Woong-Ryeol Yu

List of Publications by Year
in descending order

101	2,357	279487	233125
papers	citations	23 h-index	45 g-index

101	101	101	3000
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent Progress in Coaxial Electrospinning: New Parameters, Various Structures, and Wide Applications. Advanced Materials, 2018, 30, e1704765.	11.1	313
2	Fabrication of long and discontinuous natural fiber reinforced polypropylene biocomposites and their mechanical properties. Fibers and Polymers, 2009, 10, 83-90.	1.1	195
3	Fabrication of Si core/C shell nanofibers and their electrochemical performances as a lithium-ion battery anode. Journal of Power Sources, 2012, 206, 267-273.	4.0	136
4	A simple anisotropic hyperelastic constitutive model for textile fabrics with application to forming simulation. Composites Part B: Engineering, 2013, 52, 275-281.	5.9	121
5	Anodic properties of hollow carbon nanofibers for Li-ion battery. Journal of Power Sources, 2012, 199, 53-60.	4.0	109
6	Effect of Pores in Hollow Carbon Nanofibers on Their Negative Electrode Properties for a Lithium Rechargeable Battery. ACS Applied Materials & Interfaces, 2012, 4, 6702-6710.	4.0	84
7	Silicon/Carbon Nanotube/BaTiO₃ Nanocomposite Anode: Evidence for Enhanced Lithium-Ion Mobility Induced by the Local Piezoelectric Potential. ACS Nano, 2016, 10, 2617-2627.	7.3	81
8	Thermo-mechanical constitutive modeling of shape memory polyurethanes using a phenomenological approach. International Journal of Plasticity, 2010, 26, 204-218.	4.1	73
9	Three-dimensional constitutive model for shape memory polymers using multiplicative decomposition of the deformation gradient and shape memory strains. Mechanics of Materials, 2016, 93, 43-62.	1.7	59
10	Design, fabrication, and bending test of shape memory polymer composite hinges for space deployable structures. Journal of Intelligent Material Systems and Structures, 2018, 29, 1560-1574.	1.4	53
11	New Electrospinning Nozzle to Reduce Jet Instability and Its Application to Manufacture of Multi-layered Nanofibers. Scientific Reports, 2014, 4, 6758.	1.6	50
12	Novel multi-layered 1-D nanostructure exhibiting the theoretical capacity of silicon for a super-enhanced lithium-ion battery. Nanoscale, 2014, 6, 5989.	2.8	47
13	An effective method for manufacturing hollow carbon nanofibers and microstructural analysis. Macromolecular Research, 2012, 20, 605-613.	1.0	46
14	Prediction of the tensile strength of unidirectional carbon fiber composites considering the interfacial shear strength. Composite Structures, 2017, 168, 92-103.	3.1	38
15	Facile conductive bridges formed between silicon nanoparticles inside hollow carbon nanofibers. Nanoscale, 2013, 5, 4790.	2.8	37
16	Optimally conductive networks in randomly dispersed CNT:graphene hybrids. Scientific Reports, 2015, 5, 16568.	1.6	37
17	Poling-free spinning process of manufacturing piezoelectric yarns for textile applications. Materials and Design, 2019, 179, 107889.	3.3	37
18	Thermoresponsive shape memory characteristics of polyurethane electrospun web. Journal of Applied Polymer Science, 2011, 120, 492-500.	1.3	35

