

Shiyu Du

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

162
papers

5,788
citations

40
h-index

72
g-index

168
ext. papers

7,690
ext. citations

6.9
avg, IF

5.9
L-index

#	Paper	IF	Citations
162	Effect of A-site atom on static corrosion behavior and irradiation damage of Ti ₂ SC phases. <i>Journal of the American Ceramic Society</i> , 2022 , 105, 1386	3.8	
161	Boosting Oxygen Reduction for High-Efficiency H ₂ O Electrolysis on Oxygen-Coordinated Co ₂ N ₂ C Catalysts. <i>Small</i> , 2022 , e2200730	11	2
160	A Novel Chimp Optimization Algorithm with Refraction Learning and Its Engineering Applications. <i>Algorithms</i> , 2022 , 15, 189	1.8	0
159	Pressure Tuned Structural, Electronic and Elastic Properties of U ₃ Si ₂ C ₂ : A First Principles Study. <i>Crystals</i> , 2021 , 11, 1420	2.3	
158	Investigations of the stability and electronic structures of U ₃ Si ₂ -Al: A first-principles study. <i>Chemical Physics</i> , 2021 , 543, 111088	2.3	2
157	Rational design of high-performance thermal interface materials based on gold-nanocap-modified vertically aligned graphene architecture. <i>Composites Communications</i> , 2021 , 24, 100621	6.7	9
156	First-principles investigations on the electronic structures, polycrystalline elastic properties, ideal strengths and elastic anisotropy of U ₃ Si ₂ . <i>European Physical Journal Plus</i> , 2021 , 136, 1	3.1	1
155	Surface Modification Using Polydopamine-Coated Liquid Metal Nanocapsules for Improving Performance of Graphene Paper-Based Thermal Interface Materials. <i>Nanomaterials</i> , 2021 , 11,	5.4	6
154	Facilitating effect of heavy metals on di(2-ethylhexyl) phthalate adsorption in soil: New evidence from adsorption experiment data and quantum chemical simulation. <i>Science of the Total Environment</i> , 2021 , 772, 144980	10.2	4
153	Layer-by-layer stacked graphene nanocoatings by Marangoni self-assembly for corrosion protection of stainless steel. <i>Chinese Chemical Letters</i> , 2021 , 32, 501-505	8.1	6
152	Molten Salt Synthesis of Nanolaminated Sc ₂ SnC MAX Phase. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2021 , 36, 773	1	4
151	Helium-induced damage in U ₃ Si by first-principles studies. <i>RSC Advances</i> , 2021 , 11, 26920-26927	3.7	
150	Halogenated TiC MXenes with Electrochemically Active Terminals for High-Performance Zinc Ion Batteries. <i>ACS Nano</i> , 2021 , 15, 1077-1085	16.7	50
149	Two-Dimensional Carbonitride MXenes as an Efficient Electrocatalyst for Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 4477-4488	3.8	3
148	Electrochemical Lithium Storage Performance of Molten Salt Derived VS ₂ C MAX Phase. <i>Nano-Micro Letters</i> , 2021 , 13, 158	19.5	4
147	MAX phase Zr ₂ SeC and its thermal conduction behavior. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 4447-4451	6	6
146	Rational Design of Highly Stable and Active MXene-Based Bifunctional ORR/OER Double-Atom Catalysts. <i>Advanced Materials</i> , 2021 , 33, e2102595	24	27

