

# Christopher E Shuck

## 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.

48  
papers

2,341  
citations

24  
h-index

48  
g-index

50  
ext. papers

3,714  
ext. citations

10  
avg, IF

5.84  
L-index

#	Paper	IF	Citations
48	Shifts in valence states in bimetallic MXenes revealed by electron energy-loss spectroscopy (EELS). <i>2D Materials</i> , <b>2022</b> , 9, 025004	5.9	1
47	Guidelines for Synthesis and Processing of Chemically Stable Two-Dimensional V <sub>2</sub> CT <sub>x</sub> MXene. <i>Chemistry of Materials</i> , <b>2022</b> , 34, 499-509	9.6	11
46	Modified MAX Phase Synthesis for Environmentally Stable and Highly Conductive TiC MXene. <i>ACS Nano</i> , <b>2021</b> , 15, 6420-6429	16.7	116
45	2D MXenes with antiviral and immunomodulatory properties: A pilot study against SARS-CoV-2. <i>Nano Today</i> , <b>2021</b> , 38, 101136	17.9	23
44	The Broad Chromatic Range of Two-Dimensional Transition Metal Carbides. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2001563	8.1	33
43	Intercalation-Induced Reversible Electrochromic Behavior of Two-Dimensional Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene in Organic Electrolytes. <i>ChemElectroChem</i> , <b>2021</b> , 8, 151-156	4.3	9
42	Characterization of MXenes at every step, from their precursors to single flakes and assembled films. <i>Progress in Materials Science</i> , <b>2021</b> , 120, 100757	42.2	80
41	Safe Synthesis of MAX and MXene: Guidelines to Reduce Risk During Synthesis. <i>Journal of Chemical Health and Safety</i> , <b>2021</b> , 28, 326-338	1.7	23
40	MXene-based suspension electrode with improved energy density for electrochemical flow capacitors. <i>Journal of Power Sources</i> , <b>2021</b> , 506, 230187	8.9	2
39	Adjustable electrochemical properties of solid-solution MXenes. <i>Nano Energy</i> , <b>2021</b> , 88, 106308	17.1	18
38	Facile synthesis of polyaniline/titanium carbide (MXene) nanosheets/palladium nanocomposite for efficient electrocatalytic oxidation of methanol for fuel cell application. <i>Fuel</i> , <b>2021</b> , 303, 121329	7.1	3
37	Hydrophobic and Stable MXene-Polymer Pressure Sensors for Wearable Electronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 15362-15369	9.5	82
36	Beyond TiCT: MXenes for Electromagnetic Interference Shielding. <i>ACS Nano</i> , <b>2020</b> , 14, 5008-5016	16.7	218
35	Taking MXenes from the lab to commercial products. <i>Chemical Engineering Journal</i> , <b>2020</b> , 401, 125786	14.7	70
34	Additive-Free MXene Liquid Crystals and Fibers. <i>ACS Central Science</i> , <b>2020</b> , 6, 254-265	16.8	73
33	Scalable Synthesis of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 1901241	3.5	164
32	Synthesis of MoVAIC MAX Phase and Two-Dimensional MoVC MXene with Five Atomic Layers of Transition Metals. <i>ACS Nano</i> , <b>2020</b> , 14, 204-217	16.7	198