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19	Long-term properties of carbon fiber-reinforced shape memory epoxy/polymer composites exposed to vacuum and ultraviolet radiation. Smart Materials and Structures, 2019, 28, 115013.	1.8	27
20	3D braid scaffolds for regeneration of articular cartilage. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 34, 37-46.	1.5	26
21	All-Inkjet-Printed Flexible Nanobio-Devices with Efficient Electrochemical Coupling Using Amphiphilic Biomaterials. ACS Applied Materials & Interfaces, 2020, 12, 24231-24241.	4.0	25
22	Face-Centered-Cubic Lithium Crystals Formed in Mesopores of Carbon Nanofiber Electrodes. ACS Nano, 2013, 7, 5801-5807.	7.3	24
23	PA6/MWNT nanocomposites fabricated using electrospun nanofibers containing MWNT. Macromolecular Research, 2010, 18, 162-169.	1.0	23
24	Prediction of delamination of steel-polymer composites using cohesive zone model and peeling tests. Composite Structures, 2017, 160, 118-127.	3.1	23
25	Fiber electrode by one-pot wet-spinning of graphene and manganese oxide nanowires for wearable lithium-ion batteries. Journal of Applied Electrochemistry, 2017, 47, 865-875.	1.5	22
26	Fabrication of SnO2nanotube microyarn and its gas sensing behavior. Smart Materials and Structures, 2011, 20, 105019.	1.8	21
27	Fabrication of double-tubular carbon nanofibers using quadruple coaxial electrospinning. Nanotechnology, 2014, 25, 465602.	1.3	21
28	Rational design of a Siâ€“Snâ€“C ternary anode having exceptional rate performance. Energy Storage Materials, 2019, 17, 62-69.	9.5	20
29	Polyurethane smart fiber with shape memory function: Experimental characterization and constitutive modelling. Fibers and Polymers, 2007, 8, 377-385.	1.1	18
30	Fabrication of carbon nanofibers with Si nanoparticle-stuffed cylindrical multi-channels via coaxial electrospinning and their anodic performance. RSC Advances, 2014, 4, 47389-47395.	1.7	18
31	Improved adhesion of metalâ€“polymer sandwich composites using a spontaneous polymer grafting process. Functional Composites and Structures, 2019, 1, 025004.	1.6	18
32	Mechanical behavior of shape memory fibers spun from nanoclay-tethered polyurethanes. Macromolecular Research, 2008, 16, 644-650.	1.0	17
33	Dispersion polymerization of styrene using poly(4-vinylpyridine) macro-RAFT agent under UV radiation. Fibers and Polymers, 2012, 13, 135-138.	1.1	17
34	Facile method to improve initial reversible capacity of hollow carbon nanofiber anodes. European Polymer Journal, 2015, 70, 392-399.	2.6	17
35	TiO2@SnO2@TiO2 triple-shell nanotube anode for high-performance lithium-ion batteries. Journal of Solid State Electrochemistry, 2017, 21, 2365-2371.	1.2	17
36	Electrochemical wet-spinning process for fabricating strong PAN fibers via an in situ induced plasticizing effect. Polymer, 2020, 202, 122641.	1.8	17

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37	Electrospun carbon nanofibers as a functional composite platform: a review of highly tunable microstructures and morphologies for versatile applications. Functional Composites and Structures, 2020, 2, 012001.	1.6	16
38	Preparation of Epoxy Shape Memory Polymers for Deployable Space Structures Using Flexible Diamines. Fibers and Polymers, 2018, 19, 1799-1805.	1.1	15
39	Theoretical and experimental study of braid pattern in mandrels with arbitrary cross-sections. Journal of Composite Materials, 2018, 52, 4009-4022.	1.2	15
40	Modeling of anisotropic creep behavior of coated textile membranes. Fibers and Polymers, 2006, 7, 123-128.	1.1	14
41	Increased breaking strain of carbon fiber-reinforced plastic and steel hybrid laminate composites. Composite Structures, 2020, 235, 111768.	3.1	14
42	Redox-Triggered Coloration Mechanism of Electrically Tunable Colloidal Photonic Crystals. Langmuir, 2017, 33, 9057-9065.	1.6	13
43	Control of Braid Pattern on Every Side of a Braided Composite Part Produced by Asymmetrical Braiding Process. Applied Composite Materials, 2019, 26, 479-492.	1.3	13
44	Preparation of epoxy-based shape memory polymers for deployable space structures using diglycidyl ether of ethoxylated bisphenol-A. Journal of Polymer Research, 2019, 26, 1.	1.2	12
45	Three-dimensional constitutive model of woven fabric-reinforced shape memory polymer composites considering thermal residual stress. Smart Materials and Structures, 2019, 28, 035023.	1.8	12
46	Fabrication of a Highly Stretchable, Wrinkleâ€Free Electrode with Switchable Transparency Using a Freeâ€Standing Silver Nanofiber Network and Shape Memory Polymer Substrate. Macromolecular Rapid Communications, 2020, 41, 2000129.	2.0	12
47	Semiconducting carbon nanotube fibers for electrochemical biosensor platforms. Materials and Design, 2020, 192, 108740.	3.3	12
48	Mechanical properties of glass-reinforced composite/perforated metal sheet hybrids. Functional Composites and Structures, 2020, 2, 035005.	1.6	12
49	Predicting the tensile strength of needle-punched nonwoven mats using X-ray computed tomography and a statistical model. Fibers and Polymers, 2014, 15, 1202-1210.	1.1	11
50	Simulating rate- and temperature-dependent behaviors of adhesives using a nonlinear viscoelastic model. Mechanics of Materials, 2020, 147, 103446.	1.7	11
51	Accelerated Testing Method for Predicting Long-Term Properties of Carbon Fiber-Reinforced Shape Memory Polymer Composites in a Low Earth Orbit Environment. Polymers, 2021, 13, 1628.	2.0	11
52	The effects of adhesion on the tensile strength of steel-polymer sandwich composites. Advanced Composite Materials, 2021, 30, 443-461.	1.0	10
53	Determination of the transition temperature of shape memory polyurethanes using constrained recovery test. Fibers and Polymers, 2010, 11, 749-756.	1.1	9
54	Optical and shape memory properties of semicrystalline poly(cyclooctene) upon coldâ€drawing. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1595-1607.	2.4	9

