Seung Jae Yang

List of Publications by Year
in descending order

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88 papers	5,622 citations	117625 34 h-index	76900 74 g-index
93 all docs	93 docs citations	93 times ranked	8988 citing authors

#	Article	IF	Citations
1	MOF-Derived Hierarchically Porous Carbon with Exceptional Porosity and Hydrogen Storage Capacity. Chemistry of Materials, 2012, 24, 464-470.	6.7	671
2	Surface modifications for the effective dispersion of carbon nanotubes in solvents and polymers. Carbon, 2012, 50, 3-33.	10.3	608
3	Preparation and Exceptional Lithium Anodic Performance of Porous Carbon-Coated ZnO Quantum Dots Derived from a Metalâ€“Organic Framework. Journal of the American Chemical Society, 2013, 135, 7394-7397.	13.7	482
4	Preparation and Enhanced Hydrostability and Hydrogen Storage Capacity of CNT@MOF-5 Hybrid Composite. Chemistry of Materials, 2009, 21, 1893-1897.	6.7	336
5	Rational Design of Nanostructured Functional Interlayer/Separator for Advanced Liâ€“S Batteries. Advanced Functional Materials, 2018, 28, 1707411.	14.9	272
6	Flexible and Robust Thermoelectric Generators Based on All-Carbon Nanotube Yarn without Metal Electrodes. ACS Nano, 2017, 11, 7608-7614.	14.6	191
7	Hidden Second Oxidation Step of Hummers Method. Chemistry of Materials, 2016, 28, 756-764.	6.7	187
8	Preparation of Highly Moistureâ€Resistant Blackâ€Colored Metal Organic Frameworks. Advanced Materials, 2012, 24, 4010-4013.	21.0	166
9	Recent progress on biomassâ€derived ecomaterials toward advanced rechargeable lithium batteries. EcoMat, 2020, 2, e12019.	11.9	117
10	MOF-derived ZnO and ZnO@C composites with high photocatalytic activity and adsorption capacity. Journal of Hazardous Materials, 2011, 186, 376-382.	12.4	116
11	Self-Assembly of Metal Phenolic Mesocrystals and Morphosynthetic Transformation toward Hierarchically Porous Carbons. Journal of the American Chemical Society, 2015, 137, 8269-8273.	13.7	115
12	Rational design of exfoliated 1T MoS₂@CNT-based bifunctional separators for lithium sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 23909-23918.	10.3	111
13	Easy synthesis of highly nitrogen-enriched graphitic carbon with a high hydrogen storage capacity at room temperature. Carbon, 2009, 47, 1585-1591.	10.3	102
14	Enhanced hydrogen storage capacity of Pt-loaded CNT@MOF-5 hybrid composites. International Journal of Hydrogen Energy, 2010, 35, 13062-13067.	7.1	100
15	Si-doping effect on the enhanced hydrogen storage of single walled carbon nanotubes and graphene. International Journal of Hydrogen Energy, 2011, 36, 12286-12295.	7.1	87
16	Recent advances in hydrogen storage technologies based on nanoporous carbon materials. Progress in Natural Science: Materials International, 2012, 22, 631-638.	4.4	80
17	Preparation of a freestanding, macroporous reduced graphene oxide film as an efficient and recyclable sorbent for oils and organic solvents. Journal of Materials Chemistry A, 2013, 1, 9427.	10.3	80
18	Solvent evaporation mediated preparation of hierarchically porous metal organic framework-derived carbon with controllable and accessible large-scale porosity. Carbon, 2014, 71, 294-302.	10.3	77