31	MXene-Derived Bilayered Vanadium Oxides with Enhanced Stability in Li-Ion Batteries. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 10892-10901	6.1	8
30	Tailoring Electronic and Optical Properties of MXenes through Forming Solid Solutions. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 19110-19118	16.4	58
29	Adsorption of Uremic Toxins Using TiCT MXene for Dialysate Regeneration. <i>ACS Nano</i> , <b>2020</b> , 14, 11787-11798	16.9	35
28	Extremely hard and tough high entropy nitride ceramics. <i>Scientific Reports</i> , <b>2020</b> , 10, 19874	4.9	21
27	Synthesis and electrochemical properties of 2D molybdenum vanadium carbides solid solution MXenes. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 8957-8968	13	38
26	Boosting Performance of Na-S Batteries Using Sulfur-Doped TiCT MXene Nanosheets with a Strong Affinity to Sodium Polysulfides. <i>ACS Nano</i> , <b>2019</b> , 13, 11500-11509	16.7	134
25	SnO <sub>2</sub> /Ti <sub>3</sub> C <sub>2</sub> MXene electron transport layers for perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 5635-5642	13	111
24	Tunable stable operating potential window for high-voltage aqueous supercapacitors. <i>Nano Energy</i> , <b>2019</b> , 63, 103848	17.1	43
23	Effect of Ti <sub>3</sub> AlC <sub>2</sub> MAX Phase on Structure and Properties of Resultant Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 3368-3376	5.6	92
22	In-situ transmission electron microscopy determination of solid-state diffusion in the aluminum-nickel system. <i>Journal of Solid State Chemistry</i> , <b>2019</b> , 276, 114-121	3.3	5
21	Electrochromic Effect in Titanium Carbide MXene Thin Films Produced by Dip-Coating. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1809223	15.6	80
20	High-Temperature Behavior and Surface Chemistry of Carbide MXenes Studied by Thermal Analysis. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3324-3332	9.6	162
19	The Solid Flame Phenomenon: A Novel Perspective. <i>Advanced Engineering Materials</i> , <b>2018</b> , 20, 1701065	3.5	14
18	Micro-heterogeneous regimes for gasless combustion of composite materials. <i>Combustion Science and Technology</i> , <b>2018</b> , 190, 893-908	1.5	4
17	Mesoporous metal - silica materials: Synthesis, catalytic and thermal properties. <i>Microporous and Mesoporous Materials</i> , <b>2018</b> , 257, 175-184	5.3	12
16	Two-dimensional vanadium carbide (V <sub>2</sub> C) MXene as electrode for supercapacitors with aqueous electrolytes. <i>Electrochemistry Communications</i> , <b>2018</b> , 96, 103-107	5.1	108
15	Kinetics and Mechanism of Ignition in Reactive Al/Ni Nanostructured Materials. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 27082-27092	3.8	14
14	Reactive Ni/Al Nanocomposites: Structural Characteristics and Activation Energy. <i>Journal of Physical Chemistry A</i> , <b>2017</b> , 121, 1175-1181	2.8	15

13	Kinetics of SHS reactions: A review. <i>International Journal of Self-Propagating High-Temperature Synthesis</i> , <b>2017</b> , 26, 145-165	0.7	31
12	Numerical and experimental analysis of the Young's modulus of cold compacted powder materials. <i>Mechanics of Materials</i> , <b>2017</b> , 112, 56-70	3.3	6
11	Infrared Thermal Analysis <b>2017</b> , 170-171		
10	Ni/Al Energetic Nanocomposites and the Solid Flame Phenomenon. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 27066-27078	3.8	22
9	X-ray nanotomography and focused-ion-beam sectioning for quantitative three-dimensional analysis of nanocomposites. <i>Journal of Synchrotron Radiation</i> , <b>2016</b> , 23, 990-6	2.4	17
8	Exothermic Self-Sustained Waves with Amorphous Nickel. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 5827-5838	3.8	18
7	Solid-flame: Experimental validation. <i>Combustion and Flame</i> , <b>2016</b> , 163, 487-493	5.3	32
6	Nickel Oxide Reduction by Hydrogen: Kinetics and Structural Transformations. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 16131-16138	3.8	59
5	Irradiation-enhanced reactivity of multilayer Al/Ni nanomaterials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 11272-9	9.5	28
4	Preparation and reactivity of gasless nanostructured energetic materials. <i>Journal of Visualized Experiments</i> , <b>2015</b> , e52624	1.6	2
3	Surface Redox Pseudocapacitance of Partially Oxidized Titanium Carbide MXene in Water-in-Salt Electrolyte. <i>ACS Energy Letters</i> , 30-35	20.1	7
2	An aqueous 2.1 V pseudocapacitor with MXene and V-MnO <sub>2</sub> electrodes. <i>Nano Research</i> , 1	10	6
1	MXene chemistry, electrochemistry and energy storage applications. <i>Nature Reviews Chemistry</i> ,	34.6	35