145	A damage-effect-involved phenomenological crystal plasticity model and computational methods for mechanical responses of FeCrAl alloys. <i>Materials Today Communications</i> , 2021 , 28, 102595	2.5	0
144	Near-room temperature ferromagnetic behavior of single-atom-thick 2D iron in nanolaminated ternary MAX phases. <i>Applied Physics Reviews</i> , 2021 , 8, 031418	17.3	2
143	Lightweight thermal interface materials based on hierarchically structured graphene paper with superior through-plane thermal conductivity. <i>Chemical Engineering Journal</i> , 2021 , 419, 129609	14.7	22
142	The studies of electronic structure, mechanical properties and ideal fracture behavior of U3Si1.75Al0.25: first-principle investigations. <i>Journal of Materials Research and Technology</i> , 2021 , 15, 1356-1369	5.5	2
141	Lattice Matching and Halogen Regulation for Synergistically Induced Uniform Zinc Electrodeposition by Halogenated TiC MXenes.. <i>ACS Nano</i> , 2021 ,	16.7	15
140	The compositional dependence of structural stability and resulting properties for Mn+1CnT2 (M = Sc, Ti, V; T = O, OH, F, Cl, Br and I; n = 1, 2): first-principle investigations. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 14979-14989	5.5	0
139	First-principles investigations on MXene-blue phosphorene and MXene-MoS transistors. <i>Nanotechnology</i> , 2020 , 31, 395203	3.4	5
138	Defective structures in FeCrAl alloys from first principles calculations. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, 046003	1.4	5
137	Pt nanodendrites with (111) crystalline facet as an efficient, stable and pH-universal catalyst for electrochemical hydrogen production. <i>Chinese Chemical Letters</i> , 2020 , 31, 2478-2482	8.1	6
136	The role of Hume-Rothery [®] rules play in the MAX phases formability. <i>Materialia</i> , 2020 , 12, 100810	3.2	8
135	The role of nuclear charges in unifying the descriptions of neural networks (NN)-based force fields. <i>Materials Letters</i> , 2020 , 276, 128262	3.3	
134	Mechanism of Al on FeCrAl steam oxidation behavior and molecular dynamics simulations. <i>Journal of Alloys and Compounds</i> , 2020 , 828, 154310	5.7	18
133	Electric Field Effect on the Reactivity of Solid State Materials: The Case of Single Layer Graphene. <i>Advanced Functional Materials</i> , 2020 , 30, 1909269	15.6	5
132	A dense graphene monolith with poloxamer prefunctionalization enabling aqueous redispersion to obtain solubilized graphene sheets. <i>Chinese Chemical Letters</i> , 2020 , 31, 2507-2511	8.1	4
131	A general Lewis acidic etching route for preparing MXenes with enhanced electrochemical performance in non-aqueous electrolyte. <i>Nature Materials</i> , 2020 , 19, 894-899	27	368
130	First-principles study of magnetism in some novel MXene materials.. <i>RSC Advances</i> , 2020 , 10, 44430-44436	3.7	1
129	Two-dimensional semiconducting LuCT (T = F, OH) MXene with low work function and high carrier mobility. <i>Nanoscale</i> , 2020 , 12, 3795-3802	7.7	14
128	Mo2B, an MBene member with high electrical and thermal conductivities, and satisfactory performances in lithium ion batteries. <i>Nanoscale Advances</i> , 2020 , 2, 347-355	5.1	11

