Sungjin Kim

List of Publications by Year
in descending order

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62 papers	4,977 citations	117625 34 h-index	118850 62 g-index
62 all docs	62 docs citations	62 times ranked	5978 citing authors

#	Article	IF	Citations
1	Comprehensive defect suppression in perovskite nanocrystals for high-efficiency light-emitting diodes. Nature Photonics, 2021, 15, 148-155.	31.4	590
2	Na₂V₆O₁₆Â·3H₂O Barnesite Nanorod: An Open Door to Display a Stable and High Energy for Aqueous Rechargeable Zn-Ion Batteries as Cathodes. Nano Letters, 2018, 18, 2402-2410.	9.1	461
3	Manganese and Vanadium Oxide Cathodes for Aqueous Rechargeable Zinc-Ion Batteries: A Focused View on Performance, Mechanism, and Developments. ACS Energy Letters, 2020, 5, 2376-2400.	17.4	303
4	Facile synthesis and the exploration of the zinc storage mechanism of Î²-MnO₂ nanorods with exposed (101) planes as a novel cathode material for high performance eco-friendly zinc-ion batteries. Journal of Materials Chemistry A, 2017, 5, 23299-23309.	10.3	297
5	Aqueous rechargeable Zn-ion batteries: an imperishable and high-energy Zn₂V₂O₇ nanowire cathode through intercalation regulation. Journal of Materials Chemistry A, 2018, 6, 3850-3856.	10.3	293
6	Amorphous iron phosphate: potential host for various charge carrier ions. NPG Asia Materials, 2014, 6, e138-e138.	7.9	213
7	K₂V₆O₁₆Â·2.7H₂O nanorod cathode: an advanced intercalation system for high energy aqueous rechargeable Zn-ion batteries. Journal of Materials Chemistry A, 2018, 6, 15530-15539.	10.3	201
8	Grapheneâ€“Biomineral Hybrid Materials. Advanced Materials, 2011, 23, 2009-2014.	21.0	168
9	Betaâ€Sheetâ€Forming, Selfâ€Assembled Peptide Nanomaterials towards Optical, Energy, and Healthcare Applications. Small, 2015, 11, 3623-3640.	10.0	161
10	Aqueous Magnesium Zinc Hybrid Battery: An Advanced High-Voltage and High-Energy MgMn₂O₄ Cathode. ACS Energy Letters, 2018, 3, 1998-2004.	17.4	159
11	A high surface area tunnel-type Î±-MnO2 nanorod cathode by a simple solvent-free synthesis for rechargeable aqueous zinc-ion batteries. Chemical Physics Letters, 2016, 650, 64-68.	2.6	142
12	Co₃V₂O₈ Sponge Network Morphology Derived from Metalâ€“Organic Framework as an Excellent Lithium Storage Anode Material. ACS Applied Materials & Interfaces, 2016, 8, 8546-8553.	8.0	139
13	Mussel-inspired transformation of CaCO3 to bone minerals. Biomaterials, 2010, 31, 6628-6634.	11.4	113
14	Dopamine-Induced Mineralization of Calcium Carbonate Vaterite Microspheres. Langmuir, 2010, 26, 14730-14736.	3.5	113
15	Bioâ€Inspired Synthesis of Minerals for Energy, Environment, and Medicinal Applications. Advanced Functional Materials, 2013, 23, 10-25.	14.9	94
16	Exploiting the full advantages of colloidal perovskite nanocrystals for large-area efficient light-emitting diodes. Nature Nanotechnology, 2022, 17, 590-597.	31.5	81
17	Polymers with Dynamic Bonds: Adaptive Functional Materials for a Sustainable Future. Journal of Physical Chemistry B, 2021, 125, 9389-9401.	2.6	66
18	Design of tough adhesive from commodity thermoplastics through dynamic crosslinking. Science Advances, 2021, 7, eabk2451.	10.3	66

