

Maria R Lukatskaya

List of Publications by Year in descending order

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43
papers

27,826
citations

117625

34
h-index

197818

49
g-index

52
all docs

52
docs citations

52
times ranked

17861
citing authors

#	ARTICLE	IF	CITATIONS
1	2D metal carbides and nitrides (MXenes) for energy storage. Nature Reviews Materials, 2017, 2, .	48.7	5,261
2	Conductive two-dimensional titanium carbide $\text{Ti}_3\text{C}_2\text{MX}_2$ with high volumetric capacitance. Nature, 2014, 516, 78-81.	27.8	4,306
3	Cation Intercalation and High Volumetric Capacitance of Two-Dimensional Titanium Carbide. Science, 2013, 341, 1502-1505.	12.6	3,329
4	Ultra-high-rate pseudocapacitive energy storage in two-dimensional transition metal carbides. Nature Energy, 2017, 2, .	39.5	1,626
5	Multidimensional materials and device architectures for future hybrid energy storage. Nature Communications, 2016, 7, 12647.	12.8	1,281
6	Transparent Conductive Two-Dimensional Titanium Carbide Epitaxial Thin Films. Chemistry of Materials, 2014, 26, 2374-2381.	6.7	1,173
7	Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer $\text{Ti}_3\text{C}_2\text{MX}_2$ MXene Flakes. Advanced Electronic Materials, 2016, 2, 1600255.	5.1	1,160
8	Flexible MXene/Carbon Nanotube Composite Paper with High Volumetric Capacitance. Advanced Materials, 2015, 27, 339-345.	21.0	1,125
9	Two-Dimensional Molybdenum Carbide (MXene) as an Efficient Electrocatalyst for Hydrogen Evolution. ACS Energy Letters, 2016, 1, 589-594.	17.4	1,100
10	Synthesis and Characterization of 2D Molybdenum Carbide (MXene). Advanced Functional Materials, 2016, 26, 3118-3127.	14.9	945
11	Robust and conductive two-dimensional metal-organic frameworks with exceptionally high volumetric and areal capacitance. Nature Energy, 2018, 3, 30-36.	39.5	786
12	Amine-Assisted Delamination of Nb_2C MXene for Li-Ion Energy Storage Devices. Advanced Materials, 2015, 27, 3501-3506.	21.0	749
13	NMR reveals the surface functionalisation of $\text{Ti}_3\text{C}_2\text{MX}_2$ MXene. Physical Chemistry Chemical Physics, 2016, 18, 5099-5102.	2.8	689
14	One-step synthesis of nanocrystalline transition metal oxides on thin sheets of disordered graphitic carbon by oxidation of MXenes. Chemical Communications, 2014, 50, 7420-7423.	4.1	614
15	Probing the Mechanism of High Capacitance in 2D Titanium Carbide Using In Situ X-Ray Absorption Spectroscopy. Advanced Energy Materials, 2015, 5, 1500589.	19.5	521
16	High capacitance of surface-modified 2D titanium carbide in acidic electrolyte. Electrochemistry Communications, 2014, 48, 118-122.	4.7	420
17	Concentrated mixed cation acetate H_2O -in-salt solutions as green and low-cost high voltage electrolytes for aqueous batteries. Energy and Environmental Science, 2018, 11, 2876-2883.	30.8	315
18	In situ environmental transmission electron microscopy study of oxidation of two-dimensional Ti_3C_2 and formation of carbon-supported TiO_2 . Journal of Materials Chemistry A, 2014, 2, 14339.	10.3	287

