Jonghwan Suhr

List of Publications by Year
in descending order

71 papers	3,663 citations	201674 27 h-index	128289 60 g-index
74 all docs	74 docs citations	74 times ranked	5129 citing authors

#	Article	IF	Citations
1	Composites with carbon nanotubes and graphene: An outlook. Science, 2018, 362, 547-553.	12.6	662
2	Viscoelasticity in carbon nanotube composites. Nature Materials, 2005, 4, 134-137.	27.5	443
3	Energy absorption capability of nanocomposites: A review. Composites Science and Technology, 2009, 69, 2392-2409.	7.8	422
4	Additive manufacturing of multi-directional preforms for composites: opportunities and challenges. Materials Today, 2015, 18, 503-512.	14.2	244
5	Characterizing energy dissipation in single-walled carbon nanotube polycarbonate composites. Applied Physics Letters, 2005, 87, 063102.	3.3	119
6	Microstructural design and additive manufacturing and characterization of 3D orthogonal short carbon fiber/acrylonitrile-butadiene-styrene preform and composite. Composites Science and Technology, 2016, 126, 139-148.	7.8	111
7	Three-Dimensional Nitrogen-Doped Multiwall Carbon Nanotube Sponges with Tunable Properties. Nano Letters, 2013, 13, 5514-5520.	9.1	110
8	Temperature-Activated Interfacial Friction Damping in Carbon Nanotube Polymer Composites. Nano Letters, 2006, 6, 219-223.	9.1	104
9	Hierarchical Porous Chitosan Sponges as Robust and Recyclable Adsorbents for Anionic Dye Adsorption. Scientific Reports, 2017, 7, 18054.	3.3	94
10	Utilizing interfaces in carbon nanotube reinforced polymer composites for structural damping. Journal of Materials Science, 2006, 41, 7824-7829.	3.7	88
11	All Biomass and UV Protective Composite Composed of Compatibilized Lignin and Poly (Lactic-acid). Scientific Reports, 2017, 7, .	3.3	78
12	Experimental and analytical investigation of mechanical damping and CTE of both SiO2 particle and carbon nanofiber reinforced hybrid epoxy composites. Composites Part A: Applied Science and Manufacturing, 2011, 42, 98-103.	7.6	69
13	Tensile properties of millimeter-long multi-walled carbon nanotubes. Scientific Reports, 2017, 7, 9512.	3.3	66
14	Enhancing interfacial properties of carbon fiber reinforced epoxy composites by grafting MXene sheets (Ti2C). Composites Part B: Engineering, 2021, 207, 108580.	12.0	62
15	MXene-xanthan nanocomposite films with layered microstructure for electromagnetic interference shielding and Joule heating. Chemical Engineering Journal, 2021, 410, 128348.	12.7	55
16	Dynamic viscoelasticity of silica-filled styrene-butadiene rubber/polybutadiene rubber (SBR/BR) elastomer composites. Composites Part B: Engineering, 2020, 187, 107865.	12.0	52
17	UV-curing kinetics and performance development of in situ curable 3D printing materials. European Polymer Journal, 2017, 93, 140-147.	5.4	51
18	Superb electromagnetic wave-absorbing composites based on large-scale graphene and carbon nanotube films. Scientific Reports, 2017, 7, 2349.	3.3	51

