In-Yup Jeon

List of Publications by Year
in descending order

97 papers	8,052 citations	61857 43 h-index	48187 88 g-index
98 all docs	98 docs citations	98 times ranked	10733 citing authors

#	Article	IF	Citations
1	Nitrogenated holey two-dimensional structures. Nature Communications, 2015, 6, 6486.	5.8	923
2	Edge-carboxylated graphene nanosheets via ball milling. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5588-5593.	3.3	595
3	Large-Scale Production of Edge-Selectively Functionalized Graphene Nanoplatelets via Ball Milling and Their Use as Metal-Free Electrocatalysts for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2013, 135, 1386-1393.	6.6	578
4	Edgeâ€Selectively Sulfurized Graphene Nanoplatelets as Efficient Metalâ€Free Electrocatalysts for Oxygen Reduction Reaction: The Electron Spin Effect. Advanced Materials, 2013, 25, 6138-6145.	11.1	537
5	Facile, scalable synthesis of edge-halogenated graphene nanoplatelets as efficient metal-free eletrocatalysts for oxygen reduction reaction. Scientific Reports, 2013, 3, 1810.	1.6	300
6	N-Doped Graphene Nanoplatelets as Superior Metal-Free Counter Electrodes for Organic Dye-Sensitized Solar Cells. ACS Nano, 2013, 7, 5243-5250.	7.3	238
7	Recent advances in ruthenium-based electrocatalysts for the hydrogen evolution reaction. Nanoscale Horizons, 2020, 5, 43-56.	4.1	223
8	Sulfurâ€“Graphene Nanostructured Cathodes <i>via</i> Ball-Milling for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2014, 8, 10920-10930.	7.3	213
9	Direct nitrogen fixation at the edges of graphene nanoplatelets as efficient electrocatalysts for energy conversion. Scientific Reports, 2013, 3, 2260.	1.6	204
10	Direct Synthesis of a Covalent Triazineâ€Based Framework from Aromatic Amides. Angewandte Chemie - International Edition, 2018, 57, 8438-8442.	7.2	196
11	Edgeâ€Fluorinated Graphene Nanoplatelets as High Performance Electrodes for Dyeâ€Sensitized Solar Cells and Lithium Ion Batteries. Advanced Functional Materials, 2015, 25, 1170-1179.	7.8	174
12	Mechanochemically Assisted Synthesis of a Ru Catalyst for Hydrogen Evolution with Performance Superior to Pt in Both Acidic and Alkaline Media. Advanced Materials, 2018, 30, e1803676.	11.1	173
13	Formation of Large-Area Nitrogen-Doped Graphene Film Prepared from Simple Solution Casting of Edge-Selectively Functionalized Graphite and Its Electrocatalytic Activity. Chemistry of Materials, 2011, 23, 3987-3992.	3.2	171
14	Graphene Phosphonic Acid as an Efficient Flame Retardant. ACS Nano, 2014, 8, 2820-2825.	7.3	169
15	Edgeâ€Selectively Halogenated Graphene Nanoplatelets (XGnPs, X = Cl, Br, or I) Prepared by Ballâ€Milling and Used as Anode Materials for Lithiumâ€Ion Batteries. Advanced Materials, 2014, 26, 7317-7323.	11.1	160
16	Graphene Nanoplatelets Doped with N at its Edges as Metalâ€Free Cathodes for Organic Dyeâ€Sensitized Solar Cells. Advanced Materials, 2014, 26, 3055-3062.	11.1	140
17	Scalable Production of Edgeâ€Functionalized Graphene Nanoplatelets via Mechanochemical Ballâ€Milling. Advanced Functional Materials, 2015, 25, 6961-6975.	7.8	135
18	Nitrogen-Doped Graphene Nanoplatelets from Simple Solution Edge-Functionalization for n-Type Field-Effect Transistors. Journal of the American Chemical Society, 2013, 135, 8981-8988.	6.6	113