127	Multielemental single-atom-thick layers in nanolaminated V(Sn,) C (= Fe, Co, Ni, Mn) for tailoring magnetic properties. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 820-825	11.5	42
126	Metal-Semiconductor Phase Twinned Hierarchical MoS Nanowires with Expanded Interlayers for Sodium-Ion Batteries with Ultralong Cycle Life. <i>Small</i> , 2020 , 16, e1906607	11	46
125	Structural, mechanical and electronic properties of two-dimensional chlorine-terminated transition metal carbides and nitrides. <i>Journal of Physics Condensed Matter</i> , 2020 , 32, 135302	1.8	6
124	ZnO nanoflowers modified with RuO for enhancing acetone sensing performance. <i>Nanotechnology</i> , 2020 , 31, 115502	3.4	9
123	First-principles investigations on the anisotropic elasticity and thermodynamic properties of USi-Al.. <i>RSC Advances</i> , 2020 , 10, 35049-35056	3.7	4
122	Theoretical study on the electrical and mechanical properties of MXene multilayer structures through strain regulation. <i>Chemical Physics Letters</i> , 2020 , 760, 137997	2.5	6
121	Theoretical investigations on structural and thermo-mechanical properties of layered ternary carbide ThAlC systems. <i>Journal of Nuclear Materials</i> , 2020 , 540, 152358	3.3	4
120	Amorphous carbon to graphene: Carbon diffusion via nickel catalyst. <i>Materials Letters</i> , 2020 , 278, 128468	3.3	2
119	Theoretical exploration on the vibrational and mechanical properties of M3C2/M3C2T2 MXenes. <i>International Journal of Quantum Chemistry</i> , 2020 , 120, e26409	2.1	1
118	Theoretical investigations on the U2Mo3Si4 compound from first-principles calculations. <i>Progress in Nuclear Energy</i> , 2020 , 118, 103121	2.3	2
117	A Study on the Periodic Rule of Reduction Potentials of Lanthanides on Liquid Zinc Electrode. <i>Journal of the Electrochemical Society</i> , 2019 , 166, D689-D693	3.9	3
116	Synthesis of MAX phases Nb2CuC and Ti2(Al0.1Cu0.9)N by A-site replacement reaction in molten salts. <i>Materials Research Letters</i> , 2019 , 7, 510-516	7.4	27
115	Metal-Level Thermally Conductive yet Soft Graphene Thermal Interface Materials. <i>ACS Nano</i> , 2019 , 13, 11561-11571	16.7	117
114	Two-Dimensional Hydroxyl-Functionalized and Carbon-Deficient Scandium Carbide, ScC OH, a Direct Band Gap Semiconductor. <i>ACS Nano</i> , 2019 , 13, 1195-1203	16.7	24
113	Irradiation behavior of Cf/SiC composite with titanium carbide (TiC)-based interphase. <i>Journal of Nuclear Materials</i> , 2019 , 523, 10-15	3.3	0
112	Graphene foam-embedded epoxy composites with significant thermal conductivity enhancement. <i>Nanoscale</i> , 2019 , 11, 17600-17606	7.7	68
111	First-principles study of the electronic, optical and transport of few-layer semiconducting MXene. <i>Computational Materials Science</i> , 2019 , 168, 137-143	3.2	11
110	Mg@C60 nano-lamellae and its 12.50 wt% hydrogen storage capacity. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 15239-15245	6.7	14

109	Electronic structures, mechanical properties and defect formation energies of U ₃ Si ₅ from density functional theory calculations. <i>Progress in Nuclear Energy</i> , 2019 , 116, 87-94	2.3	5
108	Mutual Identification between the Pressure-Induced Superlubricity and the Image Contrast Inversion of Carbon Nanostructures from AFM Technology. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 1498-1504	6.4	11
107	Hierarchical CoO@NiMoO core-shell nanowires for chemiresistive sensing of xylene vapor. <i>Mikrochimica Acta</i> , 2019 , 186, 222	5.8	14
106	Tuning the Electrical Conductivity of Ti ₂ CO ₂ MXene by Varying the Layer Thickness and Applying Strains. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 6802-6811	3.8	25
105	High Oxidation Resistance of CVD Graphene-Reinforced Copper Matrix Composites. <i>Nanomaterials</i> , 2019 , 9,	5.4	9
104	A Paper-Like Inorganic Thermal Interface Material Composed of Hierarchically Structured Graphene/Silicon Carbide Nanorods. <i>ACS Nano</i> , 2019 , 13, 1547-1554	16.7	93
103	Designing Flexible Quantum Spin Hall Insulators through 2D Ordered Hybrid Transition-Metal Carbides. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 20664-20674	3.8	2
102	Predictions of the structures and properties of the substituted layered ternary compound series (Zr T)AlC (T = Hf, Nb, and V) through first-principles studies. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 385702	1.8	1
101	Single-Atom-Thick Active Layers Realized in Nanolaminated Ti(AlCu)C and Its Artificial Enzyme Behavior. <i>ACS Nano</i> , 2019 , 13, 9198-9205	16.7	31
100	Tin+1C _n MXenes with fully saturated and thermally stable Cl terminations. <i>Nanoscale Advances</i> , 2019 , 1, 3680-3685	5.1	49
99	Manganese-Zeolitic Imidazolate Frameworks-90 with High Blood Circulation Stability for MRI-Guided Tumor Therapy. <i>Nano-Micro Letters</i> , 2019 , 11, 61	19.5	27
98	Non-MAX Phase Precursors for MXenes 2019 , 53-68		5
97	MoO Nanoparticle Catalysts for d-Glucose Epimerization and Their Electrical Immobilization in a Continuous Flow Reactor. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 44118-44123	9.5	2
96	Rational Design of Flexible Two-Dimensional MXenes with Multiple Functionalities. <i>Chemical Reviews</i> , 2019 , 119, 11980-12031	68.1	137
95	Element Replacement Approach by Reaction with Lewis Acidic Molten Salts to Synthesize Nanolaminated MAX Phases and MXenes. <i>Journal of the American Chemical Society</i> , 2019 , 141, 4730-4737	16.4	355
94	First-principles study on the stability and properties of E ₂ SiC/M+1AlC (M=Sc, Ti, V, Cr, Zr, Nb, Mo, Hf, Ta; n=1,2) interfaces. <i>Journal of Physics and Chemistry of Solids</i> , 2019 , 127, 119-126	3.9	4
93	Interface modification of carbon fibers with TiC/Ti ₂ AlC coating and its effect on the tensile strength. <i>Ceramics International</i> , 2019 , 45, 4661-4666	5.1	7
92	Theory-guided bottom-up design of the FeCrAl alloys as accident tolerant fuel cladding materials. <i>Journal of Nuclear Materials</i> , 2019 , 516, 63-72	3.3	14