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19	Partially unzipped carbon nanotubes for high-rate and stable lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2016, 4, 819-826.	10.3	76
20	Simple and cost-effective reduction of graphite oxide by sulfuric acid. Carbon, 2012, 50, 3229-3232.	10.3	70
21	Easy Preparation of Self-Assembled High-Density Buckypaper with Enhanced Mechanical Properties. Nano Letters, 2015, 15, 190-197.	9.1	69
22	Preparation and Exceptional Mechanical Properties of Bone-Mimicking Size-Tuned Graphene Oxide@Carbon Nanotube Hybrid Paper. ACS Nano, 2016, 10, 2184-2192.	14.6	62
23	The effect of heating rate on porosity production during the low temperature reduction of graphite oxide. Carbon, 2013, 53, 73-80.	10.3	59
24	Facile preparation of reduced graphene oxide-based gas barrier films for organic photovoltaic devices. Energy and Environmental Science, 2014, 7, 3403-3411.	30.8	58
25	All-in-one flexible supercapacitor with ultrastable performance under extreme load. Science Advances, 2022, 8, eabl8631.	10.3	55
26	Stabilization of Insoluble Discharge Products by Facile Aniline Modification for High Performance Liâ€S Batteries. Advanced Energy Materials, 2015, 5, 1500268.	19.5	51
27	Wrapping SnO2 with porosity-tuned graphene as a strategy for high-rate performance in lithium battery anodes. Carbon, 2015, 85, 289-298.	10.3	51
28	General Relationship between Hydrogen Adsorption Capacities at 77 and 298 K and Pore Characteristics of the Porous Adsorbents. Journal of Physical Chemistry C, 2012, 116, 10529-10540.	3.1	50
29	Simple fabrication of carbon/TiO₂composite nanotubes showing dual functions with adsorption and photocatalytic decomposition of Rhodamine B. Nanotechnology, 2012, 23, 035604.	2.6	45
30	Facile preparation of monodisperse ZnO quantum dots with high quality photoluminescence characteristics. Nanotechnology, 2008, 19, 035609.	2.6	44
31	Characteristics tuning of graphene-oxide-based-graphene to various end-uses. Energy Storage Materials, 2018, 14, 8-21.	18.0	43
32	A simple method for determining the neutralization point in Boehm titration regardless of the CO2 effect. Carbon, 2012, 50, 3315-3323.	10.3	41
33	Preparation and photoluminescence (PL) performance of a nanoweb of P3HT nanofibers with diameters below 100 nm. Journal of Materials Chemistry, 2011, 21, 14231.	6.7	39
34	Quantum Hall effect in graphene decorated with disordered multilayer patches. Applied Physics Letters, 2013, 103, .	3.3	39
35	Guidelines for Tailored Chemical Functionalization of Graphene. Chemistry of Materials, 2017, 29, 307-318.	6.7	36
36	One step preparation and excellent performance of CNT yarn based flexible micro lithium ion batteries. Energy Storage Materials, 2016, 5, 1-7.	18.0	34