#	Article	IF	Citations
19	High-yield exfoliation of three-dimensional graphite into two-dimensional graphene-like sheets. Chemical Communications, 2010, 46, 6320.	2.2	109
20	Exploration of the Effective Location of Surface Oxygen Defects in Grapheneâ€Based Electrocatalysts for Allâ€Vanadium Redoxâ€Flow Batteries. Advanced Energy Materials, 2015, 5, 1401550.	10.2	107
21	Fluorine Functionalized Graphene Nano Platelets for Highly Stable Inverted Perovskite Solar Cells. Nano Letters, 2017, 17, 6385-6390.	4.5	106
22	Edge-halogenated graphene nanoplatelets with F, Cl, or Br as electrocatalysts for all-vanadium redox flow batteries. Nano Energy, 2016, 26, 233-240.	8.2	105
23	Nitrogenâ€Doped Carbon Nanomaterials: Synthesis, Characteristics and Applications. Chemistry - an Asian Journal, 2020, 15, 2282-2293.	1.7	100
24	Large-Area Graphene Films by Simple Solution Casting of Edge-Selectively Functionalized Graphite. ACS Nano, 2011, 5, 4974-4980.	7.3	98
25	Edge-selenated graphene nanoplatelets as durable metal-free catalysts for iodine reduction reaction in dye-sensitized solar cells. Science Advances, 2016, 2, e1501459.	4.7	88
26	High-performance dye-sensitized solar cells using edge-halogenated graphene nanoplatelets as counter electrodes. Nano Energy, 2015, 13, 336-345.	8.2	85
27	Edge-functionalized graphene-like platelets as a co-curing agent and a nanoscale additive to epoxy resin. Journal of Materials Chemistry, 2011, 21, 7337.	6.7	84
28	Edge-carboxylated graphene nanoplatelets as oxygen-rich metal-free cathodes for organic dye-sensitized solar cells. Energy and Environmental Science, 2014, 7, 1044-1052.	15.6	82
29	Controlled Fabrication of Hierarchically Structured Nitrogenâ€Doped Carbon Nanotubes as a Highly Active Bifunctional Oxygen Electrocatalyst. Advanced Functional Materials, 2017, 27, 1605717.	7.8	80
30	Antimony-doped graphene nanoplatelets. Nature Communications, 2015, 6, 7123.	5.8	77
31	Direct Solvothermal Synthesis of B/Nâ€Doped Graphene. Angewandte Chemie - International Edition, 2014, 53, 2398-2401.	7.2	61
32	Water-Dispersible, Sulfonated Hyperbranched Poly(ether-ketone) Grafted Multiwalled Carbon Nanotubes as Oxygen Reduction Catalysts. ACS Nano, 2012, 6, 6345-6355.	7.3	57
33	Semimetallic Transport in Nanocomposites Derived from Grafting of Linear and Hyperbranched Poly(phenylene sulfide)s onto the Surface of Functionalized Multi-Walled Carbon Nanotubes. Macromolecules, 2008, 41, 7423-7432.	2.2	56
34	Highly Conducting and Flexible Few-Walled Carbon Nanotube Thin Film. ACS Nano, 2011, 5, 2324-2331.	7.3	54
35	Cloud-like graphene nanoplatelets on Nd_{0.5}Sr_{0.5}CoO_{3âˆ’Î´} nanorods as an efficient bifunctional electrocatalyst for hybrid Liâ€“air batteries. Journal of Materials Chemistry A, 2016, 4, 2122-2127.	5.2	54
36	Mechanochemically driven solid-state Dielsâ€“Alder reaction of graphite into graphene nanoplatelets. Chemical Science, 2013, 4, 4273.	3.7	49

#	Article	IF	Citations
37	Metalloid tellurium-doped graphene nanoplatelets as ultimately stable electrocatalysts for cobalt reduction reaction in dye-sensitized solar cells. Nano Energy, 2016, 30, 867-876.	8.2	49
