Seung-Min Kim

List of Publications by Year
in descending order

62	2,675	201385 27	182168 51
papers	citations	h-index	g-index

66	66	66	3634
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-crystallinity single-walled carbon nanotube aerogel growth: Understanding the real-time catalytic decomposition reaction through floating catalyst chemical vapor deposition. Chemical Engineering Journal Advances, 2022, 10, 100261.	2.4	14
2	High Purity Single Wall Carbon Nanotube by Oxygen-Containing Functional Group of Ferrocene-Derived Catalyst Precursor by Floating Catalyst Chemical Vapor Deposition. Nanomaterials, 2022, 12, 863.	1.9	2
3	One-pot, cascade conversion of cellulose to Î³-valerolactone over a multifunctional Ruâ€“Cu/zeolite-Y catalyst in supercritical methanol. Applied Catalysis B: Environmental, 2022, 314, 121466.	10.8	10
4	Fabrication of sustainable and multifunctional TiO2@carbon nanotube nanocomposite fibers. Applied Surface Science, 2021, 541, 148332.	3.1	19
5	Deep-injection floating-catalyst chemical vapor deposition to continuously synthesize carbon nanotubes with high aspect ratio and high crystallinity. Carbon, 2021, 173, 901-909.	5.4	52
6	Purification effect of carbon nanotube fibers on their surface modification to develop a high-performance and multifunctional nanocomposite fiber. Carbon, 2021, 173, 376-383.	5.4	17
7	Improving mechanical and physical properties of ultra-thick carbon nanotube fiber by fast swelling and stretching process. Carbon, 2021, 172, 733-741.	5.4	16
8	Strong and Highly Conductive Carbon Nanotube Fibers as Conducting Wires for Wearable Electronics. ACS Applied Nano Materials, 2021, 4, 3833-3842.	2.4	16
9	Reply to Comment on â€œA Mechanistic Understanding of Nonclassical Crystal Growth in Hydrothermally Synthesized Sodium Yttrium Fluoride Nanowiresâ€. Chemistry of Materials, 2021, 33, 3862-3864.	3.2	1
10	Synthesis, property, and application of carbon nanotube fiber. Journal of the Korean Ceramic Society, 2021, 58, 148-159.	1.1	20
11	Modified tunicate nanocellulose liquid crystalline fiber as closed loop for recycling platinum-group metals. Carbohydrate Polymers, 2020, 228, 115424.	5.1	29
12	Inâ€Depth TEM Investigation on Structural Inhomogeneity within a Primary Li_xNi_{0.835}Co_{0.15}Al_{0.015}O₂ Particle: Origin of Capacity Decay during Highâ€Rate Discharge. Angewandte Chemie - International Edition, 2020, 59, 2385-2391.	7.2	16
13	Inâ€Depth TEM Investigation on Structural Inhomogeneity within a Primary Li x Ni 0.835 Co 0.15 Al 0.015 O 2 Particle: Origin of Capacity Decay during Highâ€Rate Discharge. Angewandte Chemie, 2020, 132, 2406-2412.	1.6	4
14	One-pot direct conversion of levulinic acid into high-yield valeric acid over a highly stable bimetallic Nb-Cu/Zr-doped porous silica catalyst. Green Chemistry, 2020, 22, 766-787.	4.6	39
15	Different thermal degradation mechanisms: Role of aluminum in Ni-rich layered cathode materials. Nano Energy, 2020, 78, 105367.	8.2	27
16	Continuous synthesis of high-crystalline carbon nanotubes by controlling the configuration of the injection part in the floating catalyst chemical vapor deposition process. Carbon Letters, 2020, 30, 613-619.	3.3	6
17	A Mechanistic Understanding of Nonclassical Crystal Growth in Hydrothermally Synthesized Sodium Yttrium Fluoride Nanowires. Chemistry of Materials, 2020, 32, 2753-2763.	3.2	27
18	Frontispiece: Inâ€Depth TEM Investigation on Structural Inhomogeneity within a Primary Li_xNi_{0.835}Co_{0.15}Al_{0.015}O₂ Particle: Origin of Capacity Decay during Highâ€Rate Discharge. Angewandte Chemie - International Edition, 2020, 59, .	7.2	0

