Xiang Peng

List of Publications by Citations

68 papers	3,625 citations	35 h-index	59 g-index
69 ext. papers	4,356 ext. citations	8.8 avg, IF	5.42 L-index

#	Paper	IF	Citations
68	Freestanding mesoporous VN/CNT hybrid electrodes for flexible all-solid-state supercapacitors. *Advanced Materials*, **2013**, 25, 5091-7	24	369
67	Enhanced Ion Conductivity in Conducting Polymer Binder for High-Performance Silicon Anodes in Advanced Lithium-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1702314	21.8	180
66	Recent progress of transition metal nitrides for efficient electrocatalytic water splitting. *Sustainable Energy and Fuels*, **2019**, 3, 366-381	5.8	154
65	Antibacterial effects of titanium embedded with silver nanoparticles based on electron-transfer-induced reactive oxygen species. *Biomaterials*, **2017**, 124, 25-34	15.6	152
64	Elucidating the Intercalation Pseudocapacitance Mechanism of MoS-Carbon Monolayer Interoverlapped Superstructure: Toward High-Performance Sodium-Ion-Based Hybrid Supercapacitor. *ACS Applied Materials & Interfaces*, **2017**, 9, 32745-32755	9.5	118
63	Hydrogenated V2O5 Nanosheets for Superior Lithium Storage Properties. *Advanced Functional Materials*, **2016**, 26, 784-791	15.6	110
62	An antibacterial platform based on capacitive carbon-doped TiO nanotubes after direct or alternating current charging. *Nature Communications*, **2018**, 9, 2055	17.4	99
61	Bamboo leaf derived ultrafine Si nanoparticles and Si/C nanocomposites for high-performance Li-ion battery anodes. *Nanoscale*, **2015**, 7, 13840-7	7.7	93
60	Vanadium carbide nanoparticles encapsulated in graphitic carbon network nanosheets: A high-efficiency electrocatalyst for hydrogen evolution reaction. *Nano Energy*, **2016**, 26, 603-609	17.1	92
59	Highly Stretchable Conductive Glue for High-Performance Silicon Anodes in Advanced Lithium-Ion Batteries. *Advanced Functional Materials*, **2018**, 28, 1704858	15.6	90
58	Ni/Co-based nanosheet arrays for efficient oxygen evolution reaction. *Nano Energy*, **2018**, 52, 360-368	17.1	88
57	Mesoporous nitrogen-doped carbon hollow spheres as high-performance anodes for lithium-ion batteries. *Journal of Power Sources*, **2016**, 324, 233-238	8.9	87
56	Flexible Nb2O5 nanowires/graphene film electrode for high-performance hybrid Li-ion supercapacitors. *Journal of Power Sources*, **2016**, 328, 599-606	8.9	86
55	Nitrogen-Doped Carbon Encapsulated Mesoporous Vanadium Nitride Nanowires as Self-Supported Electrodes for Flexible All-Solid-State Supercapacitors. *Advanced Materials Interfaces*, **2015**, 2, 1500211	4.6	84
54	In situ segregation of cobalt nanoparticles on VN nanosheets via nitriding of Co2V2O7 nanosheets as efficient oxygen evolution reaction electrocatalysts. *Nano Energy*, **2017**, 34, 1-7	17.1	81
53	Recent advance and prospectives of electrocatalysts based on transition metal selenides for efficient water splitting. *Nano Energy*, **2020**, 78, 105234	17.1	81
52	Mesoporous hollow nanospheres consisting of carbon coated silica nanoparticles for robust lithium-ion battery anodes. *Journal of Power Sources*, **2017**, 345, 227-236	8.9	78