91	Adsorption Behaviors and Phase Equilibria for Clathrate Hydrates of Sulfur- and Nitrogen-Containing Small Molecules. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 2691-2702	3.8	2
90	Development of interatomic potentials for Fe-Cr-Al alloy with the particle swarm optimization method. <i>Journal of Alloys and Compounds</i> , 2019 , 780, 881-887	5.7	16
89	Mechanistic Quantification of Thermodynamic Stability and Mechanical Strength for Two-Dimensional Transition-Metal Carbides. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 4710-4722	3.8	22
88	Y receptor ligand-based nanomicelle as a novel nanoprobe for glioma-targeted imaging and therapy. <i>Nanoscale</i> , 2018 , 10, 5845-5851	7.7	8
87	Residual thermal stress of SiC/Ti ₃ SiC ₂ /SiC joints calculation and relaxed by postannealing. <i>International Journal of Applied Ceramic Technology</i> , 2018 , 15, 1157-1165	2	12
86	Phonon-mediated stabilization and softening of 2D transition metal carbides: case studies of TiCO and MoCO. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 14608-14618	3.6	6
85	Bipolar magnetic semiconductors among intermediate states during the conversion from ScC(OH) to ScCO MXene. <i>Nanoscale</i> , 2018 , 10, 8763-8771	7.7	18
84	Synthesis and properties of conductive B ₄ C ceramic composites with TiB ₂ grain network. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 3780-3786	3.8	21
83	Novel Scale-Like Structures of Graphite/TiC/Ti ₃ C ₂ Hybrids for Electromagnetic Absorption. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700617	6.4	61
82	CopperSiC whiskers composites with interface optimized by Ti ₃ SiC ₂ . <i>Journal of Materials Science</i> , 2018 , 53, 9806-9815	4.3	7
81	Coordination Polymer-Derived Multishelled Mixed Ni-Co Oxide Microspheres for Robust and Selective Detection of Xylene. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 15314-15321	9.5	50
80	Facile and Efficient Decontamination of Thorium from Rare Earths Based on Selective Selenite Crystallization. <i>Inorganic Chemistry</i> , 2018 , 57, 1880-1887	5.1	26
79	Abnormal grain growth of UO ₂ with pores in the final stage of sintering: A phase field study. <i>Computational Materials Science</i> , 2018 , 145, 24-34	3.2	5
78	How Vertical Compression Triggers Lateral Interlayer Slide for Metallic Molybdenum Disulfide?. <i>Tribology Letters</i> , 2018 , 66, 1	2.8	8
77	Superlubricity Enabled by Pressure-Induced Friction Collapse. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 2554-2559	6.4	48
76	The critical issues of SiC materials for future nuclear systems. <i>Scripta Materialia</i> , 2018 , 143, 149-153	5.6	79
75	A theoretical investigation and synthesis of layered ternary carbide system U-Al-C. <i>Ceramics International</i> , 2018 , 44, 1646-1652	5.1	8
74	Theoretical studies on microstructures, stabilities and formation conditions of some sour gas in the type I, II, and H clathrate hydrates. <i>Journal of Molecular Structure</i> , 2018 , 1153, 292-298	3.4	0

