Maria R Lukatskaya

List of Publications by Citations

47 papers	19,097 citations	28 h-index	52 g-index
52 ext. papers	23,151 ext. citations	15.9 avg, IF	7.3 L-index

#	Paper	IF	Citations
47	2D metal carbides and nitrides (MXenes) for energy storage. *Nature Reviews Materials*, **2017**, 2,	73.3	3469
46	Conductive two-dimensional titanium carbide 'clay' with high volumetric capacitance. *Nature*, **2014**, 516, 78-81	50.4	2849
45	Cation intercalation and high volumetric capacitance of two-dimensional titanium carbide. *Science*, **2013**, 341, 1502-5	33.3	2510
44	Ultra-high-rate pseudocapacitive energy storage in two-dimensional transition metal carbides. *Nature Energy*, **2017**, 2,	62.3	1071
43	Multidimensional materials and device architectures for future hybrid energy storage. *Nature Communications*, **2016**, 7, 12647	17.4	992
42	Flexible MXene/carbon nanotube composite paper with high volumetric capacitance. *Advanced Materials*, **2015**, 27, 339-45	24	860
41	Transparent Conductive Two-Dimensional Titanium Carbide Epitaxial Thin Films. *Chemistry of Materials*, **2014**, 26, 2374-2381	9.6	778
40	Two-Dimensional Molybdenum Carbide (MXene) as an Efficient Electrocatalyst for Hydrogen Evolution. *ACS Energy Letters*, **2016**, 1, 589-594	20.1	752
39	Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer Ti3C2 MXene Flakes. *Advanced Electronic Materials*, **2016**, 2, 1600255	6.4	649
38	Synthesis and Characterization of 2D Molybdenum Carbide (MXene). *Advanced Functional Materials*, **2016**, 26, 3118-3127	15.6	640
37	Amine-Assisted Delamination of Nb2C MXene for Li-Ion Energy Storage Devices. *Advanced Materials*, **2015**, 27, 3501-6	24	555
36	Robust and conductive two-dimensional metal□rganic frameworks with exceptionally high volumetric and areal capacitance. *Nature Energy*, **2018**, 3, 30-36	62.3	528
35	NMR reveals the surface functionalisation of Ti3C2 MXene. *Physical Chemistry Chemical Physics*, **2016**, 18, 5099-102	3.6	491
34	One-step synthesis of nanocrystalline transition metal oxides on thin sheets of disordered graphitic carbon by oxidation of MXenes. *Chemical Communications*, **2014**, 50, 7420-3	5.8	427
33	Probing the Mechanism of High Capacitance in 2D Titanium Carbide Using In Situ X-Ray Absorption Spectroscopy. *Advanced Energy Materials*, **2015**, 5, 1500589	21.8	374
32	High capacitance of surface-modified 2D titanium carbide in acidic electrolyte. *Electrochemistry Communications*, **2014**, 48, 118-122	5.1	308
31	Solving the Capacitive Paradox of 2D MXene using Electrochemical Quartz-Crystal Admittance and In Situ Electronic Conductance Measurements. *Advanced Energy Materials*, **2015**, 5, 1400815	21.8	225