#	Article	IF	Citations
19	Composite Membrane Based on Graphene Oxide Sheets and Nafion for Polymer Electrolyte Membrane Fuel Cells. ECS Electrochemistry Letters, 2014, 4, F1-F4.	1.9	46
20	Low velocity impact resistance and energy absorption of environmentally friendly expanded cork core-carbon fiber sandwich composites. Composites Part A: Applied Science and Manufacturing, 2017, 101, 290-296.	7.6	46
21	Experimental investigation of mechanical properties of UV-Curable 3D printing materials. Polymer, 2018, 145, 88-94.	3.8	45
22	Anisotropic electromagnetic interference shielding properties of polymer-based composites with magnetically-responsive aligned Fe3O4 decorated reduced graphene oxide. European Polymer Journal, 2020, 127, 109595.	5.4	41
23	Interfacial shear strength of reduced graphene oxide polymer composites. Carbon, 2014, 77, 390-397.	10.3	40
24	A flexible supercapacitor based on vertically oriented â€˜Graphene Forestâ€™ electrodes. Journal of Materials Chemistry A, 2015, 3, 21875-21881.	10.3	39
25	Quantitative Interpretation of Electromagnetic Interference Shielding Efficiency: Is It Really a Wave Absorber or a Reflector?. ACS Omega, 2022, 7, 4135-4139.	3.5	35
26	Mechanical properties of nanocomposites reinforced by carbon nanotube sponges. Journal of Materiomics, 2018, 4, 157-164.	5.7	32
27	Lightweight graphene oxide-based sponges with high compressibility and durability for dye adsorption. Carbon, 2020, 160, 54-63.	10.3	30
28	Carbon aerogel reinforced PDMS nanocomposites with controllable and hierarchical microstructures for multifunctional wearable devices. Carbon, 2021, 171, 758-767.	10.3	29
29	Natural Cork Agglomerate Employed as an Environmentally Friendly Solution for Quiet Sandwich Composites. Scientific Reports, 2012, 2, 403.	3.3	28
30	Accelerated Aging and Lifetime Prediction of Graphene-Reinforced Natural Rubber Composites. Macromolecular Research, 2018, 26, 998-1003.	2.4	26
31	Solvent-free bulk polymerization of lignin-polycaprolactone (PCL) copolymer and its thermoplastic characteristics. Scientific Reports, 2019, 9, 7033.	3.3	25
32	All natural cork composites with suberin-based polyester and lignocellulosic residue. Industrial Crops and Products, 2017, 109, 843-849.	5.2	20
33	Rheological and mechanical properties of polypropylene composites containing microfibrillated cellulose (MFC) with improved compatibility through surface silylation. Cellulose, 2019, 26, 1085-1097.	4.9	18
34	Investigation of laser powder bed fusion manufacturing and post-processing for surface quality of as-built 17-4PH stainless steel. Surface and Coatings Technology, 2021, 422, 127492.	4.8	18
35	Quantitative Electrode Design Modeling of an Electroadhesive Lifting Device Based on the Localized Charge Distribution and Interfacial Polarization of Different Objects. ACS Omega, 2019, 4, 7994-8000.	3.5	17
36	Effects of functional carbon nanodots on water hyacinth response to Cd/Pb stress: Implication for phytoremediation. Journal of Environmental Management, 2021, 299, 113624.	7.8	15

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37	Aperture control in polymer-based composites with hybrid coreâ€“shell spheres for frequency-selective electromagnetic interference shielding. Journal of Materials Chemistry A, 2022, 10, 8751-8760.	10.3	15
38	Highly Anisotropic Adhesive Film Made from Upside-Down, Flat, and Uniform Vertically Aligned CNTs. ACS Applied Materials & Interfaces, 2016, 8, 34061-34067.	8.0	13
39	Development of reversibly compressible feather-like lightweight Chitosan/GO composite foams and their mechanical and viscoelastic properties. Carbon, 2020, 157, 191-200.	10.3	13
40	3D printing of free-standing Ti3C2Tx/PEO architecture for electromagnetic interference shielding. Polymer, 2021, 236, 124312.	3.8	13
41	Experimental Investigation on 3D Graphene-CNT Hybrid Foams with Different Interactions. Nanomaterials, 2018, 8, 694.	4.1	12
42	Bio-inspired multiple-stimuli responsive porous materials with switchable flexibility and programmable shape morphing capability. Carbon, 2020, 161, 702-711.	10.3	12
43	Natural cork agglomerate enabled mechanically robust rigid polyurethane foams with outstanding viscoelastic damping properties. Polymer, 2021, 217, 123437.	3.8	12
44	Hyperelasticity of three-dimensional carbon nanotube sponge controlled by the stiffness of covalent junctions. Carbon, 2015, 95, 640-645.	10.3	11
45	Determination of material constants of vertically aligned carbon nanotube structures in compressions. Nanotechnology, 2015, 26, 245701.	2.6	11
46	Non-Einstein Viscosity Phenomenon of Acrylonitrileâ€“Butadieneâ€“Styrene Composites Containing Ligninâ€“Polycaprolactone Particulates Highly Dispersed by High-Shear Stress. ACS Omega, 2019, 4, 10036-10043.	3.5	11
47	All-Cellulose Paper with High Optical Transmittance and Haze Fabricated via Electrophoretic Deposition. ACS Sustainable Chemistry and Engineering, 2021, 9, 11110-11117.	6.7	9
48	Mechanical properties and flame retardancy of surface modified magnesium oxysulfate (5Mg(OH)2Â·MgSO4Â·3H2O) whisker for polypropylene composites. Journal of Materiomics, 2018, 4, 149-156.	5.7	8
49	Noncovalently assembled nanotubular porous layers for delaying of heating surface failure. Scientific Reports, 2014, 4, 6817.	3.3	7
50	Nanoplatelet reinforcement of cavity cell walls in polymer foams using carbon dioxide supercritical fluid. Journal of Applied Polymer Science, 2018, 135, 46615.	2.6	7
51	Semi-empirical investigation of the interfacial shear strength of short fiber polymer composites. Polymer Testing, 2019, 74, 99-103.	4.8	7
52	Forced infiltration of silica beads into densely-packed glass fibre beds for thin composite laminates. RSC Advances, 2016, 6, 91341-91348.	3.6	6
53	Controllable and Predictable Viscoelastic Behavior of 3D Boronâ€Doped Multiwalled Carbon Nanotube Sponges. Particle and Particle Systems Characterization, 2016, 33, 21-26.	2.3	6
54	A Suggested Vacuum Bagging Process for the Fabrication of Single-Walled Carbon Nanotube/Epoxy Composites That Maximize Electromagnetic Interference Shielding Effectiveness. Polymers, 2021, 13, 1867.	4.5	6

