# 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 | 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. | 2.6 | 52 |
| 2 | Can Anions Be Inserted into MXene?. Journal of the American Chemical Society, 2021, 143, 12552-12559. | 13.7 | 63 |
| 3 | Water or Anion? Uncovering the Zn<sup>2+</sup> Solvation Environment in Mixed Zn(TFSI)<sub>2</sub> and LiTFSI Water-in-Salt Electrolytes. ACS Energy Letters, 2021, 6, 3458-3463. | 17.4 | 45 |
| 4 | Bottom-Up Design of Configurable Oligomer-Derived Conducting Metallopolymers for High-Power Electrochemical Energy Storage. ACS Nano, 2021, 15, 15422-15428. | 14.6 | 9 |
| 5 | Toward Unraveling the Origin of Lithium Fluoride in the Solid Electrolyte Interphase. Chemistry of Materials, 2021, 33, 7315-7336. | 6.7 | 39 |
| 6 | Interfacial Speciation Determines Interfacial Chemistry: Xâ€rayâ€Induced Lithium Fluoride Formation from Waterâ€inâ€salt Electrolytes on Solid Surfaces. Angewandte Chemie - International Edition, 2020, 59, 23180-23187. | 13.8 | 28 |
| 7 | Interfacial Speciation Determines Interfacial Chemistry: Xâ€rayâ€Induced Lithium Fluoride Formation from Waterâ€inâ€salt Electrolytes on Solid Surfaces. Angewandte Chemie, 2020, 132, 23380-23387. | 2.0 | 9 |
| 8 | Understanding the Mechanism of High Capacitance in Nickel Hexaaminobenzene-Based Conductive Metalâ€“Organic Frameworks in Aqueous Electrolytes. ACS Nano, 2020, 14, 15919-15925. | 14.6 | 46 |
| 9 | Understanding the MXene Pseudocapacitance. Journal of Physical Chemistry Letters, 2018, 9, 1223-1228. | 4.6 | 231 |
| 10 | Robust and conductive two-dimensional metalâ˜organic frameworks with exceptionally high volumetric and areal capacitance. Nature Energy, 2018, 3, 30-36. | 39.5 | 786 |
| 11 | Concentrated mixed cation acetate â€œwater-in-saltâ€•solutions as green and low-cost high voltage electrolytes for aqueous batteries. Energy and Environmental Science, 2018, 11, 2876-2883. | 30.8 | 315 |
| 12 | 2D metal carbides and nitrides (MXenes) for energy storage. Nature Reviews Materials, 2017, 2, . | 48.7 | 5,261 |
| 13 | In Situ Monitoring of Gravimetric and Viscoelastic Changes in 2D Intercalation Electrodes. ACS Energy Letters, 2017, 2, 1407-1415. | 17.4 | 56 |
| 14 | Ultra-high-rate pseudocapacitive energy storage in two-dimensional transition metal carbides. Nature Energy, 2017, 2, . | 39.5 | 1,626 |
| 15 | Synthesis and Characterization of 2D Molybdenum Carbide (MXene). Advanced Functional Materials, 2016, 26, 3118-3127. | 14.9 | 945 |
| 16 | MXene Materials: Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer Ti<sub>3</sub>C<sub>2</sub> MXene Flakes (Adv. Electron. Mater. 12/2016). Advanced Electronic Materials, 2016, 2, . | 5.1 | 18 |
| 17 | Synthesis and Charge Storage Properties of Hierarchical Niobium Pentoxide/Carbon/Niobium Carbide (MXene) Hybrid Materials. Chemistry of Materials, 2016, 28, 3937-3943. | 6.7 | 210 |
| 18 | Two-Dimensional Molybdenum Carbide (MXene) as an Efficient Electrocatalyst for Hydrogen Evolution. ACS Energy Letters, 2016, 1, 589-594. | 17.4 | 1,100 |

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|---|---|---|---|
| 19 | Multidimensional materials and device architectures for future hybrid energy storage. Nature Communications, 2016, 7, 12647. | 12.8 | 1,281 |
| 20 | Effect of Synthesis on Quality, Electronic Properties and Environmental Stability of Individual Monolayer Ti<sub>3</sub>C<sub>2</sub> MXene Flakes. Advanced Electronic Materials, 2016, 2, 1600255. | 5.1 | 1,160 |