51	Mesoporous TiO2 Nanocrystals/Graphene as an Efficient Sulfur Host Material for High-Performance Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 23784-92	9.5	78
50	Corrosion resistance and cytocompatibility of tantalum-surface-functionalized biomedical ZK60 Mg alloy. *Corrosion Science*, **2017**, 114, 45-56	6.8	75
49	Peapod-like V2O3 nanorods encapsulated into carbon as binder-free and flexible electrodes in lithium-ion batteries. *Journal of Power Sources*, **2016**, 331, 58-66	8.9	73
48	Ni-doped amorphous iron phosphide nanoparticles on TiN nanowire arrays: An advanced alkaline hydrogen evolution electrocatalyst. *Nano Energy*, **2018**, 53, 66-73	17.1	72
47	Coaxial PANI/TiN/PANI nanotube arrays for high-performance supercapacitor electrodes. *Chemical Communications*, **2013**, 49, 10172-4	5.8	72
46	Reduced graphene oxide encapsulated selenium nanoparticles for high-power lithium–selenium battery cathode. *Journal of Power Sources*, **2015**, 288, 214-220	8.9	70
45	In Situ Synthesis of MoP Nanoflakes Intercalated N-Doped Graphene Nanobelts from MoO -Amine Hybrid for High-Efficient Hydrogen Evolution Reaction. *Small*, **2018**, 14, e1800667	11	66
44	Multilayered paper-like electrodes composed of alternating stacked mesoporous Mo2N nanobelts and reduced graphene oxide for flexible all-solid-state supercapacitors. *Journal of Materials Chemistry A*, **2015**, 3, 14617-14624	13	66
43	In situ synthesis of Ni(OH)2/TiO2 composite film on NiTi alloy for non-enzymatic glucose sensing. *Sensors and Actuators B: Chemical*, **2016**, 232, 150-157	8.5	65
42	Spatially confined synthesis of vanadium nitride nanodots intercalated carbon nanosheets with ultrahigh volumetric capacitance and long life for flexible supercapacitors. *Nano Energy*, **2018**, 51, 128-136	17.1	64
41	Direct anodic exfoliation of graphite onto high-density aligned graphene for large capacity supercapacitors. *Nano Energy*, **2017**, 34, 515-523	17.1	49
40	Mitigation of Corrosion on Magnesium Alloy by Predesigned Surface Corrosion. *Scientific Reports*, **2015**, 5, 17399	4.9	48
39	Extracellular Electron Transfer from Aerobic Bacteria to Au-Loaded TiO2 Semiconductor without Light: A New Bacteria-Killing Mechanism Other than Localized Surface Plasmon Resonance or Microbial Fuel Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 24509-16	9.5	45
38	Synthesis of mesoporous niobium nitride nanobelt arrays and their capacitive properties. *Applied Surface Science*, **2016**, 383, 57-63	6.7	45
37	Hierarchical Porous Carbon Materials Derived from Self-Template Bamboo Leaves for Lithium–Sulfur Batteries. *Electrochimica Acta*, **2017**, 229, 352-360	6.7	44
36	Large-Scale Synthesis and Mechanism of β-SiC Nanoparticles from Rice Husks by Low-Temperature Magnesiothermic Reduction. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 6600-6607	8.3	43
35	Non-enzymatic hydrogen peroxide photoelectrochemical sensor based on WO3 decorated core–shell TiC/C nanofibers electrode. *Electrochimica Acta*, **2013**, 108, 491-496	6.7	42
34	Crumpled N-doped carbon nanotubes encapsulated with peapod-like Ge nanoparticles for high-rate and long-life Li-ion battery anodes. *Journal of Materials Chemistry A*, **2016**, 4, 7585-7590	13	39

33	Low Work Function Surface Modifiers for Solution-Processed Electronics: A Review. *Advanced Materials Interfaces*, **2018**, 5, 1701404	4.6	35
32	Large and porous carbon sheets derived from water hyacinth for high-performance supercapacitors. *RSC Advances*, **2016**, 6, 29996-30003	3.7	35
31	Molybdenum diselenide □black phosphorus heterostructures for electrocatalytic hydrogen evolution. *Applied Surface Science*, **2019**, 467-468, 328-334	6.7	34
30	General fabrication of mesoporous Nb2O5 nanobelts for lithium ion battery anodes. *RSC Advances*, **2016**, 6, 90489-90493	3.7	28
29	Three-Dimensional Activated Carbon Recycled from Rotten Potatoes for High-performance Supercapacitors. *Waste and Biomass Valorization*, **2016**, 7, 551-557	3.2	25
28	Lithiation Kinetics in High-Performance Porous Vanadium Nitride Nanosheet Anode. *Electrochimica Acta*, **2016**, 214, 201-207	6.7	25
27	Rice Husk-Derived Activated Carbon for Li Ion Battery Anode. *Nanoscience and Nanotechnology Letters*, **2014**, 6, 68-71	0.8	24
26	Porous Dual-Layered MoOx Nanotube Arrays with Highly Conductive TiN Cores for Supercapacitors. *ChemElectroChem*, **2015**, 2, 512-517	4.3	22
25	Nanoporous Activated Carbon Derived from Rice Husk for High Performance Supercapacitor. *Journal of Nanomaterials*, **2014**, 2014, 1-7	3.2	22
24	Supercapacitor Electrodes Based on Hierarchical Mesoporous MnOx/Nitrided TiO2 Nanorod Arrays on Carbon Fiber Paper. *Advanced Materials Interfaces*, **2015**, 2, 1400446	4.6	21
23	Spatially controlled synthesis of superlattice-like SnS/nitrogen-doped graphene hybrid nanobelts as high-rate and durable anode materials for sodium-ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 27475-27483	13	21
22	Long-term antibacterial characteristics and cytocompatibility of titania nanotubes loaded with Au nanoparticles without photocatalytic effects. *Applied Surface Science*, **2017**, 414, 230-237	6.7	19
21	WO3 nanoparticles decorated core-shell TiC-C nanofiber arrays for high sensitive and non-enzymatic photoelectrochemical biosensing. *Chemical Communications*, **2013**, 49, 7091-3	5.8	18
20	Self-Supporting and Binder-Free Anode Film Composed of Beaded Stream-Like Li4Ti5O12 Nanoparticles for High-Performance Lithium-Ion Batteries. *ChemElectroChem*, **2016**, 3, 1301-1305	4.3	17
19	Hafnium-implanted WE43 magnesium alloy for enhanced corrosion protection and biocompatibility. *Surface and Coatings Technology*, **2016**, 306, 11-15	4.4	16
18	In situ fabrication of Ni nanoparticles on N-doped TiO nanowire arrays by nitridation of NiTiO for highly sensitive and enzyme-free glucose sensing. *Journal of Materials Chemistry B*, **2017**, 5, 1779-1786	7.3	15
17	Enhanced corrosion resistance and biocompatibilty of PMMA-coated ZK60 magnesium alloy. *Materials Letters*, **2016**, 173, 178-181	3.3	15
16	Robust electrodes based on coaxial TiC/C-MnO2 core/shell nanofiber arrays with excellent cycling stability for high-performance supercapacitors. *Small*, **2015**, 11, 1847-56	11	15

