Parthiban Pazhamalai

List of Publications by Year
in descending order

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55 papers	3,411 citations	126907 33 h-index	155660 55 g-index
57 all docs	57 docs citations	57 times ranked	3560 citing authors

#	Article	IF	Citations
1	MoS2 quantum sheets-PVDF nanocomposite film based self-poled piezoelectric nanogenerators and photovoltaically self-charging power cell. Nano Energy, 2022, 93, 106869.	16.0	21
2	Ferroelectric-semiconductor BaTiO3â€“Ag2O nanohybrid as an efficient piezo-photocatalytic material. Chemosphere, 2022, 292, 133398.	8.2	12
3	Two Faces Under a Hood: Unravelling the Energy Harnessing and Storage Properties of 1T-MoS₂ Quantum Sheets for Next-Generation Stand-Alone Energy Systems. ACS Nano, 2022, 16, 3723-3734.	14.6	27
4	Decoupling mechano- and electrochemical gating: a direct visualization for piezo-ionic propelled proton tunneling in self-charging supercapacitors. Journal of Materials Chemistry A, 2022, 10, 7818-7829.	10.3	20
5	CuMoO4 nanostructures: A novel bifunctional material for supercapacitor and sensor applications. Journal of Energy Storage, 2022, 52, 104784.	8.1	26
6	Recent trends, challenges, and perspectives in piezoelectricâ€driven selfâ€chargeable electrochemical supercapacitors. , 2022, 4, 833-855.		16
7	Monolithic integration of MoS2 quantum sheets on solid electrolyte for self-charging supercapacitor power cell governed by piezo-ionic effect. Sustainable Materials and Technologies, 2022, , e00459.	3.3	5
8	Topochemically synthesized MoS2 nanosheets: A high performance electrode for wide-temperature tolerant aqueous supercapacitors. Journal of Colloid and Interface Science, 2021, 584, 714-722.	9.4	45
9	Twoâ€Dimensional Siloxeneâ€“Graphene Heterostructureâ€Based Highâ€Performance Supercapacitor for Capturing Regenerative Braking Energy in Electric Vehicles. Advanced Functional Materials, 2021, 31, 2008422.	14.9	121
10	Ultrasound irradiation mediated preparation of antimony sulfoiodide (SbSI) nanorods as a high-capacity electrode for electrochemical supercapacitors. Materials Chemistry Frontiers, 2021, 5, 2303-2312.	5.9	13
11	Proton conducting solid electrolyte-piezoelectric PVDF hybrids: Novel bifunctional separator for self-charging supercapacitor power cell. Nano Energy, 2021, 83, 105753.	16.0	43
12	Electrospun Polymerâ€Derived Carbyne Supercapacitor for Alternating Current Line Filtering. Small, 2021, 17, e2102971.	10.0	30
13	Hydrothermally synthesized chalcopyrite platelets as an electrode material for symmetric supercapacitors. Inorganic Chemistry Frontiers, 2020, 7, 1492-1502.	6.0	47
14	Carbothermal conversion of siloxene sheets into silicon-oxy-carbide lamellae for high-performance supercapacitors. Chemical Engineering Journal, 2020, 387, 123886.	12.7	61
15	Exploring the bifunctional properties of paper-like carbyne-enriched carbon for maintenance-free self-powered systems. Materials Advances, 2020, 1, 1644-1652.	5.4	9
16	Antimonene dendritic nanostructures: Dual-functional material for high-performance energy storage and harvesting devices. Nano Energy, 2020, 77, 105248.	16.0	86
17	Solar driven renewable energy storage using rhenium disulfide nanostructure based rechargeable supercapacitors. Materials Chemistry Frontiers, 2020, 4, 3290-3301.	5.9	17
18	Probing the energy conversion process in piezoelectric-driven electrochemical self-charging supercapacitor power cell using piezoelectrochemical spectroscopy. Nature Communications, 2020, 11, 2351.	12.8	189

