Vaiyapuri Soundharrajan

List of Publications by Citations

36 papers	3,537 citations	23 h-index	37 g-index
37 ext. papers	4,468 ext. citations	11.2 avg, IF	5.33 L-index

#	Paper	IF	Citations
36	Electrochemically Induced Structural Transformation in a MnO2Cathode of a High Capacity Zinc-Ion Battery System. *Chemistry of Materials*, **2015**, 27, 3609-3620	9.6	549
35	Electrochemical Zinc Intercalation in Lithium Vanadium Oxide: A High-Capacity Zinc-Ion Battery Cathode. *Chemistry of Materials*, **2017**, 29, 1684-1694	9.6	342
34	NaVOBHO 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	11.5	341
33	A layered MnO 2 nanoflake cathode with high zinc-storage capacities for eco-friendly battery applications. *Electrochemistry Communications*, **2015**, 60, 121-125	5.1	307
32	Enhanced reversible divalent zinc storage in a structurally stable MnO 2 nanorod electrode. *Journal of Power Sources*, **2015**, 288, 320-327	8.9	240
31	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	13	212
30	Facile synthesis and the exploration of the zinc storage mechanism of 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	13	194
29	High rate performance of a Na3V2(PO4)3/C cathode prepared by pyro-synthesis for sodium-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 20857		162
28	K2V6O16 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	13	132
27	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	20.1	128
26	Co3V2O8 Sponge Network Morphology Derived from Metal-Organic Framework as an Excellent Lithium Storage Anode Material. *ACS Applied Materials & Interfaces*, **2016**, 8, 8546-53	9.5	114
25	Aqueous Magnesium Zinc Hybrid Battery: An Advanced High-Voltage and High-Energy MgMn2O4 Cathode. *ACS Energy Letters*, **2018**, 3, 1998-2004	20.1	108
24	Ambient redox synthesis of vanadium-doped manganese dioxide nanoparticles and their enhanced zinc storage properties. *Applied Surface Science*, **2017**, 404, 435-442	6.7	91
23	The dominant role of Mn2+ additive on the electrochemical reaction in ZnMn2O4 cathode for aqueous zinc-ion batteries. *Energy Storage Materials*, **2020**, 28, 407-417	19.4	84
22	Carbon-coated manganese dioxide nanoparticles and their enhanced electrochemical properties for zinc-ion battery applications. *Journal of Energy Chemistry*, **2017**, 26, 815-819	12	75
21	K+ intercalated V2O5 nanorods with exposed facets as advanced cathodes for high energy and high rate zinc-ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 20335-20347	13	67
20	Metal rganic 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	13	56

19	Zn3V2O8 porous morphology derived through a facile and green approach as an excellent anode for high-energy lithium ion batteries. *Chemical Engineering Journal*, **2017**, 328, 454-463	14.7	44
18	Investigation of Li-ion storage properties of earth abundant Mn2V2O7 prepared using facile green strategy. *Journal of Power Sources*, **2017**, 350, 80-86	8.9	36
17	In Situ Oriented Mn Deficient ZnMnO@C Nanoarchitecture for Durable Rechargeable Aqueous Zinc-Ion Batteries. *Advanced Science*, **2021**, 8, 2002636	13.6	32
16	An Enhanced High-Rate NaV(PO)-NiP Nanocomposite Cathode with Stable Lifetime for Sodium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 35235-35242	9.5	31
15	Facile green synthesis of a CoVO nanoparticle electrode for high energy lithium-ion battery applications. *Journal of Colloid and Interface Science*, **2017**, 501, 133-141	9.3	28
14	Bitter gourd-shaped Ni3V2O8 anode developed by a one-pot metal-organic framework-combustion technique for advanced Li-ion batteries. *Ceramics International*, **2017**, 43, 13224-13232	5.1	28
13	Ni3V2O8 nanoparticles as an excellent anode material for high-energy lithium-ion batteries. *Journal of Electroanalytical Chemistry*, **2018**, 810, 34-40	4.1	22
12	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	6.8	22
11	Multidimensional Na4VMn0.9Cu0.1(PO4)3/C cotton-candy cathode materials for high energy Na-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 12055-12068	13	19
10	Metal organic framework-combustion: A one-pot strategy to NiO nanoparticles with excellent anode properties for lithium ion batteries. *Journal of Energy Chemistry*, **2018**, 27, 300-305	12	17
9	Hyper oxidized V6O13+xhH2O layered cathode for aqueous rechargeable Zn battery: Effect on dual carriers transportation and parasitic reactions. *Energy Storage Materials*, **2021**, 35, 47-61	19.4	12
8	C-Na3V1.96Fe0.04(PO4)3/Fe2P nanoclusters with stable charge-transfer interface for high-power sodium ion batteries. *Chemical Engineering Journal*, **2021**, 404, 126974	14.7	10
7	Na2.3Cu1.1Mn2O7hanoflakes 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	13	9
6	An analysis of the electrochemical mechanism of manganese oxides in aqueous zinc batteries. *CheM*, **2022**, 8, 924-946	16.2	7
5	The advent of manganese-substituted sodium vanadium phosphate-based cathodes for sodium-ion batteries and their current progress: a focused review. *Journal of Materials Chemistry A*, **2022**, 10, 1022-1046	13	5
4	Hybrid porous zirconia scaffolds fabricated using additive manufacturing for bone tissue engineering applications. *Materials Science and Engineering C*, **2021**, 123, 111950	8.3	5
3	Three-Dimensional Zirconia-Based Scaffolds for Load-Bearing Bone-Regeneration Applications: Prospects and Challenges. *Materials*, **2021**, 14,	3.5	5
2	Highly conductive ZrO2 spheres as bifunctional framework stabilizers and gas evolution relievers in nickel-rich layered cathodes for lithium-ion batteries. *Composites Part B: Engineering*, **2022**, 238, 109911	10	2

1 Recent Developments of Zinc-Ion Batteries **2021**, 27-57 0