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19	Metalâ€“organic framework-combustion: a new, cost-effective and one-pot technique to produce a porous Co₃V₂O₈ microsphere anode for high energy lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 14605-14613.	10.3	64
20	Fully activated Li2MnO3 nanoparticles by oxidation reaction. Journal of Materials Chemistry, 2012, 22, 11772.	6.7	63
21	High rate performance of a NaTi₂(PO₄)₃/rGO composite electrode via pyro synthesis for sodium ion batteries. Journal of Materials Chemistry A, 2016, 4, 7815-7822.	10.3	60
22	Facile synthesis of reduced graphene oxide by modified Hummer's method as anode material for Li-, Na- and K-ion secondary batteries. Royal Society Open Science, 2019, 6, 181978.	2.4	60
23	In situ mechanical reinforcement of polymer hydrogels via metal-coordinated crosslink mineralization. Nature Communications, 2021, 12, 667.	12.8	60
24	Fine Control of Perovskite Crystallization and Reducing Luminescence Quenching Using Selfâ€Doped Polyaniline Hole Injection Layer for Efficient Perovskite Lightâ€Emitting Diodes. Advanced Functional Materials, 2019, 29, 1807535.	14.9	58
25	Pyro-synthesis of a high rate nano-Li3V2(PO4)3/C cathode with mixed morphology for advanced Li-ion batteries. Scientific Reports, 2014, 4, 4047.	3.3	57
26	Multidimensional Na₄VMn_{0.9}Cu_{0.1}(PO₄)₃/C cotton-candy cathode materials for high energy Na-ion batteries. Journal of Materials Chemistry A, 2020, 8, 12055-12068.	10.3	48
27	Pyrosynthesis of Na₃V₂(PO₄)₃@C Cathodes for Safe and Lowâ€Cost Aqueous Hybrid Batteries. ChemSusChem, 2018, 11, 2239-2247.	6.8	47
28	Enhanced electrochemical performance of novel K-doped Co₃O₄ as the anode material for secondary lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 6966-6975.	10.3	45
29	Oneâ€Step Pyroâ€Synthesis of a Nanostructured Mn₃O₄/C Electrode with Long Cycle Stability for Rechargeable Lithiumâ€Ion Batteries. Chemistry - A European Journal, 2016, 22, 2039-2045.	3.3	40
30	Porous TiN nanoparticles embedded in a N-doped carbon composite derived from metalâ€“organic frameworks as a superior anode in lithium-ion batteries. Journal of Materials Chemistry A, 2016, 4, 4706-4710.	10.3	39
31	Facile green synthesis of a Co 3 V 2 O 8 nanoparticle electrode for high energy lithium-ion battery applications. Journal of Colloid and Interface Science, 2017, 501, 133-141.	9.4	39
32	Phase-pure Na3V2(PO4)2F3 embedded in carbon matrix through a facile polyol synthesis as a potential cathode for high performance sodium-ion batteries. Nano Research, 2019, 12, 911-917.	10.4	38
33	Perovskite Emitters as a Platform Material for Downâ€Conversion Applications. Advanced Materials Technologies, 2020, 5, 2000091.	5.8	38
34	Dandelion-shaped manganese sulfide in ether-based electrolyte for enhanced performance sodium-ion batteries. Communications Chemistry, 2018, 1, .	4.5	37
35	Metal Halide Perovskites: From Crystal Formations to Lightâ€Emittingâ€Diode Applications. Small Methods, 2018, 2, 1800093.	8.6	36
36	An Enhanced High-Rate Na₃V₂(PO₄)₃-Ni₂P Nanocomposite Cathode with Stable Lifetime for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 35235-35242.	8.0	35