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55	Microstructure and Mechanical Properties of Polyacrylonitrile Precursor Fiber with Dry and Wet Drawing Process. Polymers, 2021, 13, 1613.	2.0	9
56	Effect of propagation distance on acoustic emission of carbon fiber/epoxy composites. Structural Health Monitoring, 2021, 20, 3342-3353.	4.3	9
57	Measuring tensile strength of nanofibers using conductive substrates and dynamic mechanical analyzer. Fibers and Polymers, 2009, 10, 703-708.	1.1	8
58	Carbon nanotube film interlayer for strain and damage sensing in composites during dynamic compressive loading. Applied Physics Letters, 2012, 101, 221909.	1.5	8
59	Mechanical Metamaterials with Thermoresponsive Switching between Positive and Negative Poisson's Ratios. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800040.	1.2	8
60	Quantitative evaluation of the three-dimensional deployment behavior of a shape memory polymer antenna. Smart Materials and Structures, 2018, 27, 105007.	1.8	8
61	Improved electrical conductivity of poly(ethylene oxide) nanofibers using multi-walled carbon nanotubes. AIP Advances, 2018, 8, .	0.6	8
62	Three-dimensional constitutive model for shape-memory polymers considering temperature-rate dependent behavior. Smart Materials and Structures, 2021, 30, 035030.	1.8	8
63	New auxetic materials with stretch-dominant architecture using simple trusses. Mechanics of Advanced Materials and Structures, 2023, 30, 609-625.	1.5	8
64	Modeling of the piezoresistive behavior of carbon nanotube/polymer composites during stress relaxation. Polymer Composites, 2022, 43, 2672-2682.	2.3	8
65	Synthesis of water-soluble poly(vinyl alcohol)-grafted multi-walled carbon nanotubes. Macromolecular Research, 2010, 18, 458-462.	1.0	7
66	Robust yarn electrodes for microbatteries with high areal capacity. Materials and Design, 2019, 166, 107620.	3.3	7
67	Characterization and modeling of elastocaloric effects of shape memory poly(cyclooctene). Applied Physics Letters, 2019, 114, 013904.	1.5	7
68	Carbon nanotube fiber assemblies with braided insulation layers for washable capacitive textile touch sensors. Functional Composites and Structures, 2020, 2, 015007.	1.6	7
69	Stable Cycling of a 4 V Class Lithium Polymer Battery Enabled by In Situ Cross-Linked Ethylene Oxide/Propylene Oxide Copolymer Electrolytes with Controlled Molecular Structures. ACS Applied Materials & Interfaces, 2021, 13, 35664-35676.	4.0	7
70	A new auxetic structure with enhanced stiffness via stiffened elliptical perforations. Functional Composites and Structures, 2020, 2, 045006.	1.6	7
71	Moisturized Polyacrylonitrile Copolymer for Stronger Precursor Fibers. ACS Applied Polymer Materials, 2021, 3, 6285-6293.	2.0	7
72	Three-dimensional printing of continuous carbon fiber-reinforced polymer composites via in-situ pin-assisted melt impregnation. Additive Manufacturing, 2022, 55, 102860.	1.7	7