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19	Exceptional interfacial electrochemistry of few-layered 2D MoS₂ quantum sheets for high performance flexible solid-state supercapacitors. Journal of Materials Chemistry A, 2020, 8, 13121-13131.	10.3	36
20	Free-Standing PVDF/Reduced Graphene Oxide Film for All-Solid-State Flexible Supercapacitors towards Self-Powered Systems. Micromachines, 2020, 11, 198.	2.9	22
21	High energy symmetric supercapacitor based on mechanically delaminated few-layered MoS2 sheets in organic electrolyte. Journal of Alloys and Compounds, 2019, 771, 803-809.	5.5	74
22	Carbyne-enriched carbon anchored on nickel foam: A novel binder-free electrode for supercapacitor application. Journal of Colloid and Interface Science, 2019, 556, 411-419.	9.4	11
23	A highly efficient 2D siloxene coated Ni foam catalyst for methane dry reforming and an effective approach to recycle the spent catalyst for energy storage applications. Journal of Materials Chemistry A, 2019, 7, 18950-18958.	10.3	48
24	Supercapacitive properties of amorphous MoS₃ and crystalline MoS₂ nanosheets in an organic electrolyte. Inorganic Chemistry Frontiers, 2019, 6, 2387-2395.	6.0	24
25	Hierarchically Porous Nanostructured Nickel Phosphide with Carbon Particles Embedded by Dielectric Barrier Discharge Plasma Deposition as a Binder-Free Electrode for Hybrid Supercapacitors. ACS Sustainable Chemistry and Engineering, 2019, 7, 14805-14814.	6.7	24
26	High performance self-charging supercapacitors using a porous PVDF-ionic liquid electrolyte sandwiched between two-dimensional graphene electrodes. Journal of Materials Chemistry A, 2019, 7, 21693-21703.	10.3	80
27	Copper molybdenum sulfide nanoparticles embedded on graphene sheets as advanced electrodes for wide temperature-tolerant supercapacitors. Inorganic Chemistry Frontiers, 2019, 6, 1775-1784.	6.0	29
28	Two dimensional famatinite sheets decorated on reduced graphene oxide: A novel electrode for high performance supercapacitors. Journal of Power Sources, 2019, 433, 126648.	7.8	38
29	Mechanical energy harvesting properties of free-standing carbyne enriched carbon film derived from dehydrohalogenation of polyvinylidene fluoride. Nano Energy, 2019, 59, 453-463.	16.0	24
30	Understanding the Thermal Treatment Effect of Two-Dimensional Siloxene Sheets and the Origin of Superior Electrochemical Energy Storage Performances. ACS Applied Materials & Interfaces, 2019, 11, 624-633.	8.0	74
31	Copper tungsten sulfide anchored on Ni-foam as a high-performance binder free negative electrode for asymmetric supercapacitor. Chemical Engineering Journal, 2019, 359, 409-418.	12.7	114
32	Two-dimensional molybdenum diselenide nanosheets as a novel electrode material for symmetric supercapacitors using organic electrolyte. Electrochimica Acta, 2019, 295, 591-598.	5.2	54
33	Blue TiO2 nanosheets as a high-performance electrode material for supercapacitors. Journal of Colloid and Interface Science, 2019, 536, 62-70.	9.4	82
34	Nanostructured ternary metal chalcogenide-based binder-free electrodes for high energy density asymmetric supercapacitors. Nano Energy, 2019, 57, 307-316.	16.0	147
35	A High Efficacy Selfâ€Charging MoSe₂ Solidâ€State Supercapacitor Using Electrospun Nanofibrous Piezoelectric Separator with Ionogel Electrolyte. Advanced Materials Interfaces, 2018, 5, 1800055.	3.7	82
36	Mechanochemical Reinforcement of Graphene Sheets into Alkyd Resin Matrix for the Development of Electrically Conductive Paints. ChemNanoMat, 2018, 4, 568-574.	2.8	12

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37	Hydrothermally prepared Î±-MnSe nanoparticles as a new pseudocapacitive electrode material for supercapacitor. Electrochimica Acta, 2018, 268, 403-410.	5.2	84
38	Layered famatinite nanoplates as an advanced pseudocapacitive electrode material for supercapacitor applications. Electrochimica Acta, 2018, 275, 110-118.	5.2	30
39	Two-dimensional siloxene nanosheets: novel high-performance supercapacitor electrode materials. Energy and Environmental Science, 2018, 11, 1595-1602.	30.8	232
40	Electrodeposited molybdenum selenide sheets on nickel foam as a binder-free electrode for supercapacitor application. Electrochimica Acta, 2018, 265, 514-522.	5.2	77
41	Fabrication of high energy Li-ion hybrid capacitor using manganese hexacyanoferrate nanocubes and graphene electrodes. Journal of Industrial and Engineering Chemistry, 2018, 64, 134-142.	5.8	29
42	Supercapacitive properties of activated carbon electrode using ammonium based proton conducting electrolytes. International Journal of Hydrogen Energy, 2018, 43, 1667-1674.	7.1	24
43	Copper molybdenum sulfide: A novel pseudocapacitive electrode material for electrochemical energy storage device. International Journal of Hydrogen Energy, 2018, 43, 12222-12232.	7.1	66
44	High-energy aqueous Li-ion hybrid capacitor based on metal-organic-framework-mimicking insertion-type copper hexacyanoferrate and capacitive-type graphitic carbon electrodes. Journal of Alloys and Compounds, 2018, 765, 1041-1048.	5.5	38
45	Copper molybdenum sulfide anchored nickel foam: a high performance, binder-free, negative electrode for supercapacitors. Nanoscale, 2018, 10, 13883-13888.	5.6	59
46	Titanium carbide sheet based high performance wire type solid state supercapacitors. Journal of Materials Chemistry A, 2017, 5, 5726-5736.	10.3	140
47	Electrospun Nd³⁺â€Doped LiMn₂O₄ Nanofibers as Highâ€Performance Cathode Material for Liâ€Ion Capacitors. ChemElectroChem, 2017, 4, 2059-2067.	3.4	64
48	Ruthenium sulfide nanoparticles as a new pseudocapacitive material for supercapacitor. Electrochimica Acta, 2017, 227, 85-94.	5.2	175
49	A Highâ€Energy Aqueous Sodiumâ€Ion Capacitor with Nickel Hexacyanoferrate and Graphene Electrodes. ChemElectroChem, 2017, 4, 3302-3308.	3.4	49
50	Fabrication of Highâ€Performance Aqueous Liâ€Ion Hybrid Capacitor with LiMn₂O₄ and Graphene. ChemElectroChem, 2017, 4, 396-403.	3.4	45
51	Mechanically delaminated few layered MoS2 nanosheets based high performance wire type solid-state symmetric supercapacitors. Journal of Power Sources, 2016, 321, 112-119.	7.8	182
52	Enhanced electrochemical performances of graphene based solid-state flexible cable type supercapacitor using redox mediated polymer gel electrolyte. Carbon, 2016, 105, 638-648.	10.3	104
53	Hierarchical copper selenide nanoneedles grown on copper foil as a binder free electrode for supercapacitors. International Journal of Hydrogen Energy, 2016, 41, 14830-14835.	7.1	89
54	Designing two dimensional nanoarchitectured MoS2 sheets grown on Mo foil as a binder free electrode for supercapacitors. Electrochimica Acta, 2016, 190, 305-312.	5.2	159

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55	Energy Storage Properties of Topochemically Synthesized Blue TiO2 Nanostructures in Aqueous and Organic Electrolyte. , 0, , .		0