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19	Solving the Capacitive Paradox of 2D MXene using Electrochemical Quartz-Crystal Admittance and In Situ Electronic Conductance Measurements. <i>Advanced Energy Materials</i> , 2015, 5, 1400815.	19.5	283
20	Understanding the MXene Pseudocapacitance. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1223-1228.	4.6	231
21	The effect of hydrazine intercalation on the structure and capacitance of 2D titanium carbide (MXene). <i>Nanoscale</i> , 2016, 8, 9128-9133.	5.6	225
22	Synthesis and Charge Storage Properties of Hierarchical Niobium Pentoxide/Carbon/Niobium Carbide (MXene) Hybrid Materials. <i>Chemistry of Materials</i> , 2016, 28, 3937-3943.	6.7	210
23	Controlling the actuation properties of MXene paper electrodes upon cation intercalation. <i>Nano Energy</i> , 2015, 17, 27-35.	16.0	166
24	Development of a Green Supercapacitor Composed Entirely of Environmentally Friendly Materials. <i>ChemSusChem</i> , 2013, 6, 2269-2280.	6.8	155
25	Room-Temperature Carbide-Derived Carbon Synthesis by Electrochemical Etching of MAX Phases. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4877-4880.	13.8	133
26	Synthesis of Carbon/Sulfur Nanolaminates by Electrochemical Extraction of Titanium from Ti_2SC . <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4810-4814.	13.8	100
27	Synthesis and electrochemical properties of niobium pentoxide deposited on layered carbide-derived carbon. <i>Journal of Power Sources</i> , 2015, 274, 121-129.	7.8	66
28	Can Anions Be Inserted into MXene?. <i>Journal of the American Chemical Society</i> , 2021, 143, 12552-12559.	13.7	63
29	In Situ Monitoring of Gravimetric and Viscoelastic Changes in 2D Intercalation Electrodes. <i>ACS Energy Letters</i> , 2017, 2, 1407-1415.	17.4	56
30	Water-in-Salt LiTFSI Aqueous Electrolytes. 1. Liquid Structure from Combined Molecular Dynamics Simulation and Experimental Studies. <i>Journal of Physical Chemistry B</i> , 2021, 125, 4501-4513.	2.6	52
31	Understanding the Mechanism of High Capacitance in Nickel Hexaaminobenzene-Based Conductive Metal-Organic Frameworks in Aqueous Electrolytes. <i>ACS Nano</i> , 2020, 14, 15919-15925.	14.6	46
32	Water or Anion? Uncovering the Zn^{2+} Solvation Environment in Mixed $Zn(TFSI)_2$ and LiTFSI Water-in-Salt Electrolytes. <i>ACS Energy Letters</i> , 2021, 6, 3458-3463.	17.4	45
33	Toward Unraveling the Origin of Lithium Fluoride in the Solid Electrolyte Interphase. <i>Chemistry of Materials</i> , 2021, 33, 7315-7336.	6.7	39
34	Interfacial Speciation Determines Interfacial Chemistry: X-Ray-Induced Lithium Fluoride Formation from Water-in-Salt Electrolytes on Solid Surfaces. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 23180-23187.	13.8	28
35	Controlled way to prepare quasi-1D nanostructures with complex chemical composition in porous anodic alumina. <i>Chemical Communications</i> , 2011, 47, 2396-2398.	4.1	24
36	Stable colloidal solutions of strontium hexaferrite hard magnetic nanoparticles. <i>Chemical Communications</i> , 2014, 50, 14581-14584.	4.1	21

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37	Separation and liquid chromatography using a single carbon nanotube. <i>Scientific Reports</i> , 2012, 2, 510.	3.3	19
38	Adsorption of proteins in channels of carbon nanotubes: Effect of surface chemistry. <i>Materials Express</i> , 2013, 3, 1-10.	0.5	18
39	MXene Materials: Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer Ti_3C_2 MXene Flakes (<i>Adv. Electron. Mater.</i> 12/2016). <i>Advanced Electronic Materials</i> , 2016, 2, .	5.1	18
40	Cobalt-containing nanocomposites based on zeolites of MFI framework type. <i>Journal of Magnetism and Magnetic Materials</i> , 2009, 321, 3866-3869.	2.3	10
41	Interfacial Speciation Determines Interfacial Chemistry: X-ray-Induced Lithium Fluoride Formation from Water in Salt Electrolytes on Solid Surfaces. <i>Angewandte Chemie</i> , 2020, 132, 23380-23387.	2.0	9
42	Bottom-Up Design of Configurable Oligomer-Derived Conducting Metallopolymers for High-Power Electrochemical Energy Storage. <i>ACS Nano</i> , 2021, 15, 15422-15428.	14.6	9
43	Three-dimensional nanostructures from porous anodic alumina. <i>MRS Communications</i> , 2012, 2, 51-54.	1.8	1