73	Reprint of: The development of cladding materials for the accident tolerant fuel system from the Materials Genome Initiative. <i>Scripta Materialia</i> , 2018 , 143, 129-136	5.6	7
72	First-principles study on the electrical and thermal properties of the semiconducting Sc(CN)F MXene.. <i>RSC Advances</i> , 2018 , 8, 22452-22459	3.7	14
71	Strong and biocompatible poly(lactic acid) membrane enhanced by Ti3C2Tz (MXene) nanosheets for Guided bone regeneration. <i>Materials Letters</i> , 2018 , 229, 114-117	3.3	46
70	Highly Sensitive and Selective Potassium Ion Detection Based on Graphene Hall Effect Biosensors. <i>Materials</i> , 2018 , 11,	3.5	13
69	Label-Free Electrochemical Detection of Vanillin through Low-Defect Graphene Electrodes Modified with Au Nanoparticles. <i>Materials</i> , 2018 , 11,	3.5	16
68	New formulation for reduction potentials of (Cu, Ni, Al, Zn)lanthanide alloys Implications for electrolysis-based pyroprocessing of spent nuclear fuel. <i>Electrochemistry Communications</i> , 2018 , 93, 180-182	5.1	4
67	Effects of Different Surface Functionalization and Doping on the Electronic Transport Properties of M2CTxM2CO2 Heterojunction Devices. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 14908-14917	3.8	15
66	A synergetic stabilization and strengthening strategy for two-dimensional ordered hybrid transition metal carbides. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 29684-29692	3.6	7
65	Grand Canonical Monte Carlo Simulations on Phase Equilibria of Methane, Carbon Dioxide, and Their Mixture Hydrates. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 9724-9737	3.4	5
64	Two-Dimensional Lamellar MoC for Electrochemical Hydrogen Production: Insights into the Origin of Hydrogen Evolution Reaction Activity in Acidic and Alkaline Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 40500-40508	9.5	28
63	Surface Electrochemical Stability and Strain-Tunable Lithium Storage of Highly Flexible 2D Transition Metal Carbides. <i>Advanced Functional Materials</i> , 2018 , 28, 1804867	15.6	21
62	Preparation of TiC/Ti2AlC coating on carbon fiber and investigation of the oxidation resistance properties. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 5269-5280	3.8	14
61	How Does the Hydrogen Bonding Interaction Influence the Properties of Polybenzoxazine? An Experimental Study Combined with Computer Simulation. <i>Macromolecules</i> , 2018 , 51, 4782-4799	5.5	55
60	Template-Free Growth of Well-Ordered Silver Nano Forest/Ceramic Metamaterial Films with Tunable Optical Responses. <i>Advanced Materials</i> , 2017 , 29, 1605324	24	32
59	In situ formation of a cellular graphene framework in thermoplastic composites leading to superior thermal conductivity. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 6164-6169	13	120
58	Photoluminescent Ti C MXene Quantum Dots for Multicolor Cellular Imaging. <i>Advanced Materials</i> , 2017 , 29, 1604847	24	439
57	Structures and Mechanical and Electronic Properties of the Ti2CO2 MXene Incorporated with Neighboring Elements (Sc, V, B and N). <i>Journal of Electronic Materials</i> , 2017 , 46, 2460-2466	1.9	42
56	Controllable magnitude and anisotropy of the electrical conductivity of HfCO MXene. <i>Journal of Physics Condensed Matter</i> , 2017 , 29, 165701	1.8	22

