

Christopher E Shuck

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3005560/publications.pdf>

Version: 2024-02-01

50
papers

5,696
citations

159525

30
h-index

206029

48
g-index

50
all docs

50
docs citations

50
times ranked

4143
citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond Ti ₃ C ₂ T _x : MXenes for Electromagnetic Interference Shielding. ACS Nano, 2020, 14, 5008-5016.	7.3	489
2	Scalable Synthesis of Ti ₃ C ₂ T _x MXene. Advanced Engineering Materials, 2020, 22, 1901241.	1.6	468
3	Synthesis of Mo ₄ VAIC ₄ MAX Phase and Two-Dimensional Mo ₄ VC ₄ MXene with Five Atomic Layers of Transition Metals. ACS Nano, 2020, 14, 204-217.	7.3	429
4	MXene chemistry, electrochemistry and energy storage applications. Nature Reviews Chemistry, 2022, 6, 389-404.	13.8	429
5	Modified MAX Phase Synthesis for Environmentally Stable and Highly Conductive Ti ₃ C ₂ MXene. ACS Nano, 2021, 15, 6420-6429.	7.3	417
6	High-Temperature Behavior and Surface Chemistry of Carbide MXenes Studied by Thermal Analysis. Chemistry of Materials, 2019, 31, 3324-3332.	3.2	296
7	Characterization of MXenes at every step, from their precursors to single flakes and assembled films. Progress in Materials Science, 2021, 120, 100757.	16.0	288
8	Boosting Performance of Naâ€“S Batteries Using Sulfur-Doped Ti ₃ C ₂ T _x MXene Nanosheets with a Strong Affinity to Sodium Polysulfides. ACS Nano, 2019, 13, 11500-11509.	7.3	220
9	Effect of Ti ₃ AlC ₂ MAX Phase on Structure and Properties of Resultant Ti ₃ C ₂ T _x MXene. ACS Applied Nano Materials, 2019, 2, 3368-3376.	2.4	210
10	Tailoring Electronic and Optical Properties of MXenes through Forming Solid Solutions. Journal of the American Chemical Society, 2020, 142, 19110-19118.	6.6	198
11	Two-dimensional vanadium carbide (V ₂ C) MXene as electrode for supercapacitors with aqueous electrolytes. Electrochemistry Communications, 2018, 96, 103-107.	2.3	191
12	Additive-Free MXene Liquid Crystals and Fibers. ACS Central Science, 2020, 6, 254-265.	5.3	182
13	SnO ₂ â€“Ti ₃ C ₂ MXene electron transport layers for perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 5635-5642.	5.2	173
14	Hydrophobic and Stable MXeneâ€“Polymer Pressure Sensors for Wearable Electronics. ACS Applied Materials & Interfaces, 2020, 12, 15362-15369.	4.0	161
15	Electrochromic Effect in Titanium Carbide MXene Thin Films Produced by Dipâ€“Coating. Advanced Functional Materials, 2019, 29, 1809223.	7.8	148
16	Taking MXenes from the lab to commercial products. Chemical Engineering Journal, 2020, 401, 125786.	6.6	139
17	The Broad Chromatic Range of Twoâ€“Dimensional Transition Metal Carbides. Advanced Optical Materials, 2021, 9, 2001563.	3.6	118
18	Safe Synthesis of MAX and MXene: Guidelines to Reduce Risk During Synthesis. Journal of Chemical Health and Safety, 2021, 28, 326-338.	1.1	102