| 21 | NMR reveals the surface functionalisation of Ti<sub>3</sub>C<sub>2</sub>MXene. Physical Chemistry Chemical Physics, 2016, 18, 5099-5102. | 2.8 | 689 |
| 22 | The effect of hydrazine intercalation on the structure and capacitance of 2D titanium carbide (MXene). Nanoscale, 2016, 8, 9128-9133. | 5.6 | 225 |
| 23 | 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 |
| 24 | Synthesis of Carbon/Sulfur Nanolaminates by Electrochemical Extraction of Titanium from Ti<sub>2</sub>SC. Angewandte Chemie - International Edition, 2015, 54, 4810-4814. | 13.8 | 100 |
| 25 | Amine€Assisted Delamination of Nb<sub>2</sub>C MXene for Li€Ion Energy Storage Devices. Advanced Materials, 2015, 27, 3501-3506. | 21.0 | 749 |
| 26 | Controlling the actuation properties of MXene paper electrodes upon cation intercalation. Nano Energy, 2015, 17, 27-35. | 16.0 | 166 |
| 27 | Flexible MXene/Carbon Nanotube Composite Paper with High Volumetric Capacitance. Advanced Materials, 2015, 27, 339-345. | 21.0 | 1,125 |
| 28 | Synthesis and electrochemical properties of niobium pentoxide deposited on layered carbide-derived carbon. Journal of Power Sources, 2015, 274, 121-129. | 7.8 | 66 |
| 29 | Solving the Capacitive Paradox of 2D MXene using Electrochemical Quartz€Crystal Admittance and In Situ Electronic Conductance Measurements. Advanced Energy Materials, 2015, 5, 1400815. | 19.5 | 283 |
| 30 | High capacitance of surface-modified 2D titanium carbide in acidic electrolyte. Electrochemistry Communications, 2014, 48, 118-122. | 4.7 | 420 |
| 31 | Conductive two-dimensional titanium carbide ˜clay™ with high volumetric capacitance. Nature, 2014, 516, 78-81. | 27.8 | 4,306 |
| 32 | Room€Temperature Carbide€Derived Carbon Synthesis by Electrochemical Etching of MAX Phases. Angewandte Chemie - International Edition, 2014, 53, 4877-4880. | 13.8 | 133 |
| 33 | Stable colloidal solutions of strontium hexaferrite hard magnetic nanoparticles. Chemical Communications, 2014, 50, 14581-14584. | 4.1 | 21 |
| 34 | In situ environmental transmission electron microscopy study of oxidation of two-dimensional Ti<sub>3</sub>C<sub>2</sub>and formation of carbon-supported TiO<sub>2</sub>. Journal of Materials Chemistry A, 2014, 2, 14339. | 10.3 | 287 |
| 35 | 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 |
| 36 | Transparent Conductive Two-Dimensional Titanium Carbide Epitaxial Thin Films. Chemistry of Materials, 2014, 26, 2374-2381. | 6.7 | 1,173 |

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|---|---|---|---|
| 37 | Cation Intercalation and High Volumetric Capacitance of Two-Dimensional Titanium Carbide. Science, 2013, 341, 1502-1505. | 12.6 | 3,329 |
| 38 | Development of a Green Supercapacitor Composed Entirely of Environmentally Friendly Materials. ChemSusChem, 2013, 6, 2269-2280. | 6.8 | 155 |
| 39 | Adsorption of proteins in channels of carbon nanotubes: Effect of surface chemistry. Materials Express, 2013, 3, 1-10. | 0.5 | 18 |
| 40 | Separation and liquid chromatography using a single carbon nanotube. Scientific Reports, 2012, 2, 510. | 3.3 | 19 |
| 41 | Three-dimensional nanostructures from porous anodic alumina. MRS Communications, 2012, 2, 51-54. | 1.8 | 1 |
| 42 | Controlled way to prepare quasi-1D nanostructures with complex chemical composition in porous anodic alumina. Chemical Communications, 2011, 47, 2396-2398. | 4.1 | 24 |
| 43 | Cobalt-containing nanocomposites based on zeolites of MFI framework type. Journal of Magnetism and Magnetic Materials, 2009, 321, 3866-3869. | 2.3 | 10 |