55	Enhanced thermal properties of poly(vinylidene fluoride) composites with ultrathin nanosheets of MXene. <i>RSC Advances</i> , 2017 , 7, 20494-20501	3.7	131
54	Structures and Mechanical Properties of CH ₄ , SO ₂ , and H ₂ S Hydrates from Density Function Theory Calculations. <i>Chemistry Letters</i> , 2017 , 46, 1141-1144	1.7	6
53	Facile preparation of in situ coated Ti ₃ C ₂ T _x /Ni _{0.5} Zn _{0.5} Fe ₂ O ₄ composites and their electromagnetic performance. <i>RSC Advances</i> , 2017 , 7, 24698-24708	3.7	108
52	3D Graphene Oxide Micropatterns Achieved by Roller-Assisted Microcontact Printing Induced Interface Integral Peel and Transfer. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1600867	4.6	5
51	Theoretical investigations on helium trapping in the Zr/Ti ₂ AlC interface. <i>Surface and Coatings Technology</i> , 2017 , 322, 19-24	4.4	14
50	Synthesis and Electrochemical Properties of Two-Dimensional Hafnium Carbide. <i>ACS Nano</i> , 2017 , 11, 3841-3850	16.7	229
49	Rare earth separations by selective borate crystallization. <i>Nature Communications</i> , 2017 , 8, 14438	17.4	94
48	Ab Initio Studies on the Clathrate Hydrates of Some Nitrogen- and Sulfur-Containing Gases. <i>Journal of Physical Chemistry A</i> , 2017 , 121, 2620-2626	2.8	12
47	Thickness-dependent phase evolution and bonding strength of SiC ceramics joints with active Ti interlayer. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 1233-1241	6	48
46	Effect of carbide interlayers on the microstructure and properties of graphene-nanoplatelet-reinforced copper matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 708, 311-318	5.3	48
45	The development of cladding materials for the accident tolerant fuel system from the Materials Genome Initiative. <i>Scripta Materialia</i> , 2017 , 141, 99-106	5.6	23
44	Cytocompatibility of TiAlC, TiSiC, and TiAlN: Tests and First-Principles Calculations. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 2293-2301	5.5	40
43	Designing flexible 2D transition metal carbides with strain-controllable lithium storage. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E11082-E11091	11.5	36
42	Current rectification induced by V-doped and Sc-doped in Ti ₂ CO ₂ devices. <i>Computational Materials Science</i> , 2017 , 138, 175-182	3.2	10
41	Effect of electric current on diffusion of aluminum in Ti ₃ AlC ₂ into zirconium alloy. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2017 , 32, 645-649	1	2
40	Highly Conductive 3D Segregated Graphene Architecture in Polypropylene Composite with Efficient EMI Shielding. <i>Polymers</i> , 2017 , 9,	4.5	30
39	Electronic and Transport Properties of Ti ₂ CO ₂ MXene Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 17143-17152	3.8	35
38	Loading Actinides in Multilayered Structures for Nuclear Waste Treatment: The First Case Study of Uranium Capture with Vanadium Carbide MXene. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 16396-403	9.5	138

