Zhonglu Guo

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3086629/publications.pdf

Version: 2024-02-01

46 papers	2,829 citations	236925 25 h-index	223800 46 g-index
46 all docs	46 docs citations	46 times ranked	3333 citing authors

#	Article	IF	Citations
1	MXene: a promising photocatalyst for water splitting. Journal of Materials Chemistry A, 2016, 4, 11446-11452.	10.3	569
2	New two-dimensional transition metal borides for Li ion batteries and electrocatalysis. Journal of Materials Chemistry A, 2017, 5, 23530-23535.	10.3	253
3	Flexible two-dimensional Ti_{n+1}C_n (n = 1, 2 and 3) and their functionalized MXenes predicted by density functional theories. Physical Chemistry Chemical Physics, 2015, 17, 15348-15354.	2.8	247
4	Strain-mediated type-I/type-II transition in MXene/Blue phosphorene van der Waals heterostructures for flexible optical/electronic devices. Journal of Materials Chemistry C, 2017, 5, 978-984.	5.5	155
5	Ultrathin h-BN/Bi2MoO6 heterojunction with synergetic effect for visible-light photocatalytic tetracycline degradation. Journal of Colloid and Interface Science, 2021, 589, 545-555.	9.4	115
6	An overview of materials issues in resistive random access memory. Journal of Materiomics, 2015, 1, 285-295.	5.7	106
7	Novel two-dimensional molybdenum carbides as high capacity anodes for lithium/sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 12145-12153.	10.3	106
8	Novel Two-Dimensional Janus MoSiGeN₄ and WSiGeN₄ as Highly Efficient Photocatalysts for Spontaneous Overall Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 28090-28097.	8.0	89
9	Ti-enhanced exfoliation of V2AlC into V2C MXene for lithium-ion battery anodes. Ceramics International, 2017, 43, 11450-11454.	4.8	85
10	M2C-type MXenes: Promising catalysts for CO2 capture and reduction. Applied Surface Science, 2020, 521, 146436.	6.1	77
11	Band gap engineering in huge-gap semiconductor SrZrO3 for visible-light photocatalysis. International Journal of Hydrogen Energy, 2014, 39, 2042-2048.	7.1	72
12	Nickel (II) modified porous boron nitride: An effective adsorbent for tetracycline removal from aqueous solution. Chemical Engineering Journal, 2020, 394, 124985.	12.7	66
13	Microscopic origin of MXenes derived from layered MAX phases. RSC Advances, 2015, 5, 25403-25408.	3.6	61
14	Carbon doped hexagonal boron nitride nanoribbon as efficient metal-free electrochemical nitrogen reduction catalyst. Chemical Engineering Journal, 2021, 410, 128419.	12.7	59
15	Combined effects of simulated rainfall and overland flow on sediment and solute transport in hillslope erosion. Journal of Soils and Sediments, 2018, 18, 1120-1132.	3.0	55
16	Two-dimensional chromium boride MBenes with high HER catalytic activity. Applied Surface Science, 2020, 500, 144248.	6.1	50
17	The effect of Bahiagrass roots on soil erosion resistance of Aquults in subtropical China. Geomorphology, 2017, 285, 82-93.	2.6	49
18	New gallium chalcogenides/arsenene van der Waals heterostructures promising for photocatalytic water splitting. International Journal of Hydrogen Energy, 2018, 43, 15995-16004.	7.1	49