#	ARTICLE	IF	CITATIONS
19	Nickel Oxide Reduction by Hydrogen: Kinetics and Structural Transformations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16131-16138.	1.5	92
20	Synthesis and electrochemical properties of 2D molybdenum vanadium carbides “solid solution MXenes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8957-8968.	5.2	90
21	Guidelines for Synthesis and Processing of Chemically Stable Two-Dimensional V_2CT_x MXene. <i>Chemistry of Materials</i> , 2022, 34, 499-509.	3.2	74
22	Adsorption of Uremic Toxins Using Ti_3C_2Tx MXene for Dialysate Regeneration. <i>ACS Nano</i> , 2020, 14, 11787-11798.	7.3	71
23	Extremely hard and tough high entropy nitride ceramics. <i>Scientific Reports</i> , 2020, 10, 19874.	1.6	65
24	2D MXenes with antiviral and immunomodulatory properties: A pilot study against SARS-CoV-2. <i>Nano Today</i> , 2021, 38, 101136.	6.2	63
25	Tunable stable operating potential window for high-voltage aqueous supercapacitors. <i>Nano Energy</i> , 2019, 63, 103848.	8.2	55
26	Adjustable electrochemical properties of solid-solution MXenes. <i>Nano Energy</i> , 2021, 88, 106308.	8.2	55
27	Surface Redox Pseudocapacitance of Partially Oxidized Titanium Carbide MXene in Water-in-Salt Electrolyte. <i>ACS Energy Letters</i> , 2022, 7, 30-35.	8.8	43
28	Kinetics of SHS reactions: A review. <i>International Journal of Self-Propagating High-Temperature Synthesis</i> , 2017, 26, 145-165.	0.2	42
29	Solid-flame: Experimental validation. <i>Combustion and Flame</i> , 2016, 163, 487-493.	2.8	36
30	Irradiation-Enhanced Reactivity of Multilayer Al/Ni Nanomaterials. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 11272-11279.	4.0	33
31	Facile synthesis of polyaniline/titanium carbide (MXene) nanosheets/palladium nanocomposite for efficient electrocatalytic oxidation of methanol for fuel cell application. <i>Fuel</i> , 2021, 303, 121329.	3.4	33
32	An aqueous 2.1 V pseudocapacitor with MXene and V-MnO ₂ electrodes. <i>Nano Research</i> , 2022, 15, 535-541.	5.8	31
33	Ni/Al Energetic Nanocomposites and the Solid Flame Phenomenon. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27066-27078.	1.5	29
34	Exothermic Self-Sustained Waves with Amorphous Nickel. <i>Journal of Physical Chemistry C</i> , 2016, 120, 5827-5838.	1.5	23
35	The Solid Flame Phenomenon: A Novel Perspective. <i>Advanced Engineering Materials</i> , 2018, 20, 1701065.	1.6	23
36	Reactive Ni/Al Nanocomposites: Structural Characteristics and Activation Energy. <i>Journal of Physical Chemistry A</i> , 2017, 121, 1175-1181.	1.1	21

#	ARTICLE	IF	CITATIONS
37	Kinetics and Mechanism of Ignition in Reactive Al/Ni Nanostructured Materials. Journal of Physical Chemistry C, 2018, 122, 27082-27092.	1.5	21
38	MXene-Derived Bilayered Vanadium Oxides with Enhanced Stability in Li-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 10892-10901.	2.5	21
39	Intercalation-Induced Reversible Electrochromic Behavior of Two-Dimensional Ti_3C_2Tx MXene in Organic Electrolytes. ChemElectroChem, 2021, 8, 151-156.	1.7	21
40	X-ray nanotomography and focused-ion-beam sectioning for quantitative three-dimensional analysis of nanocomposites. Journal of Synchrotron Radiation, 2016, 23, 990-996.	1.0	19
41	Mesoporous metal - silica materials: Synthesis, catalytic and thermal properties. Microporous and Mesoporous Materials, 2018, 257, 175-184.	2.2	18
42	In-situ transmission electron microscopy determination of solid-state diffusion in the aluminum-nickel system. Journal of Solid State Chemistry, 2019, 276, 114-121.	1.4	15
43	Shifts in valence states in bimetallic MXenes revealed by electron energy-loss spectroscopy (EELS). 2D Materials, 2022, 9, 025004.	2.0	11
44	Removal and recovery of ammonia from simulated wastewater using Ti_3C_2Tx MXene in flow electrode capacitive deionization. Npj Clean Water, 2022, 5, .	3.1	9
45	Numerical and experimental analysis of the Young's modulus of cold compacted powder materials. Mechanics of Materials, 2017, 112, 56-70.	1.7	7
46	Micro-heterogeneous regimes for gasless combustion of composite materials. Combustion Science and Technology, 2018, 190, 893-908.	1.2	7
47	MXene-based suspension electrode with improved energy density for electrochemical flow capacitors. Journal of Power Sources, 2021, 506, 230187.	4.0	5
48	Kinetics of Heterogeneous Self-Propagating High-Temperature Reactions. , 0, , .		3
49	Preparation and Reactivity of Gasless Nanostructured Energetic Materials. Journal of Visualized Experiments, 2015, , e52624.	0.2	2
50	Infrared Thermal Analysis. , 2017, , 170-171.		0