37	Negative differential resistance and rectifying performance induced by doped graphene nanoribbons p-n device. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016 , 380, 1049-1055	2.3	28
36	First-principles investigations on the electronic structures of U ₃ Si ₂ . <i>Journal of Nuclear Materials</i> , 2016 , 469, 194-199	3.3	46
35	VFFDT: A New Software for Preparing AMBER Force Field Parameters for Metal-Containing Molecular Systems. <i>Journal of Chemical Information and Modeling</i> , 2016 , 56, 811-8	6.1	49
34	Exceptionally high thermal and electrical conductivity of three-dimensional graphene-foam-based polymer composites. <i>RSC Advances</i> , 2016 , 6, 22364-22369	3.7	79
33	Influence of passivation pretreatment in common acid and alkali on oxidation behaviour of Ti ₃ SiC ₂ at 500°C. <i>Advances in Applied Ceramics</i> , 2016 , 115, 60-64	2.3	2
32	Promising electron mobility and high thermal conductivity in Sc ₂ CT ₂ (T = F, OH) MXenes. <i>Nanoscale</i> , 2016 , 8, 6110-7	7.7	141
31	Intrinsic Structural, Electrical, Thermal, and Mechanical Properties of the Promising Conductor Mo ₂ C MXene. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 15082-15088	3.8	98
30	Improved lysis of single bacterial cells by a modified alkaline-thermal shock procedure. <i>BioTechniques</i> , 2016 , 60, 129-35	2.5	7
29	A Two-Dimensional Zirconium Carbide by Selective Etching of Al ₃ C ₃ from Nanolaminated Zr ₃ Al ₃ C ₅ . <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 5008-13	16.4	247
28	A Two-Dimensional Zirconium Carbide by Selective Etching of Al ₃ C ₃ from Nanolaminated Zr ₃ Al ₃ C ₅ . <i>Angewandte Chemie</i> , 2016 , 128, 5092-5097	3.6	55
27	The thermal and electrical properties of the promising semiconductor MXene Hf ₂ CO ₂ . <i>Scientific Reports</i> , 2016 , 6, 27971	4.9	115
26	Structural, electronic and mechanical properties of (Nb _x Ti _{1-x}) ₂ SC and (Nb _x Zr _{1-x}) ₂ SC (0 ≤ x ≤ 1) from first-principles investigations. <i>Computational and Theoretical Chemistry</i> , 2016 , 1090, 58-66	2	9
25	Revisiting alpha decay-based near-light-speed particle propulsion. <i>Applied Radiation and Isotopes</i> , 2016 , 114, 14-8	1.7	1
24	Hybridization of inorganic CoB noncrystal with graphene and its Kubas-enhanced hydrogen adsorption at room temperature. <i>RSC Advances</i> , 2016 , 6, 93238-93244	3.7	5
23	Electronic structures and mechanical properties of Al(111)/ZrB ₂ (0001) heterojunctions from first-principles calculation. <i>Molecular Physics</i> , 2015 , 113, 1794-1801	1.7	18
22	High-resolution dynamic pressure sensor array based on piezo-phototronic effect tuned photoluminescence imaging. <i>ACS Nano</i> , 2015 , 9, 3143-50	16.7	94
21	New insight into the helium-induced damage in MAX phase Ti ₃ AlC ₂ by first-principles studies. <i>Journal of Chemical Physics</i> , 2015 , 143, 114707	3.9	22
20	Fast joining SiC ceramics with Ti ₃ SiC ₂ tape film by electric field-assisted sintering technology. <i>Journal of Nuclear Materials</i> , 2015 , 466, 322-327	3.3	52

19	Role of the surface effect on the structural, electronic and mechanical properties of the carbide MXenes. <i>Europhysics Letters</i> , 2015 , 111, 26007	1.6	161
18	Direct in situ observation and explanation of lithium dendrite of commercial graphite electrodes. <i>RSC Advances</i> , 2015 , 5, 69514-69521	3.7	67
17	Uranyl Carboxyphosphonates Derived from Hydrothermal in Situ Ligand Reaction: Syntheses, Structures, and Computational Investigations. <i>Inorganic Chemistry</i> , 2015 , 54, 8617-24	5.1	24
16	Exploring the potential of exfoliated ternary ultrathin Ti ₄ AlN ₃ nanosheets for fabricating hybrid patterned polymer brushes. <i>RSC Advances</i> , 2015 , 5, 70339-70344	3.7	21
15	High Pressure Phase-Transformation Induced Texture Evolution and Strengthening in Zirconium Metal: Experiment and Modeling. <i>Scientific Reports</i> , 2015 , 5, 12552	4.9	18
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