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37	Effects of carbon dioxide and acidic carbon compounds on the analysis of Boehm titration curves. Carbon, 2012, 50, 1510-1516.	10.3	33
38	Rational Design of 1D Partially Graphitized N-Doped Hierarchical Porous Carbon with Uniaxially Packed Carbon Nanotubes for High-Performance Lithium-Ion Batteries. ACS Nano, 2018, 12, 11106-11119.	14.6	33
39	Impact of large-scale meso- and macropore structures in adenosine-derived affordable noble carbon on efficient reversible oxygen electrocatalytic redox reactions. Journal of Materials Chemistry A, 2015, 3, 11720-11724.	10.3	32
40	Effects of structural modifications on the hydrogen storage capacity of MOF-5. International Journal of Hydrogen Energy, 2012, 37, 5777-5783.	7.1	31
41	Morphochemical imprinting of melamine cyanurate mesocrystals in glucose-derived carbon for high performance lithium ion batteries. Journal of Materials Chemistry A, 2017, 5, 20635-20642.	10.3	31
42	Determination of solubility parameters of single-walled and double-walled carbon nanotubes using a finite-length model. RSC Advances, 2013, 3, 4814.	3.6	30
43	Metalâ€“Phenolic Carbon Nanocomposites for Robust and Flexible Energyâ€Storage Devices. ChemSusChem, 2017, 10, 1675-1682.	6.8	30
44	A universal surface modification method of carbon nanotube fibers with enhanced tensile strength. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106182.	7.6	27
45	Preparation of PCDTBT nanofibers with a diameter of 20 nm and their application to air-processed organic solar cells. Nanoscale, 2014, 6, 2847.	5.6	26
46	Influence of H+ ion irradiation on the surface and microstructural changes of a nuclear graphite. Fusion Engineering and Design, 2012, 87, 344-351.	1.9	25
47	Rational Design of Metalâ€“Organic <scp>Frameworkâ€Based</scp> Materials for Advanced Lïï£¿S Batteries. Bulletin of the Korean Chemical Society, 2021, 42, 148-158.	1.9	25
48	Reversible Pore Size Control of Elastic Microporous Material by Mechanical Force. Chemistry - A European Journal, 2013, 19, 13009-13016.	3.3	23
49	Ultrafast room-temperature reduction of graphene oxide to graphene with excellent dispersibility by lithium naphthalenide. Carbon, 2013, 63, 165-174.	10.3	23
50	Fast-chargeable N-doped multi-oriented graphitic carbon as a Li-intercalation compound. Energy Storage Materials, 2022, 44, 416-424.	18.0	21
51	Enhanced water stability and CO₂ gas sorption properties of a methyl functionalized titanium metalâ€“organic framework. New Journal of Chemistry, 2014, 38, 2752-2755.	2.8	19
52	Macroscopically interconnected hierarchically porous carbon monolith by metal-phenolic coordination as an sorbent for multi-scale molecules. Carbon, 2018, 126, 190-196.	10.3	19
53	Stacked double-walled carbon nanotube sheet electrodes for electrochemically harvesting thermal energy. Carbon, 2019, 147, 559-565.	10.3	19
54	Concentration-Driven Evolution of Crystal Structure, Pore Characteristics, and Hydrogen Storage Capacity of Metal Organic Framework-5s: Experimental and Computational Studies. Chemistry of Materials, 2010, 22, 6138-6145.	6.7	18

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55	Highly Reproducible Thermocontrolled Electrospun Fiber Based Organic Photovoltaic Devices. ACS Applied Materials & Interfaces, 2015, 7, 4481-4487.	8.0	18
56	Enhanced gas barrier property of stacking-controlled reduced graphene oxide films for encapsulation of polymer solar cells. Carbon, 2019, 150, 275-283.	10.3	18
57	Facile preparation of ZnO quantum dots@porous carbon composites through direct carbonization of metalâ€“organic complex for high-performance lithium ion batteries. Carbon Letters, 2021, 31, 323-329.	5.9	18
58	Revisiting the Role of Graphene Quantum Dots in Ternary Organic Solar Cells: Insights into the Nanostructure Reconstruction and Effective FÃ¶rster Resonance Energy Transfer. ACS Applied Energy Materials, 2019, 2, 8826-8835.	5.1	17
59	New insights into the oxidation of single-walled carbon nanotubes for the fabrication of transparent conductive films. Carbon, 2015, 81, 525-534.	10.3	16
60	Atomicâ€Distributed Coordination State of Metalâ€Phenolic Compounds Enabled Low Temperature Graphitization for Highâ€Performance Multioriented Graphite Anode. Small, 2020, 16, e2003104.	10.0	16
61	A sustainable synthesis alternative for IL-derived N-doped carbons: Bio-based-imidazolium compounds. Carbon, 2015, 94, 641-645.	10.3	15
62	Revisit to the correlation of surface characteristic nature with performance of N-enriched carbon-based supercapacitor. Carbon, 2018, 140, 68-76.	10.3	15
63	Effect of annealing with pressure on tungsten film properties fabricated by atmospheric plasma spray. Metals and Materials International, 2014, 20, 1037-1042.	3.4	14
64	Function-regeneration of non-porous hydrolyzed-MOF-derived materials. Nano Research, 2019, 12, 1921-1930.	10.4	14
65	Pseudo metal-organic coordination derived one-step carbonization of non-carbonizable carboxylate organic molecules toward functional mesostructured porous carbons. Carbon, 2021, 173, 637-645.	10.3	14
66	Unusual thermopower of inhomogeneous graphene grown by chemical vapor deposition. Applied Physics Letters, 2014, 104, 021902.	3.3	13
67	Demonstration of the nanosize effect of carbon nanomaterials on the dehydrogenation temperature of ammonia borane. Nanoscale Advances, 2019, 1, 4697-4703.	4.6	13
68	Deposition/erosion and H/D retention characteristics in gaps of PFCs in KSTAR studied by cavity technique. Journal of Nuclear Materials, 2013, 438, S698-S706.	2.7	12
69	Secondary Interactions of Graphene Oxide on Liquid Crystal Formation and Stability. Particle and Particle Systems Characterization, 2017, 34, 1600383.	2.3	12
70	Crucial Role of Oxidation Debris of Carbon Nanotubes in Subsequent End-Use Applications of Carbon Nanotubes. ACS Applied Materials & Interfaces, 2017, 9, 17552-17564.	8.0	10
71	Versatile reorganization of metal-polyphenol coordination on CNTs for dispersion, assembly, and transformation. Carbon, 2019, 144, 402-409.	10.3	10
72	Mechanical Properties and Epoxy Resin Infiltration Behavior of Carbon-Nanotube-Fiber-Based Single-Fiber Composites. Materials, 2021, 14, 106.	2.9	10

