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	Measurement of two-dimensional residual stress in nanocrystalline superelastic NiTi fabricated with pre-strain laser shock peening. Mathematics and Mechanics of Solids, 2022, 27, 1559-1568.	1.5	2
2	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 1326-1335.	4.5	193
3	Stabilizing Solid Electrolyte-Anode Interface in Li-Metal Batteries by Boron Nitride-Based Nanocomposite Coating. Joule, 2019, 3, 1510-1522.	11.7	235
4	Composite lithium electrode with mesoscale skeleton via simple mechanical deformation. Science Advances, 2019, 5, eaau5655.	4.7	79
5	Shell-Protective Secondary Silicon Nanostructures as Pressure-Resistant High-Volumetric-Capacity Anodes for Lithium-Ion Batteries. Nano Letters, 2018, 18, 7060-7065.	4.5	121
6	Engineering stable interfaces for three-dimensional lithium metal anodes. Science Advances, 2018, 4, eaat5168.	4.7	153
7	Sulfiphilic Nickel Phosphosulfide Enabled Li₂S Impregnation in 3D Graphene Cages for Liâ€“S Batteries. Advanced Materials, 2017, 29, 1603366.	11.1	139
8	Theoretical Investigation of 2D Layered Materials as Protective Films for Lithium and Sodium Metal Anodes. Advanced Energy Materials, 2017, 7, 1602528.	10.2	196
9	Three-dimensional stable lithium metal anode with nanoscale lithium islands embedded in ionically conductive solid matrix. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4613-4618.	3.3	285
10	Atomic structure of sensitive battery materials and interfaces revealed by cryoâ€“electron microscopy. Science, 2017, 358, 506-510.	6.0	1,039
11	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. Journal of the American Chemical Society, 2017, 139, 11550-11558.	6.6	398
12	Revealing Nanoscale Passivation and Corrosion Mechanisms of Reactive Battery Materials in Gas Environments. Nano Letters, 2017, 17, 5171-5178.	4.5	88
13	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. Nature Nanotechnology, 2017, 12, 993-999.	15.6	376
14	Rapid water disinfection using vertically aligned MoS2 nanofilms and visible light. Nature Nanotechnology, 2016, 11, 1098-1104.	15.6	681
15	Lithium-coated polymeric matrix as a minimum volume-change and dendrite-free lithium metal anode. Nature Communications, 2016, 7, 10992.	5.8	745
16	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. Nature Energy, 2016, 1, .	19.8	609
17	Selective deposition and stable encapsulation of lithium through heterogeneous seeded growth. Nature Energy, 2016, 1, .	19.8	1,516
18	Layered reduced graphene oxide with nanoscale interlayer gaps as a stable host for lithium metal anodes. Nature Nanotechnology, 2016, 11, 626-632.	15.6	1,557

#	Article	IF	Citations
19	Composite lithium metal anode by melt infusion of lithium into a 3D conducting scaffold with lithiophilic coating. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2862-2867.	3.3	755
20	Metallurgically lithiated SiO _x anode with high capacity and ambient air compatibility. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7408-7413.	3.3	145
21	Artificial Solid Electrolyte Interphase-Protected Li_xSi Nanoparticles: An Efficient and Stable Prelithiation Reagent for Lithium-Ion Batteries. Journal of the American Chemical Society, 2015, 137, 8372-8375.	6.6	297
22	The synergetic effect of lithium polysulfide and lithium nitrate to prevent lithium dendrite growth. Nature Communications, 2015, 6, 7436.	5.8	1,250
23	A Sulfur Cathode with Pomegranateâ€Like Cluster Structure. Advanced Energy Materials, 2015, 5, 1500211.	10.2	122
24	Polymer Nanofiber-Guided Uniform Lithium Deposition for Battery Electrodes. Nano Letters, 2015, 15, 2910-2916.	4.5	495
25	Improving lithiumâ€“sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. Nature Communications, 2014, 5, 3943.	5.8	369
26	Interconnected hollow carbon nanospheres for stable lithium metal anodes. Nature Nanotechnology, 2014, 9, 618-623.	15.6	1,535
27	Improved lithiumâ€“sulfur batteries with a conductive coating on the separator to prevent the accumulation of inactive S-related species at the cathodeâ€“separator interface. Energy and Environmental Science, 2014, 7, 3381-3390.	15.6	476
28	Ultrathin Two-Dimensional Atomic Crystals as Stable Interfacial Layer for Improvement of Lithium Metal Anode. Nano Letters, 2014, 14, 6016-6022.	4.5	656