15	Tantalum nitride films for corrosion protection of biomedical Mg-Y-RE alloy. *Journal of Alloys and Compounds*, **2018**, 764, 947-958	5.7	14
14	Dominant Factors Governing the Electron Transfer Kinetics and Electrochemical Biosensing Properties of Carbon Nanofiber Arrays. *ACS Applied Materials & Interfaces*, **2016**, 8, 28872-28879	9.5	14
13	Low-Temperature Synthesis of Mesoporous SiC Hollow Spheres by Magnesiothermic Reduction. *Journal of the American Ceramic Society*, **2016**, 99, 1859-1861	3.8	13
12	Strategies to improve cobalt-based electrocatalysts for electrochemical water splitting. *Journal of Catalysis*, **2021**, 398, 54-66	7.3	12
11	Nitrogen Doped Carbon Nanosheets Encapsulated Generated Sulfur Enable High Capacity and Superior Rate Cathode for Li-S Batteries. *Frontiers in Chemistry*, **2018**, 6, 429	5	12
10	Three-dimensional flexible carbon electrode for symmetrical supercapacitors. *Materials Letters*, **2016**, 185, 193-196	3.3	10
9	Non-conjugated diketone as a linkage for enhancing the rate performance of poly(perylenediimides). *Journal of Materials Chemistry A*, **2020**, 8, 19283-19289	13	9
8	Freestanding Nanoengineered [001] Preferentially Oriented TiO2 Nanosheets□Graphene Planarly Aligned Nanohybrids with Enhanced Li-Storage Properties. *ChemElectroChem*, **2017**, 4, 2819-2825	4.3	8
7	Carbon-Doped TiO2 Nanotube Array Platform for Visible Photocatalysis. *Nanoscience and Nanotechnology Letters*, **2013**, 5, 1251-1257	0.8	8
6	Fabrication of PANI/C-TiO2Composite Nanotube Arrays Electrode for Supercapacitor. *Journal of Nanomaterials*, **2015**, 2015, 1-7	3.2	5
5	Electrocatalysts: In Situ Synthesis of MoP Nanoflakes Intercalated N-Doped Graphene Nanobelts from MoO3□Amine Hybrid for High-Efficient Hydrogen Evolution Reaction (Small 25/2018). *Small*, **2018**, 14, 1870115	11	4
4	Battery Binders: Highly Stretchable Conductive Glue for High-Performance Silicon Anodes in Advanced Lithium-Ion Batteries (Adv. Funct. Mater. 3/2018). *Advanced Functional Materials*, **2018**, 28, 1870016	15.6	3
3	Suppressing photoinduced charge recombination at the BiVO||NiOOH junction by sandwiching an oxygen vacancy layer for efficient photoelectrochemical water oxidation. *Journal of Colloid and Interface Science*, **2021**, 608, 1116-1125	9.3	3
2	Titanium Dioxide Nanotube Arrays for Sensitive and Reliable Photoelectrochemical Sensors. *Nanoscience and Nanotechnology Letters*, **2013**, 5, 1002-1006	0.8	2
1	Se-NiSe2 hybrid nanosheet arrays with self-regulated elemental Se for efficient alkaline water splitting. *Journal of Materials Science and Technology*, **2022**, 118, 136-143	9.1	2