30	In situ environmental transmission electron microscopy study of oxidation of two-dimensional Ti3C2 and formation of carbon-supported TiO2. *Journal of Materials Chemistry A*, **2014**, 2, 14339	13	211
29	Concentrated mixed cation acetate "water-in-salt" solutions as green and low-cost high voltage electrolytes for aqueous batteries. *Energy and Environmental Science*, **2018**, 11, 2876-2883	35.4	198
28	Synthesis and Charge Storage Properties of Hierarchical Niobium Pentoxide/Carbon/Niobium Carbide (MXene) Hybrid Materials. *Chemistry of Materials*, **2016**, 28, 3937-3943	9.6	172
27	The effect of hydrazine intercalation on the structure and capacitance of 2D titanium carbide (MXene). *Nanoscale*, **2016**, 8, 9128-33	7.7	161
26	Controlling the actuation properties of MXene paper electrodes upon cation intercalation. *Nano Energy*, **2015**, 17, 27-35	17.1	135
25	Understanding the MXene Pseudocapacitance. *Journal of Physical Chemistry Letters*, **2018**, 9, 1223-1228	6.4	133
24	Development of a green supercapacitor composed entirely of environmentally friendly materials. *ChemSusChem*, **2013**, 6, 2269-80	8.3	113
23	Room-temperature carbide-derived carbon synthesis by electrochemical etching of MAX phases. *Angewandte Chemie - International Edition*, **2014**, 53, 4877-80	16.4	86
22	Synthesis of carbon/sulfur nanolaminates by electrochemical extraction of titanium from Ti2SC. *Angewandte Chemie - International Edition*, **2015**, 54, 4810-4	16.4	81
21	Synthesis and electrochemical properties of niobium pentoxide deposited on layered carbide-derived carbon. *Journal of Power Sources*, **2015**, 274, 121-129	8.9	64
20	In Situ Monitoring of Gravimetric and Viscoelastic Changes in 2D Intercalation Electrodes. *ACS Energy Letters*, **2017**, 2, 1407-1415	20.1	48
19	Room-Temperature Carbide-Derived Carbon Synthesis by Electrochemical Etching of MAX Phases. *Angewandte Chemie*, **2014**, 126, 4977-4980	3.6	23
18	Controlled way to prepare quasi-1D nanostructures with complex chemical composition in porous anodic alumina. *Chemical Communications*, **2011**, 47, 2396-8	5.8	22
17	Synthesis of Carbon/Sulfur Nanolaminates by Electrochemical Extraction of Titanium from Ti2SC. *Angewandte Chemie*, **2015**, 127, 4892-4896	3.6	19
16	Can Anions Be Inserted into MXene?. *Journal of the American Chemical Society*, **2021**, 143, 12552-12559	16.4	19
15	Separation and liquid chromatography using a single carbon nanotube. *Scientific Reports*, **2012**, 2, 510	4.9	17
14	Understanding the Mechanism of High Capacitance in Nickel Hexaaminobenzene-Based Conductive Metal-Organic Frameworks in Aqueous Electrolytes. *ACS Nano*, **2020**, 14, 15919-15925	16.7	16
13	Water-in-Salt LiTFSI Aqueous Electrolytes. 1. Liquid Structure from Combined Molecular Dynamics Simulation and Experimental Studies. *Journal of Physical Chemistry B*, **2021**, 125, 4501-4513	3.4	16

12	Stable colloidal solutions of strontium hexaferrite hard magnetic nanoparticles. *Chemical Communications*, **2014**, 50, 14581-4	5.8	15
11	Adsorption of proteins in channels of carbon nanotubes: Effect of surface chemistry. *Materials Express*, **2013**, 3, 1-10	1.3	15
10	Interfacial Speciation Determines Interfacial Chemistry: X-ray-Induced Lithium Fluoride Formation from Water-in-salt Electrolytes on Solid Surfaces. *Angewandte Chemie - International Edition*, **2020**, 59, 23180-23187	16.4	12
9	Toward Unraveling the Origin of Lithium Fluoride in the Solid Electrolyte Interphase. *Chemistry of Materials*, **2021**, 33, 7315-7336	9.6	10
8	Cobalt-containing nanocomposites based on zeolites of MFI framework type. *Journal of Magnetism and Magnetic Materials*, **2009**, 321, 3866-3869	2.8	9
7	MXene Materials: Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer Ti3C2 MXene Flakes (Adv. Electron. Mater. 12/2016). *Advanced Electronic Materials*, **2016**, 2,	6.4	9
6	Interfacial Speciation Determines Interfacial Chemistry: X-ray-Induced Lithium Fluoride Formation from Water-in-salt Electrolytes on Solid Surfaces. *Angewandte Chemie*, **2020**, 132, 23380-23387	3.6	6
5	Water or Anion? Uncovering the Zn2+ Solvation Environment in Mixed Zn(TFSI)2 and LiTFSI Water-in-Salt Electrolytes. *ACS Energy Letters*,3458-3463	20.1	5
4	Three-dimensional nanostructures from porous anodic alumina. *MRS Communications*, **2012**, 2, 51-54	2.7	1
3	Bottom-Up Design of Configurable Oligomer-Derived Conducting Metallopolymers for High-Power Electrochemical Energy Storage. *ACS Nano*, **2021**, 15, 15422-15428	16.7	1
2	Innentitelbild: Room-Temperature Carbide-Derived Carbon Synthesis by Electrochemical Etching of MAX Phases (Angew. Chem. 19/2014). *Angewandte Chemie*, **2014**, 126, 4820-4820	3.6	
1	Innentitelbild: Synthesis of Carbon/Sulfur Nanolaminates by Electrochemical Extraction of Titanium from Ti2SC (Angew. Chem. 16/2015). *Angewandte Chemie*, **2015**, 127, 4764-4764	3.6	