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73	Simple Preparation of Anatase Titanium Dioxide Nanoparticles by Heating Titanium-Organic Frameworks. Bulletin of the Korean Chemical Society, 2014, 35, 2477-2480.	1.9	10
74	Effect of microstructure and morphological properties of carbon nanotubes on the length reduction during melt processing. Composites Science and Technology, 2015, 112, 42-49.	7.8	9
75	Easy preparation of partially-opened carbon nanotubes by simple air oxidation for high performance Liâ€“S batteries. RSC Advances, 2016, 6, 113522-113526.	3.6	8
76	Preliminary test results on tungsten tile with castellation structures in KSTAR. Fusion Engineering and Design, 2014, 89, 1704-1708.	1.9	7
77	Function-convertible metal-organic crystal derived from liquid-solid interfacial reaction for lithium-sulfur batteries. Journal of Power Sources, 2021, 491, 229593.	7.8	7
78	Facile Fabrication of Anisotropic Multicompartmental Microfibers Using Charge Reversal Electrohydrodynamic Coâ€Jetting. Macromolecular Rapid Communications, 2022, 43, e2100560.	3.9	7
79	Dimension-controlled N-doped graphitic carbon nanostructures through low-temperature metal-catalyzed transformation from C3N4 for high-performance electrochemical barrier in lithium-sulfur batteries. Carbon, 2022, 196, 304-312.	10.3	7
80	Influence of the physicochemical characteristics of reduced graphene oxides on the gas permeability of the barrier films for organic electronics. Chemical Communications, 2017, 53, 6573-6576.	4.1	6
81	A New Class of Carbon Nanostructures for Highâ€Performance Electroâ€Magnetic and â€Chemical Barriers. Advanced Science, 2021, 8, e2102718.	11.2	5
82	Metal-Phenolic Carbon Nanocomposites for Robust and Flexible Energy-Storage Devices. ChemSusChem, 2017, 10, 1644-1644.	6.8	4
83	Highâ€Density Carbon Nanotube Wetâ€laid Buckypapers with Enhanced Strength and Conductivity Using a Highâ€pressure Homogenization Process. Bulletin of the Korean Chemical Society, 2017, 38, 438-443.	1.9	3
84	Concentration-driven polymorphic mesocrystal and morphosynthetic transformation toward omni-adsorbent with the widest range of pores. Chemical Engineering Journal, 2022, 433, 133871.	12.7	2
85	Effect of Helmholtz Oscillation on Auto-shroud for APS Tungsten Carbide Coating. Journal of Thermal Spray Technology, 2013, 22, 756-763.	3.1	1
86	Lithium Ion Batteries: Atomicâ€Distributed Coordination State of Metalâ€Phenolic Compounds Enabled Low Temperature Graphitization for Highâ€Performance Multioriented Graphite Anode (Small 33/2020). Small, 2020, 16, 2070182.	10.0	1
87	The influence of microstructure of carbon nanotubes on the degree of length reduction during melt processing with polycarbonate. , 2015, , .		0
88	Preparation of aligned carbon nanotubes: Shape-dependence on isotropic to nematic phase transition. , 2015, , .		0