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73	Tension-induced twist of twist-spun carbon nanotube yarns and its effect on their torsional behavior. Scientific Reports, 2018, 8, 6146.	1.6	6
74	Investigation of Ib-Values for Determining Fracture Modes in Fiber-Reinforced Composite Materials by Acoustic Emission. Materials, 2021, 14, 3641.	1.3	6
75	Electrochemical properties of PVP-derived carbon nanospheres with various porosity and heteroatom contents in anode voltage range over full-cell operation. Journal of Industrial and Engineering Chemistry, 2022, 105, 146-157.	2.9	6
76	Frontally polymerizable shape memory polymer for 3D printing of free-standing structures. Smart Materials and Structures, 2022, 31, 025013.	1.8	6
77	A facile route to mechanically robust graphene oxide fibers. RSC Advances, 2019, 9, 20248-20255.	1.7	5
78	Continuous and rapid production of three-dimensional woven fabric preforms using a new weaving technique. Functional Composites and Structures, 2020, 2, 015005.	1.6	5
79	Gel Polymer Electrolytes Based on Crosslinked Networks by the Introduction of an Ionic Liquid Crosslinker with Ethylene Oxide Arms. ACS Applied Energy Materials, 2022, 5, 8381-8390.	2.5	5
80	Multi-scale modelling of 3D multi-layered braided composite tubes. International Journal of Material Forming, 2008, 1, 883-886.	0.9	3
81	Development of carbon composite bike fork using finite element analysis and a new pressure molding process. Fibers and Polymers, 2014, 15, 1517-1522.	1.1	3
82	Numerical simulation of gasâ€assisted polymerâ€melt electrospinning: Parametric study of a multinozzle system for mass production. Polymer Engineering and Science, 2020, 60, 2111-2121.	1.5	3
83	A micromechanical model of carbon fiber-reinforced plastic and steel hybrid laminate composites. Journal of Composite Materials, 2021, 55, 3071-3086.	1.2	3
84	Effect of interfacial properties on the damping performance of steelâ€“polymer sandwich cantilever beam composites. JVC/Journal of Vibration and Control, 2023, 29, 400-410.	1.5	3
85	A scalable, ecofriendly, and cost-effective lithium metal protection layer from a Post-it note. RSC Advances, 2021, 12, 346-354.	1.7	3
86	Influence of water absorption on the mechanical behavior of CFRPs manufactured by RTM at room temperature. Functional Composites and Structures, 2022, 4, 015007.	1.6	3
87	Mechanical analysis of geocomposites consisting of multi-axial warp knitted fabric and nonwoven mat. Fibers and Polymers, 2012, 13, 658-663.	1.1	2
88	Prediction of tensile and flexural strength of unidirectional CFRP considering the interfacial shear strength. AIP Conference Proceedings, 2016, , .	0.3	2
89	Simple design of a Siâ€“Snâ€“C ternary composite anode for Li-ion batteries. Journal of Industrial and Engineering Chemistry, 2021, 98, 275-282.	2.9	2
90	Microstructure Analysis of Drawing Effect and Mechanical Properties of Polyacrylonitrile Precursor Fiber According to Molecular Weight. Polymers, 2022, 14, 2625.	2.0	2

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91	Graphite Fiber Electrode by Continuous Wet-Spinning. ACS Applied Energy Materials, 2022, 5, 8963-8972.	2.5	2
92	A predictive approach to simulating the forming of viscous textile composite sheet. Revue Europeenne Des Elements, 2005, 14, 613-631.	0.1	1
93	Mechanical analysis of CFRP-steel hybrid composites considering the interfacial adhesion. AIP Conference Proceedings, 2017, , .	0.3	1
94	Constitutive modelling of carbon fiber-reinforced shape memory polymer composites. Journal of Physics: Conference Series, 2018, 1063, 012028.	0.3	1
95	Elastocaloric effects of carbon fabric-reinforced shape memory polymer composites. Functional Composites and Structures, 2019, 1, 015004.	1.6	1
96	Method for Characterizing the Rate-dependent Behavior of Aramid Fibers Coated with Shear Thickening Fluids. Fibers and Polymers, 2021, 22, 366-372.	1.1	1
97	A new cure kinetics model to simulate thermomechanical behavior of polymeric sealants for automotive applications. Functional Composites and Structures, 2021, 3, 045008.	1.6	1
98	Mechanical analysis of three dimensional woven carbon fiber-reinforced composites using fiber-based continuum model. AIP Conference Proceedings, 2016, , .	0.3	0
99	Welcome to Functional Composites and Structures. Functional Composites and Structures, 2019, 1, 010201.	1.6	0
100	Determination of critical testing frequency of the short fiberâ€reinforced plastics for efficient fatigue test. Polymer Composites, 0, , .	2.3	0
101	Synthesis of inherently helical nanofibers: Effects of solidification of electrified jet during electrospinning. Journal of Applied Polymer Science, 0, , 52352.	1.3	0