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19	Mechanically enhanced graphene oxide/carboxymethyl cellulose nanofibril composite fiber as a scalable adsorbent for heavy metal removal. Carbohydrate Polymers, 2020, 240, 116348.	5.1	50
20	Frontispiz: Inâ€Depth TEM Investigation on Structural Inhomogeneity within a Primary Li_xNi_{0.835}Co_{0.15}Al_{0.015}O₂ Particle: Origin of Capacity Decay during Highâ€Rate Discharge. Angewandte Chemie, 2020, 132, .	1.6	0
21	Using In-Situ Methods to Characterize Phase Changes in Charged Lithium Nickel Cobalt Aluminum Oxide Cathode Materials. Microscopy and Microanalysis, 2019, 25, 2030-2031.	0.2	2
22	Influence of the Sulfur Content Catalyst on the Packing Density of Carbon Nanotube Forests. Nanomaterials, 2019, 9, 889.	1.9	4
23	Mathematical model for the dynamic mechanical behavior of carbon nanotube yarn in analogy with hierarchically structured bio-materials. Carbon, 2019, 152, 151-158.	5.4	25
24	Direct spinning and densification method for high-performance carbon nanotube fibers. Nature Communications, 2019, 10, 2962.	5.8	126
25	Highly-efficient and magnetically-separable ZnO/Co@N-CNTs catalyst for hydrodeoxygenation of lignin and its derived species under mild conditions. Green Chemistry, 2019, 21, 1021-1042.	4.6	72
26	Bio-inspired incorporation of functionalized graphene oxide into carbon nanotube fibers for their efficient mechanical reinforcement. Composites Science and Technology, 2019, 181, 107680.	3.8	10
27	Rationally designed catalyst layers toward â€œimmortalâ€•growth of carbon nanotube forests: Fe-ion implanted substrates. Carbon, 2019, 152, 482-488.	5.4	13
28	CNT bundle-based thin intracochlear electrode array. Biomedical Microdevices, 2019, 21, 27.	1.4	6
29	A seed-mediated growth of gold nanoparticles inside carbon nanotube fibers for fabrication of multifunctional nanohybrid fibers with enhanced mechanical and electrical properties. Nanoscale, 2019, 11, 5295-5303.	2.8	23
30	Simultaneous enhancement of mechanical and electrical properties of carbon nanotube fiber by infiltration and subsequent carbonization of resorcinol-formaldehyde resin. Composites Part B: Engineering, 2019, 163, 431-437.	5.9	14
31	One-pot di- and polysaccharides conversion to highly selective 2,5-dimethylfuran over Cu-Pd/Amino-functionalized Zr-based metal-organic framework (UiO-66(NH2))@SGO tandem catalyst. Applied Catalysis B: Environmental, 2019, 243, 337-354.	10.8	58
32	Metal nanofibrils embedded in long free-standing carbon nanotube fibers with a high critical current density. NPG Asia Materials, 2018, 10, 146-155.	3.8	23
33	Interstitial Moâ€Assisted Photovoltaic Effect in Multilayer MoSe₂ Phototransistors. Advanced Materials, 2018, 30, e1705542.	11.1	48
34	Multifunctionalized Reduced Graphene Oxide Biosensors for Simultaneous Monitoring of Structural Changes in Amyloid-Î² 40. Sensors, 2018, 18, 1738.	2.1	12
35	Ga-doped Cu/H-nanozeolite-Y catalyst for selective hydrogenation and hydrodeoxygenation of lignin-derived chemicals. Green Chemistry, 2018, 20, 3253-3270.	4.6	60
36	Accurate measurement of specific tensile strength of carbon nanotube fibers with hierarchical structures by vibroscopic method. RSC Advances, 2017, 7, 8575-8580.	1.7	26