38	Edge-carboxylated graphene nanoplatelets as efficient electrode materials for electrochemical supercapacitors. Carbon, 2019, 142, 89-98.	5.4	49
39	Stability of multi-walled carbon nanotubes in commonly used acidic media. Carbon, 2012, 50, 1465-1476.	5.4	48
40	Fe@Nâ€Graphene Nanoplateletâ€Embedded Carbon Nanofibers as Efficient Electrocatalysts for Oxygen Reduction Reaction. Advanced Science, 2016, 3, 1500205.	5.6	47
41	Molybdenumâ€Based Carbon Hybrid Materials to Enhance the Hydrogen Evolution Reaction. Chemistry - A European Journal, 2018, 24, 18158-18179.	1.7	46
42	Edge-iodine/sulfonic acid-functionalized graphene nanoplatelets as efficient electrocatalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 8690-8695.	5.2	45
43	â€œDirectâ€•grafting of linear macromolecular â€œwedgesâ€•to the edge of pristine graphite to prepare edge-functionalized graphene-based polymer composites. Journal of Materials Chemistry, 2010, 20, 10936.	6.7	44
44	Edge-thionic acid-functionalized graphene nanoplatelets as anode materials for high-rate lithium ion batteries. Nano Energy, 2019, 62, 419-425.	8.2	44
45	Functionalization of Carbon Nanotubes. , 0, , .		43
46	Solvent-free mechanochemical reduction of graphene oxide. Carbon, 2014, 77, 501-507.	5.4	43
47	Understanding of the capacity contribution of carbon in phosphorus-carbon composites for high-performance anodes in lithium ion batteries. Nano Research, 2017, 10, 1268-1281.	5.8	43
48	Heavily aluminated graphene nanoplatelets as an efficient flame-retardant. Carbon, 2017, 116, 77-83.	5.4	43
49	Hyperbranched Macromolecules: From Synthesis to Applications. Molecules, 2018, 23, 657.	1.7	43
50	Nanocomposites derived from <i>in situ</i> grafting of linear and hyperbranched poly(etherâ€ketone)s containing flexible oxyethylene spacers onto the surface of multiwalled carbon nanotubes. Journal of Polymer Science Part A, 2008, 46, 3471-3481.	2.5	41
51	Direct Synthesis of a Covalent Triazineâ€Based Framework from Aromatic Amides. Angewandte Chemie, 2018, 130, 8574-8578.	1.6	40
52	Grafting of polyaniline onto the surface of 4â€aminobenzoylâ€functionalized multiwalled carbon nanotube and its electrochemical properties. Journal of Polymer Science Part A, 2010, 48, 3103-3112.	2.5	37
53	Nanocomposite prepared from <i>in situ</i> grafting of polypyrrole to aminobenzoylâ€functionalized multiwalled carbon nanotube and its electrochemical properties. Journal of Polymer Science Part A, 2011, 49, 2529-2537.	2.5	35
54	Comparative study of edge-functionalized graphene nanoplatelets as metal-free counter electrodes for highly efficient dye-sensitized solar cells. Materials Today Energy, 2018, 9, 67-73.	2.5	34

#	Article	IF	Citations
55	Graphene Nanoplatelets with Selectively Functionalized Edges as Electrode Material for Electrochemical Energy Storage. Langmuir, 2015, 31, 5676-5683.	1.6	33
56	Edge-selectively antimony-doped graphene nanoplatelets as an outstanding counter electrode with an unusual electrochemical stability for dye-sensitized solar cells employing cobalt electrolytes. Journal of Materials Chemistry A, 2016, 4, 9029-9037.	5.2	33
57	Synthesis and electrical properties of polyaniline/polyaniline grafted multiwalled carbon nanotube mixture via <i>in situ</i> static interfacial polymerization. Journal of Polymer Science Part A, 2010, 48, 1962-1972.	2.5	32
