

Parthiban Pazhamalai

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7401067/publications.pdf>

Version: 2024-02-01

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	Two-dimensional siloxene nanosheets: novel high-performance supercapacitor electrode materials. <i>Energy and Environmental Science</i> , 2018, 11, 1595-1602.	30.8	232
2	Probing the energy conversion process in piezoelectric-driven electrochemical self-charging supercapacitor power cell using piezoelectrochemical spectroscopy. <i>Nature Communications</i> , 2020, 11, 2351.	12.8	189
3	Mechanically delaminated few layered MoS ₂ nanosheets based high performance wire type solid-state symmetric supercapacitors. <i>Journal of Power Sources</i> , 2016, 321, 112-119.	7.8	182
4	Ruthenium sulfide nanoparticles as a new pseudocapacitive material for supercapacitor. <i>Electrochimica Acta</i> , 2017, 227, 85-94.	5.2	175
5	Designing two dimensional nanoarchitected MoS ₂ sheets grown on Mo foil as a binder free electrode for supercapacitors. <i>Electrochimica Acta</i> , 2016, 190, 305-312.	5.2	159
6	Nanostructured ternary metal chalcogenide-based binder-free electrodes for high energy density asymmetric supercapacitors. <i>Nano Energy</i> , 2019, 57, 307-316.	16.0	147
7	Titanium carbide sheet based high performance wire type solid state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5726-5736.	10.3	140
8	Two-dimensional Siloxene-graphene Heterostructure-based High-performance Supercapacitor for Capturing Regenerative Braking Energy in Electric Vehicles. <i>Advanced Functional Materials</i> , 2021, 31, 2008422.	14.9	121
9	Copper tungsten sulfide anchored on Ni-foam as a high-performance binder free negative electrode for asymmetric supercapacitor. <i>Chemical Engineering Journal</i> , 2019, 359, 409-418.	12.7	114
10	Enhanced electrochemical performances of graphene based solid-state flexible cable type supercapacitor using redox mediated polymer gel electrolyte. <i>Carbon</i> , 2016, 105, 638-648.	10.3	104
11	Hierarchical copper selenide nanoneedles grown on copper foil as a binder free electrode for supercapacitors. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 14830-14835.	7.1	89
12	Antimonene dendritic nanostructures: Dual-functional material for high-performance energy storage and harvesting devices. <i>Nano Energy</i> , 2020, 77, 105248.	16.0	86
13	Hydrothermally prepared \pm -MnSe nanoparticles as a new pseudocapacitive electrode material for supercapacitor. <i>Electrochimica Acta</i> , 2018, 268, 403-410.	5.2	84
14	A High Efficacy Self-Charging MoSe ₂ Solid-State Supercapacitor Using Electrospun Nanofibrous Piezoelectric Separator with Ionogel Electrolyte. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800055.	3.7	82
15	Blue TiO ₂ nanosheets as a high-performance electrode material for supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2019, 536, 62-70.	9.4	82
16	High performance self-charging supercapacitors using a porous PVDF-ionic liquid electrolyte sandwiched between two-dimensional graphene electrodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21693-21703.	10.3	80
17	Electrodeposited molybdenum selenide sheets on nickel foam as a binder-free electrode for supercapacitor application. <i>Electrochimica Acta</i> , 2018, 265, 514-522.	5.2	77
18	High energy symmetric supercapacitor based on mechanically delaminated few-layered MoS ₂ sheets in organic electrolyte. <i>Journal of Alloys and Compounds</i> , 2019, 771, 803-809.	5.5	74

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Electrospun Nd ³⁺ -Doped LiMn ₂ O ₄ Nanofibers as High-Performance Cathode Material for Li-Ion Capacitors. ChemElectroChem, 2017, 4, 2059-2067.	3.4	64
22	Carbothermal conversion of siloxene sheets into silicon-oxy-carbide lamellae for high-performance supercapacitors. Chemical Engineering Journal, 2020, 387, 123886.	12.7	61
23	Copper molybdenum sulfide anchored nickel foam: a high performance, binder-free, negative electrode for supercapacitors. Nanoscale, 2018, 10, 13883-13888.	5.6	59
24	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
25	A High-Energy Aqueous Sodium-Ion Capacitor with Nickel Hexacyanoferrate and Graphene Electrodes. ChemElectroChem, 2017, 4, 3302-3308.	3.4	49
26	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
27	Hydrothermally synthesized chalcopyrite platelets as an electrode material for symmetric supercapacitors. Inorganic Chemistry Frontiers, 2020, 7, 1492-1502.	6.0	47
28	Fabrication of High-Performance Aqueous Li-Ion Hybrid Capacitor with LiMn ₂ O ₄ and Graphene. ChemElectroChem, 2017, 4, 396-403.	3.4	45
29	Topochemically synthesized MoS ₂ nanosheets: A high performance electrode for wide-temperature tolerant aqueous supercapacitors. Journal of Colloid and Interface Science, 2021, 584, 714-722.	9.4	45
30	Proton conducting solid electrolyte-piezoelectric PVDF hybrids: Novel bifunctional separator for self-charging supercapacitor power cell. Nano Energy, 2021, 83, 105753.	16.0	43
31	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
32	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
33	Exceptional interfacial electrochemistry of few-layered 2D MoS ₂ quantum sheets for high performance flexible solid-state supercapacitors. Journal of Materials Chemistry A, 2020, 8, 13121-13131.	10.3	36
34	Layered famatinite nanoplates as an advanced pseudocapacitive electrode material for supercapacitor applications. Electrochimica Acta, 2018, 275, 110-118.	5.2	30
35	Electrospun Polymer-Derived Carbyne Supercapacitor for Alternating Current Line Filtering. Small, 2021, 17, e2102971.	10.0	30
36	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

