

# Kai Yan

## List of Publications by Year in descending order

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Version: 2024-02-01

28  
papers

14,512  
citations

201575

27  
h-index

501076

28  
g-index

28  
all docs

28  
docs citations

28  
times ranked

11626  
citing authors

#	ARTICLE	IF	CITATIONS
1	Layered reduced graphene oxide with nanoscale interlayer gaps as a stable host for lithium metal anodes. <i>Nature Nanotechnology</i> , 2016, 11, 626-632.	15.6	1,557
2	Interconnected hollow carbon nanospheres for stable lithium metal anodes. <i>Nature Nanotechnology</i> , 2014, 9, 618-623.	15.6	1,535
3	Selective deposition and stable encapsulation of lithium through heterogeneous seeded growth. <i>Nature Energy</i> , 2016, 1, .	19.8	1,516
4	The synergetic effect of lithium polysulfide and lithium nitrate to prevent lithium dendrite growth. <i>Nature Communications</i> , 2015, 6, 7436.	5.8	1,250
5	Atomic structure of sensitive battery materials and interfaces revealed by cryo-electron microscopy. <i>Science</i> , 2017, 358, 506-510.	6.0	1,039
6	Composite lithium metal anode by melt infusion of lithium into a 3D conducting scaffold with lithiophilic coating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 2862-2867.	3.3	755
7	Lithium-coated polymeric matrix as a minimum volume-change and dendrite-free lithium metal anode. <i>Nature Communications</i> , 2016, 7, 10992.	5.8	745
8	Rapid water disinfection using vertically aligned MoS <sub>2</sub> nanofilms and visible light. <i>Nature Nanotechnology</i> , 2016, 11, 1098-1104.	15.6	681
9	Ultrathin Two-Dimensional Atomic Crystals as Stable Interfacial Layer for Improvement of Lithium Metal Anode. <i>Nano Letters</i> , 2014, 14, 6016-6022.	4.5	656
10	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. <i>Nature Energy</i> , 2016, 1, .	19.8	609
11	Polymer Nanofiber-Guided Uniform Lithium Deposition for Battery Electrodes. <i>Nano Letters</i> , 2015, 15, 2910-2916.	4.5	495
12	Improved lithium-sulfur batteries with a conductive coating on the separator to prevent the accumulation of inactive S-related species at the cathode-separator interface. <i>Energy and Environmental Science</i> , 2014, 7, 3381-3390.	15.6	476
13	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. <i>Journal of the American Chemical Society</i> , 2017, 139, 11550-11558.	6.6	398
14	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. <i>Nature Nanotechnology</i> , 2017, 12, 993-999.	15.6	376
15	Improving lithium-sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. <i>Nature Communications</i> , 2014, 5, 3943.	5.8	369
16	Artificial Solid Electrolyte Interphase-Protected Li <sub>x</sub> Si Nanoparticles: An Efficient and Stable Prelithiation Reagent for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2015, 137, 8372-8375.	6.6	297
17	Three-dimensional stable lithium metal anode with nanoscale lithium islands embedded in ionically conductive solid matrix. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4613-4618.	3.3	285
18	Stabilizing Solid Electrolyte-Anode Interface in Li-Metal Batteries by Boron Nitride-Based Nanocomposite Coating. <i>Joule</i> , 2019, 3, 1510-1522.	11.7	235

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19	Theoretical Investigation of 2D Layered Materials as Protective Films for Lithium and Sodium Metal Anodes. <i>Advanced Energy Materials</i> , 2017, 7, 1602528.	10.2	196
20	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. <i>Nano Letters</i> , 2019, 19, 1326-1335.	4.5	193
21	Engineering stable interfaces for three-dimensional lithium metal anodes. <i>Science Advances</i> , 2018, 4, eaat5168.	4.7	153
22	Metallurgically lithiated SiO <sub>2</sub> anode with high capacity and ambient air compatibility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 7408-7413.	3.3	145
23	Sulfiphilic Nickel Phosphosulfide Enabled Li <sub>2</sub> S Impregnation in 3D Graphene Cages for Li-S Batteries. <i>Advanced Materials</i> , 2017, 29, 1603366.	11.1	139
24	A Sulfur Cathode with Pomegranate-Like Cluster Structure. <i>Advanced Energy Materials</i> , 2015, 5, 1500211.	10.2	122
25	Shell-Protective Secondary Silicon Nanostructures as Pressure-Resistant High-Volumetric-Capacity Anodes for Lithium-Ion Batteries. <i>Nano Letters</i> , 2018, 18, 7060-7065.	4.5	121
26	Revealing Nanoscale Passivation and Corrosion Mechanisms of Reactive Battery Materials in Gas Environments. <i>Nano Letters</i> , 2017, 17, 5171-5178.	4.5	88
27	Composite lithium electrode with mesoscale skeleton via simple mechanical deformation. <i>Science Advances</i> , 2019, 5, eaau5655.	4.7	79
28	Measurement of two-dimensional residual stress in nanocrystalline superelastic NiTi fabricated with pre-strain laser shock peening. <i>Mathematics and Mechanics of Solids</i> , 2022, 27, 1559-1568.	1.5	2