58	Edgeâ€Selectively Functionalized Graphene Nanoplatelets. Chemical Record, 2013, 13, 224-238.	2.9	31
59	Wedging graphite into graphene and graphene-like platelets by dendritic macromolecules. Journal of Materials Chemistry, 2011, 21, 7820.	6.7	27
60	Edge-Exfoliated Graphites for Facile Kinetics of Delithiation. ACS Nano, 2012, 6, 10770-10775.	7.3	27
61	Carbonâ€"Heteroatom Bond Formation by an Ultrasonic Chemical Reaction for Energy Storage Systems. Advanced Materials, 2017, 29, 1702747.	11.1	27
62	Oxidative Dehydrogenation of Ethylbenzene into Styrene by Fe-Graphitic Catalysts. ACS Nano, 2019, 13, 5893-5899.	7.3	26
63	Scalable Synthesis of Pure and Stable Hexaaminobenzene Trihydrochloride. Synlett, 2013, 24, 246-248.	1.0	23
64	Electrochemical activity of a polyaniline/polyaniline-grafted multiwalled carbon nanotube mixture produced by a simple suspension polymerization. Electrochimica Acta, 2011, 56, 10023-10031.	2.6	22
65	Multifunctional poly(2,5â€benzimidazole)/carbon nanotube composite films. Journal of Polymer Science Part A, 2010, 48, 1067-1078.	2.5	21
66	Hydrogen Evolution Reaction: Mechanochemically Assisted Synthesis of a Ru Catalyst for Hydrogen Evolution with Performance Superior to Pt in Both Acidic and Alkaline Media (Adv. Mater. 44/2018). Advanced Materials, 2018, 30, 1870330.	11.1	21
67	A New Strategy for Outstanding Performance and Durability in Acidic Fuel Cells: A Small Amount Pt Anchored on Fe, N coâ€Doped Graphene Nanoplatelets. ChemElectroChem, 2018, 5, 2857-2862.	1.7	18
68	Edge-Functionalization of Pyrene as a Miniature Graphene via Friedelâ€"Crafts Acylation Reaction in Poly(Phosphoric Acid). Nanoscale Research Letters, 2010, 5, 1686-1691.	3.1	17
69	Boron-nitrogen-phosphorous doped graphene nanoplatelets for enhanced electrocatalytic activity. European Polymer Journal, 2018, 99, 511-517.	2.6	17
70	Metalated graphene nanoplatelets and their uses as anode materials for lithium-ion batteries. 2D Materials, 2017, 4, 014002.	2.0	15
71	Reinforcement of polystyrene using edge-styrene graphitic nanoplatelets. Journal of Materials Research and Technology, 2021, 10, 662-670.	2.6	14
72	Tuning edge-oxygenated groups on graphitic carbon materials against corrosion. Nano Energy, 2019, 66, 104112.	8.2	13

#	Article	IF	Citations
73	Mechanochemically driven iodination of activated charcoal for metal-free electrocatalyst for fuel cells and hybrid Li-air cells. Carbon, 2015, 93, 465-472.	5.4	12
74	Forming a three-dimensional porous organic network via solid-state explosion of organic single crystals. Nature Communications, 2017, 8, 1599.	5.8	12
75	Heptene-functionalized graphitic nanoplatelets for high-performance composites of linear low-density polyethylene. Composites Science and Technology, 2020, 199, 108380.	3.8	11
76	Direct preparation of edge-propylene graphitic nanoplatelets and its reinforcing effects in polypropylene. Composites Communications, 2021, 27, 100896.	3.3	11
77	Sponge Behaviors of Functionalized Few-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2010, 114, 14868-14875.	1.5	10
