

# Xiang Peng

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Se-NiSe <sub>2</sub> hybrid nanosheet arrays with self-regulated elemental Se for efficient alkaline water splitting. <i>Journal of Materials Science and Technology</i> , <b>2022</b> , 118, 136-143	9.1	2
67	Suppressing photoinduced charge recombination at the BiVO <sub>4</sub> /NiOOH junction by sandwiching an oxygen vacancy layer for efficient photoelectrochemical water oxidation. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 608, 1116-1125	9.3	3
66	Strategies to improve cobalt-based electrocatalysts for electrochemical water splitting. <i>Journal of Catalysis</i> , <b>2021</b> , 398, 54-66	7.3	12
65	Non-conjugated diketone as a linkage for enhancing the rate performance of poly(perylenediimides). <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 19283-19289	13	9
64	Recent advance and prospectives of electrocatalysts based on transition metal selenides for efficient water splitting. <i>Nano Energy</i> , <b>2020</b> , 78, 105234	17.1	81
63	Recent progress of transition metal nitrides for efficient electrocatalytic water splitting. <i>Sustainable Energy and Fuels</i> , <b>2019</b> , 3, 366-381	5.8	154
62	Spatially controlled synthesis of superlattice-like SnS/nitrogen-doped graphene hybrid nanobelts as high-rate and durable anode materials for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 27475-27483	13	21
61	Molybdenum diselenide/black phosphorus heterostructures for electrocatalytic hydrogen evolution. <i>Applied Surface Science</i> , <b>2019</b> , 467-468, 328-334	6.7	34
60	Low Work Function Surface Modifiers for Solution-Processed Electronics: A Review. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1701404	4.6	35
59	Battery Binders: Highly Stretchable Conductive Glue for High-Performance Silicon Anodes in Advanced Lithium-Ion Batteries (Adv. Funct. Mater. 3/2018). <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1870016	15.6	3
58	Enhanced Ion Conductivity in Conducting Polymer Binder for High-Performance Silicon Anodes in Advanced Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702314	21.8	180
57	Electrocatalysts: In Situ Synthesis of MoP Nanoflakes Intercalated N-Doped Graphene Nanobelts from MoO <sub>3</sub> -Amine Hybrid for High-Efficient Hydrogen Evolution Reaction (Small 25/2018). <i>Small</i> , <b>2018</b> , 14, 1870115	11	4
56	Tantalum nitride films for corrosion protection of biomedical Mg-Y-RE alloy. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 764, 947-958	5.7	14
55	In Situ Synthesis of MoP Nanoflakes Intercalated N-Doped Graphene Nanobelts from MoO <sub>3</sub> -Amine Hybrid for High-Efficient Hydrogen Evolution Reaction. <i>Small</i> , <b>2018</b> , 14, e1800667	11	66
54	Ni-doped amorphous iron phosphide nanoparticles on TiN nanowire arrays: An advanced alkaline hydrogen evolution electrocatalyst. <i>Nano Energy</i> , <b>2018</b> , 53, 66-73	17.1	72
53	Ni/Co-based nanosheet arrays for efficient oxygen evolution reaction. <i>Nano Energy</i> , <b>2018</b> , 52, 360-368	17.1	88
52	Spatially confined synthesis of vanadium nitride nanodots intercalated carbon nanosheets with ultrahigh volumetric capacitance and long life for flexible supercapacitors. <i>Nano Energy</i> , <b>2018</b> , 51, 128-136	17.1	64

