemistry A, 2013, 117, 14253-14260.	2.5	389
4	Ti₃C₂ MXene-Based Sensors with High Selectivity for NH₃ Detection at Room Temperature. ACS Sensors, 2019, 4, 2763-2770.	7.8	355
5	Preparation, mechanical and anti-friction performance of MXene/polymer composites. Materials and Design, 2016, 92, 682-689.	7.0	286
6	Preparation of High-Purity V₂C MXene and Electrochemical Properties as Li-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A709-A713.	2.9	282
7	Synthesis and electrochemical performance of Ti3C2Tx with hydrothermal process. Electronic Materials Letters, 2016, 12, 702-710.	2.2	270
8	Hydrothermal synthesis of TiO2/Ti3C2 nanocomposites with enhanced photocatalytic activity. Materials Letters, 2015, 150, 62-64.	2.6	223
9	Two-dimensional Sc2C: A reversible and high-capacity hydrogen storage material predicted by first-principles calculations. International Journal of Hydrogen Energy, 2014, 39, 10606-10612.	7.1	163
10	Structural Transformation of MXene (V₂C, Cr₂C, and Ta₂C) with O Groups during Lithiation: A First-Principles Investigation. ACS Applied Materials & Interfaces, 2016, 8, 74-81.	8.0	159
11	The Synthesis Process and Thermal Stability of V2C MXene. Materials, 2018, 11, 2112.	2.9	152
12	Carbon dioxide adsorption of two-dimensional carbide MXenes. Journal of Advanced Ceramics, 2018, 7, 237-245.	17.4	119
13	Synthesis and Electrochemical Properties of Two-Dimensional RGO/Ti3C2Tx Nanocomposites. Nanomaterials, 2018, 8, 80.	4.1	109
14	Synthesis of two-dimensional carbide Mo2CTx MXene by hydrothermal etching with fluorides and its thermal stability. Ceramics International, 2020, 46, 19550-19556.	4.8	97
15	Preparation of MXene-Cu2O nanocomposite and effect on thermal decomposition of ammonium perchlorate. Solid State Sciences, 2014, 35, 62-65.	3.2	92
16	Preparation and methane adsorption of two-dimensional carbide Ti2C. Adsorption, 2016, 22, 915-922.	3.0	85
17	Effects of 2-D transition metal carbide Ti₂CT_xon properties of epoxy composites. RSC Advances, 2016, 6, 87341-87352.	3.6	82
18	First-principles studies of structural and electronic properties of hexagonalBC5. Physical Review B, 2006, 73, .	3.2	75

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19	MoS₂-Decorated Ti₃C₂MXene Nanosheet as Anode Material in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A2654-A2659.	2.9	75
20	Two-dimensional vanadium carbide (V2CT) MXene as supercapacitor electrode in seawater electrolyte. Chinese Chemical Letters, 2020, 31, 984-987.	9.0	74
21	The preparation of V2CTx by facile hydrothermal-assisted etching processing and its performance in lithium-ion battery. Journal of Materials Research and Technology, 2020, 9, 984-993.	5.8	58
22	Synthesis and oxidation resistance of V₂AlC powders by molten salt method. International Journal of Applied Ceramic Technology, 2017, 14, 873-879.	2.1	56
23	Comparison of Effects of Sodium Bicarbonate and Sodium Carbonate on the Hydration and Properties of Portland Cement Paste. Materials, 2019, 12, 1033.	2.9	53
24	V₂CT_x and Ti₃C₂T_x MXenes Nanosheets for Gas Sensing. ACS Applied Nano Materials, 2021, 4, 6257-6268.	5.0	52
25	Mo₂C-MXene/CdS Heterostructures as Visible-Light Photocatalysts with an Ultrahigh Hydrogen Production Rate. ACS Applied Energy Materials, 2021, 4, 12754-12766.	5.1	42
26	Synthesis of NaV6O15 nanorods via thermal oxidation of sodium-intercalated 2D V2CTx and their electrochemical properties as anode for lithium-ion batteries. Electrochimica Acta, 2017, 248, 178-187.	5.2	36
27	Thermal conductivity and electrical transport properties of double-A-layer MAX phase Mo₂Ga₂C. Materials Research Letters, 2020, 8, 158-164.	8.7	35
28	Synthesis mechanisms and thermal stability of ternary carbide Mo2Ga2C. Ceramics International, 2018, 44, 22289-22296.	4.8	34
29	Effect of electrolyte on supercapacitor performance of two-dimensional molybdenum carbide (Mo2CTx) MXene prepared by hydrothermal etching. Applied Surface Science, 2021, 568, 150971.	6.1	34
30	Body-centered superhard<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:math>phases from first principles. Physical Review B, 2007, 76, .	3.2	32
31	Microwave-assisted synthesis and photocatalytic performance of Ag-doped hierarchical ZnO architectures. Materials Letters, 2012, 79, 277-280.	2.6	31
32	High-Performance Wearable Strain Sensor Based on MXene@Cotton Fabric with Network Structure. Nanomaterials, 2021, 11, 889.	4.1	31
33	Firstâ€principles studies of structural and electronic properties of layered C₃N phases. Physica Status Solidi (B): Basic Research, 2012, 249, 784-788.	1.5	30
34	Microwave-assisted synthesis of flower-like Agâ€“BiOCl nanocomposite with enhanced visible-light photocatalytic activity. Materials Letters, 2014, 136, 295-297.	2.6	27
35	Novel Hierarchical TiO₂/C Nanocomposite with Enhanced Photocatalytic Performance. Nano, 2015, 10, 1550064.	1.0	26
36	Novel Li4Ti5O12/Ti3C2Tx nanocomposite as a high rate anode material for lithium ion batteries. Journal of Alloys and Compounds, 2018, 735, 530-535.	5.5	24