78	Enhanced electrocatalytic performance of Pt nanoparticles on triazine-functionalized graphene nanoplatelets for both oxygen and iodine reduction reactions. Journal of Materials Chemistry A, 2017, 5, 21936-21946.	5.2	10
79	Paramagnetic Carbon Nanosheets with Random Hole Defects and Oxygenated Functional Groups. Angewandte Chemie - International Edition, 2019, 58, 11670-11675.	7.2	9
80	Synthesis of linear and hyperbranched poly(etherketone)s containing flexible oxyethylene spacers. Journal of Polymer Science Part A, 2007, 45, 5112-5122.	2.5	8
81	Oneâ€Pot Purification and Iodination of Waste Kish Graphite into Highâ€Quality Electrocatalyst. Particle and Particle Systems Characterization, 2017, 34, 1600426.	1.2	8
82	Selfâ€controlled synthesis of hyperbranched poly(etherâ€ketone)s from A₂ + B₃ approach in poly(phosphoric acid). Journal of Polymer Science Part A, 2009, 47, 3326-3336.	2.5	6
83	Immobilization of platinum nanoparticles on 3,4-diaminobenzoyl-functionalized multi-walled carbon nanotube and its electrocatalytic activity. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	6
84	Fluorine: Edge-Fluorinated Graphene Nanoplatelets as High Performance Electrodes for Dye-Sensitized Solar Cells and Lithium Ion Batteries (Adv. Funct. Mater. 8/2015). Advanced Functional Materials, 2015, 25, 1328-1328.	7.8	6
85	Direct and efficient conversion from low-quality graphite to high-quality graphene nanoplatelets. FlatChem, 2018, 12, 10-16.	2.8	6
86	Edgeâ€NF_{<i>x</i>} (<i>x</i>=1 or 2) Protected Graphitic Nanoplatelets as a Stable Lithium Storage Material. Batteries and Supercaps, 2020, 3, 928-935.	2.4	6
87	Influence of the Hydrophilic Surface of Nanofiber Support on the Performance of Hybrid Supercapacitors. Energies, 2021, 14, 7621.	1.6	6
88	Strain-induced delamination of edge-grafted graphite. Chemical Communications, 2012, 48, 11109.	2.2	4
89	Ultrasonic Chemistry: Carbonâ€"Heteroatom Bond Formation by an Ultrasonic Chemical Reaction for Energy Storage Systems (Adv. Mater. 47/2017). Advanced Materials, 2017, 29, 1770339.	11.1	4
90	Electrochemical Catalysts for Green Hydrogen Energy. Advanced Energy and Sustainability Research, 2021, 2, 2100019.	2.8	4

#	Article	IF	Citations
91	Direct conversion of aromatic amides into crystalline covalent triazine frameworks by a condensation mechanism. Cell Reports Physical Science, 2021, 2, 100653.	2.8	4
92	Neohexene graphitic nanoplatelets for reinforced low-density polyethylene. Journal of Polymer Research, 2022, 29, 1.	1.2	3
93	Mild and Nondestructive Chemical Modification of Carbon Nanotubes (CNTs): Direct Friedel-Crafts Acylation Reaction. , 0, , .		2
94	Improved performance of poly(styreneâ€‹<i>co</i>â€butadiene) using butadiene graphitic nanoplatelets. Journal of Applied Polymer Science, 2022, 139, .	1.3	2
95	Electrocatalyts: Controlled Fabrication of Hierarchically Structured Nitrogenâ€Doped Carbon Nanotubes as a Highly Active Bifunctional Oxygen Electrocatalyst (Adv. Funct. Mater. 9/2017). Advanced Functional Materials, 2017, 27, .	7.8	1
96	Oxygen reduction reaction by metal-free catalysts. , 2022, , 241-275.		1
97	Energy Conversion: Fe@Nâ€Graphene Nanoplateletâ€Embedded Carbon Nanofibers as Efficient Electrocatalysts for Oxygen Reduction Reaction (Adv. Sci. 1/2016). Advanced Science, 2016, 3, .	5.6	0