#	Article	IF	Citations
19	Vacancy-mediated lithium adsorption and diffusion on MXene. Applied Surface Science, 2019, 488, 578-585.	6.1	46
20	Role of oxygen vacancies in the resistive switching of SrZrO3 for resistance random access memory. Journal of Alloys and Compounds, 2013, 580, 148-151.	5.5	44
21	Strengthening mechanism of aluminum on elastic properties of NbVTiZr high-entropy alloys. Intermetallics, 2018, 92, 7-14.	3.9	44
22	Synergistic Resistive Switching Mechanism of Oxygen Vacancies and Metal Interstitials in Ta₂O₅. Journal of Physical Chemistry C, 2016, 120, 2456-2463.	3.1	34
23	Breaking the linear scaling relations in MXene catalysts for efficient CO2 reduction. Chemical Engineering Journal, 2022, 429, 132171.	12.7	32
24	In Situ Cu-Loaded Porous Boron Nitride Nanofiber as an Efficient Adsorbent for CO₂ Capture. ACS Sustainable Chemistry and Engineering, 2020, 8, 7454-7462.	6.7	30
25	Plant community characteristics and functional traits as drivers of soil erodibility mitigation along a land degradation gradient. Land Degradation and Development, 2020, 31, 1851-1863.	3.9	29
26	Functionalized Mo2B2 MBenes: Promising anchoring and electrocatalysis materials for Lithium-Sulfur battery. Applied Surface Science, 2021, 566, 150634.	6.1	29
27	Bimetallic AuPd Nanoparticles Loaded on Amine-Functionalized Porous Boron Nitride Nanofibers for Catalytic Dehydrogenation of Formic Acid. ACS Applied Nano Materials, 2021, 4, 1849-1857.	5.0	27
28	Fine roots benefit soil physical properties key to mitigate soil detachment capacity following the restoration of eroded land. Plant and Soil, 2020, 446, 487-501.	3.7	25
29	Synergistic effect of Ni and Fe in Fe-doped NiS2 counter electrode for dye-sensitized solar cells: Experimental and DFT studies. Electrochimica Acta, 2018, 284, 24-29.	5.2	23
30	Effect of water content, bulk density, and aggregate size on mechanical characteristics of Aquults soil blocks and aggregates from subtropical China. Journal of Soils and Sediments, 2017, 17, 210-219.	3.0	22
31	Design principles of tuning oxygen vacancy diffusion in SrZrO₃ for resistance random access memory. Journal of Materials Chemistry C, 2015, 3, 4081-4085.	5.5	20
32	Realization of a reversible switching in TaO2 polymorphs via Peierls distortion for resistance random access memory. Applied Physics Letters, 2015, 106, 091903.	3.3	19
33	Coincident modulation of lattice and electron thermal transport performance in MXenes via surface functionalization. Physical Chemistry Chemical Physics, 2018, 20, 19689-19697.	2.8	18
34	Solvothermal synthesis of Mn-doped CsPbCl₃ perovskite nanocrystals with tunable morphology and their size-dependent optical properties. RSC Advances, 2019, 9, 39315-39322.	3.6	16
35	Novel hierarchical RGO/MoS₂/K-Î±MnO₂ composite architectures with enhanced broadband microwave absorption performance. Journal of Materials Chemistry C, 2019, 7, 13878-13886.	5.5	15
36	Sc2CO-MXene/h-BN heterostructure with synergetic effect as an anchoring and catalytic material for lithium-sulfur battery. Journal of Alloys and Compounds, 2021, 887, 161273.	5.5	15

#	Article	IF	Citations
37	Anchoring of CsPbBr₃ perovskite quantum dots on BN nanostructures for enhanced efficiency and stability: a comparative study. Journal of Materials Chemistry C, 2021, 9, 842-850.	5.5	14
38	Metalâ€“Metal Bonding Stabilized Ground State Structure of Early Transition Metal Monoxide TMâ€“MO (TM = Ti, Hf, V, Ta). Journal of Physical Chemistry C, 2016, 120, 10009-10014.	3.1	10
39	Mercury Adsorption on Thiol-Modified Porous Boron Nitride: A Combined Experimental and Theoretical Investigation. Industrial & Engineering Chemistry Research, 2021, 60, 12984-12998.	3.7	9
40	Enhanced Li+ storage through highly hybridized networks of self-assembled SnS2/rGO aerogels. Journal of Alloys and Compounds, 2020, 828, 154192.	5.5	8
41	Eco-green C, O co-doped porous BN adsorbent for aqueous solution with superior adsorption efficiency and selectivity. Chemosphere, 2022, 288, 132520.	8.2	8
42	Synthesis of Nanostructured Boron Nitride Aerogels by Rapid Pyrolysis of Melamine Diborate Aerogels via Induction Heating: From Composition Adjustment to Property Studies. ACS Applied Nano Materials, 2021, 4, 13788-13797.	5.0	8
43	Local-ordering mediated configuration stability and elastic properties of aluminum-containing high entropy alloys. Intermetallics, 2019, 110, 106474.	3.9	6
44	Two-dimensional O-phase group III monochalcogenides for photocatalytic water splitting. Journal of Physics Condensed Matter, 2020, 32, 065501.	1.8	6
45	Lattice Thermal Conductivity of mGeTeâ€¢nSb2Te3 Phase-Change Materials: A First-Principles Study. Crystals, 2019, 9, 136.	2.2	5
46	First-principles investigation of the stability and stabilization mechanism of Ni2Zn11 Î³ brasses under high pressure. Computational Materials Science, 2015, 98, 430-434.	3.0	4