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37	Enhanced Water Retention Maintains Energy Dissipation in Dehydrated Metal-Coordinate Polymer Networks: Another Role for Fe-Catechol Cross-Links?. Chemistry of Materials, 2018, 30, 3648-3655.	6.7	34
38	Bio-inspired mineralization of CO2 gas to hollow CaCO3 microspheres and bone hydroxyapatite/polymer composites. Journal of Materials Chemistry, 2011, 21, 11070.	6.7	33
39	Closed-loop additive manufacturing of upcycled commodity plastic through dynamic cross-linking. Science Advances, 2022, 8, .	10.3	33
40	A sponge network-shaped Mn₃O₄/C anode derived from a simple, one-pot metal organic framework-combustion technique for improved lithium ion storage. Inorganic Chemistry Frontiers, 2016, 3, 1609-1615.	6.0	31
41	Chiral polymer hosts for circularly polarized electroluminescence devices. Chemical Science, 2021, 12, 8668-8681.	7.4	28
42	Electrochemical lithium storage of a ZnFe₂O₄/graphene nanocomposite as an anode material for rechargeable lithium ion batteries. RSC Advances, 2014, 4, 47087-47095.	3.6	27
43	Direct ink writing techniques for in situ gelation and solidification. MRS Communications, 2021, 11, 106-121.	1.8	25
44	Li3V2(PO4)3/graphene nanocomposite as a high performance cathode material for lithium ion battery. Ceramics International, 2015, 41, 389-396.	4.8	23
45	Electroluminescence of Perovskite Nanocrystals with Ligand Engineering. Trends in Chemistry, 2020, 2, 837-849.	8.5	22
46	Electroplated Silverâ€“Nickel Coreâ€“Shell Nanowire Network Electrodes for Highly Efficient Perovskite Nanoparticle Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2020, 12, 39479-39486.	8.0	21
47	Na_{2.3}Cu_{1.1}Mn₂O_{7â^Î´} nanoflakes as enhanced cathode materials for high-energy sodium-ion batteries achieved by a rapid pyrosynthesis approach. Journal of Materials Chemistry A, 2020, 8, 770-778.	10.3	20
48	Uniform Carbon Coated Na₃V₂(PO₄)₂O_{2x}F_{3â€“2x} Nanoparticles for Sodium Ion Batteries as Cathode. ACS Sustainable Chemistry and Engineering, 2019, 7, 18826-18834.	6.7	16
49	Suppressing Ï€â€“Ï€ stacking interactions for enhanced solid-state emission of flat aromatic moleculesviaedge functionalization with picket-fence-type groups. Journal of Materials Chemistry C, 2020, 8, 17289-17296.	5.5	16
50	A high voltage LiMnPO4â€“LiMn2O4 nanocomposite cathode synthesized by a one-pot pyro synthesis for Li-ion batteries. RSC Advances, 2013, 3, 25640.	3.6	15
51	High lithium storage properties in a manganese sulfide anode via an intercalation-cum-conversion reaction. Journal of Materials Chemistry A, 2020, 8, 17537-17549.	10.3	15
52	Synergistic Molecular Engineering of Holeâ€Injecting Conducting Polymers Overcomes Luminescence Quenching in Perovskite Lightâ€Emitting Diodes. Advanced Optical Materials, 2021, 9, 2100646.	7.3	14
53	Mesoporous manganese dioxide cathode prepared by an ambient temperature synthesis for Na-ion batteries. RSC Advances, 2013, 3, 26328.	3.6	12
54	Mesoporous Mulberry-like CoMoO₄: A Highly Suitable Anode Material for Sodium Ion Batteries over Lithium Ion Batteries. ACS Applied Energy Materials, 2022, 5, 126-136.	5.1	12

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55	One-pot pyro-synthesis of a high energy density LiFePO 4 -Li 3 V 2 (PO 4) 3 nanocomposite cathode for lithium-ion battery applications. Ceramics International, 2017, 43, 4288-4294.	4.8	11
56	Validating the Structural (In)stability of P3- and P2-Na_{0.67}Mg_{0.1}Mn_{0.9}O₂-Layered Cathodes for Sodium-Ion Batteries: A Time-Decisive Approach. ACS Applied Materials & Interfaces, 2021, 13, 53877-53891.	8.0	10
57	Microwave-Assisted Rapid Synthesis of NH4V4O10 Layered Oxide: A High Energy Cathode for Aqueous Rechargeable Zinc Ion Batteries. Nanomaterials, 2021, 11, 1905.	4.1	8
58	Processing and 3D printing of SiCN polymerâ€derived ceramics. International Journal of Applied Ceramic Technology, 2022, 19, 939-948.	2.1	7
59	An in-situ gas chromatography investigation into the suppression of oxygen gas evolution by coated amorphous cobalt-phosphate nanoparticles on oxide electrode. Scientific Reports, 2016, 6, 23394.	3.3	6
60	Chemically Robust Indium Tin Oxide/Graphene Anode for Efficient Perovskite Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2021, 13, 9074-9080.	8.0	6
61	Structural and electrochemical behavior of a NiMnO₃/Mn₂O₃ nanocomposite as an anode for high rate and long cycle lithium ion batteries. New Journal of Chemistry, 2019, 43, 12916-12922.	2.8	4
62	Quantum-confinement effect on the linewidth broadening of metal halide perovskite-based quantum dots. Journal of Physics Condensed Matter, 2021, 33, .	1.8	4