#	ARTICLE	IF	CITATIONS
37	Copper molybdenum sulfide nanoparticles embedded on graphene sheets as advanced electrodes for wide temperature-tolerant supercapacitors. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1775-1784.	6.0	29
38	Two Faces Under a Hood: Unravelling the Energy Harnessing and Storage Properties of 1T-MoS ₂ Quantum Sheets for Next-Generation Stand-Alone Energy Systems. <i>ACS Nano</i> , 2022, 16, 3723-3734.	14.6	27
39	CuMoO ₄ nanostructures: A novel bifunctional material for supercapacitor and sensor applications. <i>Journal of Energy Storage</i> , 2022, 52, 104784.	8.1	26
40	Supercapacitive properties of activated carbon electrode using ammonium based proton conducting electrolytes. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 1667-1674.	7.1	24
41	Supercapacitive properties of amorphous MoS ₃ and crystalline MoS ₂ nanosheets in an organic electrolyte. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2387-2395.	6.0	24
42	Hierarchically Porous Nanostructured Nickel Phosphide with Carbon Particles Embedded by Dielectric Barrier Discharge Plasma Deposition as a Binder-Free Electrode for Hybrid Supercapacitors. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14805-14814.	6.7	24
43	Mechanical energy harvesting properties of free-standing carbyne enriched carbon film derived from dehydrohalogenation of polyvinylidene fluoride. <i>Nano Energy</i> , 2019, 59, 453-463.	16.0	24
44	Free-Standing PVDF/Reduced Graphene Oxide Film for All-Solid-State Flexible Supercapacitors towards Self-Powered Systems. <i>Micromachines</i> , 2020, 11, 198.	2.9	22
45	MoS ₂ quantum sheets-PVDF nanocomposite film based self-poled piezoelectric nanogenerators and photovoltaically self-charging power cell. <i>Nano Energy</i> , 2022, 93, 106869.	16.0	21
46	Decoupling mechano- and electrochemical gating: a direct visualization for piezo-ionic propelled proton tunneling in self-charging supercapacitors. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7818-7829.	10.3	20
47	Solar driven renewable energy storage using rhenium disulfide nanostructure based rechargeable supercapacitors. <i>Materials Chemistry Frontiers</i> , 2020, 4, 3290-3301.	5.9	17
48	Recent trends, challenges, and perspectives in piezoelectric-driven self-charging electrochemical supercapacitors. , 2022, 4, 833-855.		16
49	Ultrasound irradiation mediated preparation of antimony sulfide (Sb ₂ S ₃) nanorods as a high-capacity electrode for electrochemical supercapacitors. <i>Materials Chemistry Frontiers</i> , 2021, 5, 2303-2312.	5.9	13
50	Mechanochemical Reinforcement of Graphene Sheets into Alkyd Resin Matrix for the Development of Electrically Conductive Paints. <i>ChemNanoMat</i> , 2018, 4, 568-574.	2.8	12
51	Ferroelectric-semiconductor BaTiO ₃ /Ag ₂ O nanohybrid as an efficient piezo-photocatalytic material. <i>Chemosphere</i> , 2022, 292, 133398.	8.2	12
52	Carbyne-enriched carbon anchored on nickel foam: A novel binder-free electrode for supercapacitor application. <i>Journal of Colloid and Interface Science</i> , 2019, 556, 411-419.	9.4	11
53	Exploring the bifunctional properties of paper-like carbyne-enriched carbon for maintenance-free self-powered systems. <i>Materials Advances</i> , 2020, 1, 1644-1652.	5.4	9
54	Monolithic integration of MoS ₂ quantum sheets on solid electrolyte for self-charging supercapacitor power cell governed by piezo-ionic effect. <i>Sustainable Materials and Technologies</i> , 2022, , e00459.	3.3	5

#	ARTICLE	IF	CITATIONS
55	Energy Storage Properties of Topochemically Synthesized Blue TiO ₂ Nanostructures in Aqueous and Organic Electrolyte. , 0, , .		0