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37	High-modulus and strength carbon nanotube fibers using molecular cross-linking. Carbon, 2017, 118, 413-421.	5.4	83
38	Direct one-pot conversion of monosaccharides into high-yield 2,5-dimethylfuran over a multifunctional Pd/Zr-based metalâ€“organic framework@sulfonated graphene oxide catalyst. Green Chemistry, 2017, 19, 2482-2490.	4.6	97
39	Direct conversion of cellulose to high-yield methyl lactate over Ga-doped Zn/H-nanozeolite Y catalysts in supercritical methanol. Green Chemistry, 2017, 19, 1969-1982.	4.6	62
40	Highly flexible and stretchable thermally conductive composite film by polyurethane supported 3D networks of boron nitride. Composites Science and Technology, 2017, 152, 94-100.	3.8	56
41	Photoacoustic effect on the electrical and mechanical properties of polymer-infiltrated carbon nanotube fiber/graphene oxide composites. Composites Science and Technology, 2017, 153, 136-144.	3.8	21
42	Evolution of implanted Fe ions in SiO2/Si wafer into uniformly sized catalyst particles for carbon nanotube forest growth. Carbon, 2017, 123, 122-128.	5.4	9
43	Significantly Increased Solubility of Carbon Nanotubes in Superacid by Oxidation and Their Assembly into Highâ€Performance Fibers. Small, 2017, 13, 1701131.	5.2	38
44	Improving the Stability of High-Performance Multilayer MoS₂ Field-Effect Transistors. ACS Applied Materials & Interfaces, 2017, 9, 42943-42950.	4.0	59
45	Structural Evolution of Li_xNi_yMn_zCo_{1-y-z}O₂ Cathode Materials during High-Rate Charge and Discharge. Journal of Physical Chemistry Letters, 2017, 8, 5758-5763.	2.1	27
46	A highly sensitive chemical gas detecting transistor based on highly crystalline CVD-grown MoSe2 films. Nano Research, 2017, 10, 1861-1871.	5.8	102
47	A facile method for transparent carbon nanosheets heater based on polyimide. RSC Advances, 2016, 6, 52509-52517.	1.7	30
48	Effects of a SiO₂ sub-supporting layer on the structure of a Al₂O₃ supporting layer, formation of Fe catalyst particles, and growth of carbon nanotube forests. RSC Advances, 2016, 6, 68424-68432.	1.7	8
49	Ultrastrong Anchoring on the Periodic Atomic Grooves of Black Phosphorus. Advanced Materials Interfaces, 2016, 3, 1600534.	1.9	14
50	Mechanical and electrical properties of thermochemically cross-linked polymer carbon nanotube fibers. Composites Part A: Applied Science and Manufacturing, 2016, 91, 222-228.	3.8	31
51	High-strength carbon nanotube/carbon composite fibers via chemical vapor infiltration. Nanoscale, 2016, 8, 18972-18979.	2.8	46
52	A route to synthesis molybdenum disulfide-reduced graphene oxide (MoS2-RGO) composites using supercritical methanol and their enhanced electrochemical performance for Li-ion batteries. Journal of Power Sources, 2016, 309, 202-211.	4.0	89
53	Direct observation of morphological evolution of a catalyst during carbon nanotube forest growth: new insights into growth and growth termination. Nanoscale, 2016, 8, 2055-2062.	2.8	14
54	Synthesis and lithium storage properties of MoS 2 nanoparticles prepared using supercritical ethanol. Chemical Engineering Journal, 2016, 285, 517-527.	6.6	33

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55	The influence of boundary layer on the growth kinetics of carbon nanotube forests. Carbon, 2015, 93, 217-225.	5.4	18
56	Effects of nitrogen doping from pyrolyzed ionic liquid in carbon nanotube fibers: enhanced mechanical and electrical properties. Nanotechnology, 2015, 26, 075706.	1.3	13
57	Effect of oxygen plasma treatment on the mechanical properties of carbon nanotube fibers. Materials Letters, 2015, 156, 17-20.	1.3	42
58	Investigating the Reversibility of Structural Modifications of Li_xNi_yMn_zCo_{1â€“yâ€“z}O₂ Cathode Materials during Initial Charge/Discharge, at Multiple Length Scales. Chemistry of Materials, 2015, 27, 6044-6052.	3.2	80
59	Hydrogen-Enriched Reduced Graphene Oxide with Enhanced Electrochemical Performance in Lithium Ion Batteries. Chemistry of Materials, 2015, 27, 266-275.	3.2	53
60	Influence of Alumina Type on the Evolution and Activity of Alumina-Supported Fe Catalysts in Single-Walled Carbon Nanotube Carpet Growth. ACS Nano, 2010, 4, 895-904.	7.3	201
61	Evolution in Catalyst Morphology Leads to Carbon Nanotube Growth Termination. Journal of Physical Chemistry Letters, 2010, 1, 918-922.	2.1	177
62	Role of Water in Super Growth of Single-Walled Carbon Nanotube Carpets. Nano Letters, 2009, 9, 44-49.	4.5	371