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55	Polyamide-nylon 6 particulate polycarbonate composites with outstanding energy-absorbing properties. Polymer, 2022, 254, 125082.	3.8	6
56	Vertical Graphene Canal Mesh for Strain Sensing with a Supereminent Resolution. ACS Applied Materials & Interfaces, 2022, 14, 32387-32394.	8.0	6
57	Lifting-Force Maximization of a Micropatterned Electroadhesive Device Comparable to the Human-Finger Grip. ACS Applied Electronic Materials, 2020, 2, 1596-1602.	4.3	5
58	Natural Cork Suberin-Originated Ecofriendly Biopolyester Syntactic Foam. ACS Sustainable Chemistry and Engineering, 2022, 10, 7508-7514.	6.7	5
59	Experimental and numerical investigation of 17â€“4PH stainless steel fabricated by laser powder bed fusion and hot isostatic pressing. Materials Research Express, 2021, 8, 106512.	1.6	4
60	Natural cork/potato periderm derivatives enabled interface engineering of elastomer composites for tunable energy-absorbing capabilities. Industrial Crops and Products, 2021, 170, 113763.	5.2	4
61	Design optimization of smartphone camera housing fabricated by laser powder bed fusion using thermal analysis. Journal of Mechanical Science and Technology, 2022, 36, 699-708.	1.5	4
62	INVESTIGATION OF MECHANICAL DAMPING CHARACTERISTIC IN SHORT FIBERGLASS REINFORCED POLYCARBONATE COMPOSITES. Modern Physics Letters B, 2013, 27, 1350108.	1.9	3
63	A strategy to synthesize graphene-incorporated lignin polymer composite materials with uniform graphene dispersion and covalently bonded interface engineering. Korea Australia Rheology Journal, 2017, 29, 207-213.	1.7	3
64	Use of Nanoindentation, Finite Element Simulations, and a Combined Experimental/Numerical Approach to Characterize Elastic Moduli of Individual Porous Silica Particles. Particulate Science and Technology, 2015, 33, 213-218.	2.1	2
65	Multi-step cure kinetic model of ultra-thin glass fiber epoxy prepreg exhibiting both autocatalytic and diffusion-controlled regimes under isothermal and dynamic-heating conditions. Korea Australia Rheology Journal, 2017, 29, 157-162.	1.7	2
66	Adhesion and failure analysis of metal-polymer interface in flexible printed circuits boards. Journal of the Korean Physical Society, 2017, 71, 1019-1026.	0.7	2
67	Capturing Polar and Nonpolar Particles with an Electroadhesive Device Using Interfacial and Orientational Polarization. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	2
68	Porous Carbon Boosted Non-Enzymatic Glutamate Detection with Ultra-High Sensitivity in Broad Range Using Cu Ions. Nanomaterials, 2022, 12, 1987.	4.1	2
69	Toughening mechanisms of thermoplastic particulate polycarbonate composites. , 2012, , .		1
70	Determination of local debonding stress and investigation of its effect on mechanical properties of glass short fiber reinforced polycarbonate composites. , 2012, , .		1
71	Effect of geometry and loading fractions on energy absorbing properties of fiberglass polymer composite under quasiâ€static and lowâ€velocity impact loadings. Journal of Applied Polymer Science, 2014, 131, .	2.6	0