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37	First-principles study of atomic oxygen adsorption on boron-substituted graphite. Surface Science, 2008, 602, 37-45.	1.9	22
38	Facile preparation of BiOCl/Ti₃C₂ hybrid photocatalyst with enhanced visible-light photocatalytic activity. Functional Materials Letters, 2019, 12, 1850100.	1.2	21
39	Enhanced Reversible Capacity and Cyclic Performance of Lithiumâ€ion Batteries Using SnO₂ Interpenetrated MXene V₂C Architecture as Anode Materials. Energy Technology, 2021, 9, 2000753.	3.8	20
40	Preparation and Photocatalytic Performance of Ti₃C₂/TiO₂/CuO Ternary Nanocomposites. Journal of Nanomaterials, 2017, 2017, 1-5.	2.7	19
41	Carbon-rich boron carbide in the eutectic product synthesized by resistance heating of B2CN in graphite. Journal of Alloys and Compounds, 2007, 437, 238-246.	5.5	16
42	Ab initio investigation on a promising transparent conductive oxide, Nb:SnO2. Thin Solid Films, 2012, 520, 5965-5970.	1.8	13
43	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.	2.2	12
44	The thermal expansion of a highly crystalline hexagonal BC2N compound synthesized under high temperature and pressure. Journal of Physics Condensed Matter, 2006, 18, 9519-9524.	1.8	10
45	Solvent-free synthesis of crystalline carbon nitride compounds. Journal of Alloys and Compounds, 2008, 455, 303-307.	5.5	9
46	The influence of carbon spheres on thermal and mechanical properties of epoxy composites. Journal of Polymer Research, 2018, 25, 1.	2.4	9
47	Ground-state structures, physical properties and phase diagram of carbon-rich nitride C₅N. Journal of Physics Condensed Matter, 2018, 30, 385402.	1.8	9
48	SnO₂ Quantum Dots Interspersed d-Ti₃C₂Tx MXene Heterostructure with Enhanced Performance for Lithium Ion Battery. Journal of the Electrochemical Society, 2020, 167, 116522.	2.9	7
49	Thermal oxidation behavior of hexagonal BC2N. Materials Characterization, 2009, 60, 56-59.	4.4	5
50	Structural and Thermodynamic Properties of TiAl intermetallics under High Pressure. Communications in Theoretical Physics, 2012, 57, 141-144.	2.5	5
51	Selfâ€Assemble and Inâ€Situ Formation of Laponite RDSâ€Decorated dâ€Ti₃C₂T_x Hybrids for Application in Lithiumâ€ion Battery. ChemistrySelect, 2019, 4, 10694-10700.	1.5	5
52	Synthesis and oxidation behavior of boron-substituted carbon powders by hot filament chemical vapor deposition. Science in China Series D: Earth Sciences, 2008, 51, 1464-1469.	0.9	4
53	Unexpected ground-state structures and properties of carbon nitride C3N at ambient and high pressures. Materials and Design, 2018, 140, 45-53.	7.0	3
54	Responses to comments on the paper â€œTwo-dimensional Sc2C: A reversible and high capacity hydrogen storage material predicted by first-principles calculationsâ€• International Journal of Hydrogen Energy, 2020, 45, 7257-7262.	7.1	3

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55	Comment on â€œMoS2/Ti3C2 heterostructure for efficient visible-light photocatalytic hydrogen generationâ€• International Journal of Hydrogen Energy, 2020, 45, 13559-13562.	7.1	3
56	Phase transition, elastic, and thermodynamic properties of NaF under high pressure. Phase Transitions, 2012, 85, 409-418.	1.3	2
57	Phase-constituent control and superconducting properties of MgB2 films in situ grown by hot-filament chemical-vapor deposition. Journal of Crystal Growth, 2007, 299, 82-85.	1.5	0
58	Responses to comments on the paper â€œtwo-dimensional Sc2C: A reversible and high capacity hydrogen storage material predicted by first-principles calculationsâ€• International Journal of Hydrogen Energy, 2022, 47, 9829-9834.	7.1	0