51	Highly Stretchable Conductive Glue for High-Performance Silicon Anodes in Advanced Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1704858	15.6	90
50	Nitrogen Doped Carbon Nanosheets Encapsulated Generated Sulfur Enable High Capacity and Superior Rate Cathode for Li-S Batteries. <i>Frontiers in Chemistry</i> , <b>2018</b> , 6, 429	5	12
49	An antibacterial platform based on capacitive carbon-doped TiO nanotubes after direct or alternating current charging. <i>Nature Communications</i> , <b>2018</b> , 9, 2055	17.4	99
48	Hierarchical Porous Carbon Materials Derived from Self-Template Bamboo Leaves for Lithium-Sulfur Batteries. <i>Electrochimica Acta</i> , <b>2017</b> , 229, 352-360	6.7	44
47	Direct anodic exfoliation of graphite onto high-density aligned graphene for large capacity supercapacitors. <i>Nano Energy</i> , <b>2017</b> , 34, 515-523	17.1	49
46	Antibacterial effects of titanium embedded with silver nanoparticles based on electron-transfer-induced reactive oxygen species. <i>Biomaterials</i> , <b>2017</b> , 124, 25-34	15.6	152
45	Mesoporous hollow nanospheres consisting of carbon coated silica nanoparticles for robust lithium-ion battery anodes. <i>Journal of Power Sources</i> , <b>2017</b> , 345, 227-236	8.9	78
44	In situ segregation of cobalt nanoparticles on VN nanosheets via nitriding of Co <sub>2</sub> V <sub>2</sub> O <sub>7</sub> nanosheets as efficient oxygen evolution reaction electrocatalysts. <i>Nano Energy</i> , <b>2017</b> , 34, 1-7	17.1	81
43	In situ fabrication of Ni nanoparticles on N-doped TiO nanowire arrays by nitridation of NiTiO for highly sensitive and enzyme-free glucose sensing. <i>Journal of Materials Chemistry B</i> , <b>2017</b> , 5, 1779-1786	7.3	15
42	Long-term antibacterial characteristics and cytocompatibility of titania nanotubes loaded with Au nanoparticles without photocatalytic effects. <i>Applied Surface Science</i> , <b>2017</b> , 414, 230-237	6.7	19
41	Elucidating the Intercalation Pseudocapacitance Mechanism of MoS-Carbon Monolayer Interoverlapped Superstructure: Toward High-Performance Sodium-Ion-Based Hybrid Supercapacitor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 32745-32755	9.5	118
40	Freestanding Nanoengineered [001] Preferentially Oriented TiO <sub>2</sub> Nanosheets/Graphene Planarly Aligned Nanohybrids with Enhanced Li-Storage Properties. <i>ChemElectroChem</i> , <b>2017</b> , 4, 2819-2825	4.3	8
39	Corrosion resistance and cytocompatibility of tantalum-surface-functionalized biomedical ZK60 Mg alloy. <i>Corrosion Science</i> , <b>2017</b> , 114, 45-56	6.8	75
38	Mesoporous TiO <sub>2</sub> Nanocrystals/Graphene as an Efficient Sulfur Host Material for High-Performance Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 23784-92	9.5	78
37	Flexible Nb <sub>2</sub> O <sub>5</sub> nanowires/graphene film electrode for high-performance hybrid Li-ion supercapacitors. <i>Journal of Power Sources</i> , <b>2016</b> , 328, 599-606	8.9	86
36	Three-dimensional flexible carbon electrode for symmetrical supercapacitors. <i>Materials Letters</i> , <b>2016</b> , 185, 193-196	3.3	10
35	Extracellular Electron Transfer from Aerobic Bacteria to Au-Loaded TiO <sub>2</sub> Semiconductor without Light: A New Bacteria-Killing Mechanism Other than Localized Surface Plasmon Resonance or Microbial Fuel Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 24509-16	9.5	45
34	Peapod-like V <sub>2</sub> O <sub>3</sub> nanorods encapsulated into carbon as binder-free and flexible electrodes in lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 331, 58-66	8.9	73

33	General fabrication of mesoporous Nb <sub>2</sub> O <sub>5</sub> nanobelts for lithium ion battery anodes. <i>RSC Advances</i> , <b>2016</b> , 6, 90489-90493	3.7	28
32	Self-Supporting and Binder-Free Anode Film Composed of Beaded Stream-Like Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Nanoparticles for High-Performance Lithium-Ion Batteries. <i>ChemElectroChem</i> , <b>2016</b> , 3, 1301-1305	4.3	17
31	Large-Scale Synthesis and Mechanism of SiC Nanoparticles from Rice Husks by Low-Temperature Magnesiothermic Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 6600-6607	8.3	43
30	Vanadium carbide nanoparticles encapsulated in graphitic carbon network nanosheets: A high-efficiency electrocatalyst for hydrogen evolution reaction. <i>Nano Energy</i> , <b>2016</b> , 26, 603-609	17.1	92
29	Low-Temperature Synthesis of Mesoporous SiC Hollow Spheres by Magnesiothermic Reduction. <i>Journal of the American Ceramic Society</i> , <b>2016</b> , 99, 1859-1861	3.8	13
28	Hydrogenated V <sub>2</sub> O <sub>5</sub> Nanosheets for Superior Lithium Storage Properties. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 784-791	15.6	110
27	Three-Dimensional Activated Carbon Recycled from Rotten Potatoes for High-performance Supercapacitors. <i>Waste and Biomass Valorization</i> , <b>2016</b> , 7, 551-557	3.2	25
26	Enhanced corrosion resistance and biocompatibility of PMMA-coated ZK60 magnesium alloy. <i>Materials Letters</i> , <b>2016</b> , 173, 178-181	3.3	15
25	Large and porous carbon sheets derived from water hyacinth for high-performance supercapacitors. <i>RSC Advances</i> , <b>2016</b> , 6, 29996-30003	3.7	35
24	Mesoporous nitrogen-doped carbon hollow spheres as high-performance anodes for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 324, 233-238	8.9	87
23	Hafnium-implanted WE43 magnesium alloy for enhanced corrosion protection and biocompatibility. <i>Surface and Coatings Technology</i> , <b>2016</b> , 306, 11-15	4.4	16
22	In situ synthesis of Ni(OH) <sub>2</sub> /TiO <sub>2</sub> composite film on NiTi alloy for non-enzymatic glucose sensing. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 232, 150-157	8.5	65
21	Crumpled N-doped carbon nanotubes encapsulated with peapod-like Ge nanoparticles for high-rate and long-life Li-ion battery anodes. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7585-7590	13	39
20	Synthesis of mesoporous niobium nitride nanobelt arrays and their capacitive properties. <i>Applied Surface Science</i> , <b>2016</b> , 383, 57-63	6.7	45
19	Dominant Factors Governing the Electron Transfer Kinetics and Electrochemical Biosensing Properties of Carbon Nanofiber Arrays. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 28872-28879	9.5	14
18	Lithiation Kinetics in High-Performance Porous Vanadium Nitride Nanosheet Anode. <i>Electrochimica Acta</i> , <b>2016</b> , 214, 201-207	6.7	25
17	Supercapacitor Electrodes Based on Hierarchical Mesoporous MnO <sub>x</sub> /Nitrided TiO <sub>2</sub> Nanorod Arrays on Carbon Fiber Paper. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1400446	4.6	21
16	Reduced graphene oxide encapsulated selenium nanoparticles for high-power lithium-selenium battery cathode. <i>Journal of Power Sources</i> , <b>2015</b> , 288, 214-220	8.9	70

15	Porous Dual-Layered MoO <sub>x</sub> Nanotube Arrays with Highly Conductive TiN Cores for Supercapacitors. <i>ChemElectroChem</i> , <b>2015</b> , 2, 512-517	4.3	22
14	Mitigation of Corrosion on Magnesium Alloy by Predesigned Surface Corrosion. <i>Scientific Reports</i> , <b>2015</b> , 5, 17399	4.9	48
13	Nitrogen-Doped Carbon Encapsulated Mesoporous Vanadium Nitride Nanowires as Self-Supported Electrodes for Flexible All-Solid-State Supercapacitors. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1500211	4.6	84
12	Fabrication of PANI/C-TiO <sub>2</sub> Composite Nanotube Arrays Electrode for Supercapacitor. <i>Journal of Nanomaterials</i> , <b>2015</b> , 2015, 1-7	3.2	5
11	Multilayered paper-like electrodes composed of alternating stacked mesoporous Mo <sub>2</sub> N nanobelts and reduced graphene oxide for flexible all-solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 14617-14624	13	66
10	Bamboo leaf derived ultrafine Si nanoparticles and Si/C nanocomposites for high-performance Li-ion battery anodes. <i>Nanoscale</i> , <b>2015</b> , 7, 13840-7	7.7	93
9	Robust electrodes based on coaxial TiC/C-MnO <sub>2</sub> core/shell nanofiber arrays with excellent cycling stability for high-performance supercapacitors. <i>Small</i> , <b>2015</b> , 11, 1847-56	11	15
8	Nanoporous Activated Carbon Derived from Rice Husk for High Performance Supercapacitor. <i>Journal of Nanomaterials</i> , <b>2014</b> , 2014, 1-7	3.2	22
7	Rice Husk-Derived Activated Carbon for Li Ion Battery Anode. <i>Nanoscience and Nanotechnology Letters</i> , <b>2014</b> , 6, 68-71	0.8	24
6	Coaxial PANI/TiN/PANI nanotube arrays for high-performance supercapacitor electrodes. <i>Chemical Communications</i> , <b>2013</b> , 49, 10172-4	5.8	72
5	Freestanding mesoporous VN/CNT hybrid electrodes for flexible all-solid-state supercapacitors. <i>Advanced Materials</i> , <b>2013</b> , 25, 5091-7	24	369
4	Non-enzymatic hydrogen peroxide photoelectrochemical sensor based on WO <sub>3</sub> decorated core-shell TiC/C nanofibers electrode. <i>Electrochimica Acta</i> , <b>2013</b> , 108, 491-496	6.7	42
3	WO <sub>3</sub> nanoparticles decorated core-shell TiC-C nanofiber arrays for high sensitive and non-enzymatic photoelectrochemical biosensing. <i>Chemical Communications</i> , <b>2013</b> , 49, 7091-3	5.8	18
2	Carbon-Doped TiO <sub>2</sub> Nanotube Array Platform for Visible Photocatalysis. <i>Nanoscience and Nanotechnology Letters</i> , <b>2013</b> , 5, 1251-1257	0.8	8
1	Titanium Dioxide Nanotube Arrays for Sensitive and Reliable Photoelectrochemical Sensors. <i>Nanoscience and Nanotechnology Letters</i> , <b>2013</b> , 5, 1002-1006	0.8	2