Hani E Naguib

List of Publications by Year in descending order

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205 papers 6,115 citations

76326 40 h-index 106344 65 g-index

210 all docs

210 docs citations

210 times ranked

6362 citing authors

#	Article	IF	CITATIONS
1	A Platform for Generation of Chamber-Specific Cardiac Tissues and Disease Modeling. Cell, 2019, 176, 913-927.e18.	28.9	398
2	Strategies for achieving ultra low-density polypropylene foams. Polymer Engineering and Science, 2002, 42, 1481-1492.	3.1	243
3	Fundamental foaming mechanisms governing the volume expansion of extruded polypropylene foams. Journal of Applied Polymer Science, 2004, 91, 2661-2668.	2.6	236
4	Cell Structure Evolution and the Crystallization Behavior of Polypropylene/Clay Nanocomposites Foams Blown in Continuous Extrusion. Industrial & Engineering Chemistry Research, 2010, 49, 9834-9845.	3.7	147
5	Novel Pliable Electrodes for Flexible Electrochemical Energy Storage Devices: Recent Progress and Challenges. Advanced Energy Materials, 2016, 6, 1600490.	19.5	136
6	Comparison of the thermal, dynamic mechanical and morphological properties of PLA-Lignin & PLA-Tannin particulate green composites. Composites Part B: Engineering, 2015, 82, 92-99.	12.0	107
7	A hybrid piezoelectric-triboelectric generator for low-frequency and broad-bandwidth energy harvesting. Energy Conversion and Management, 2018, 174, 188-197.	9.2	104
8	Biodegradable Composite Foams of PLA and PHBV Using Subcritical CO2. Journal of Polymers and the Environment, 2008, 16, 258-266.	5.0	99
9	Advances in precursor system for silica-based aerogel production toward improved mechanical properties, customized morphology, and multifunctionality: A review. Advances in Colloid and Interface Science, 2020, 276, 102101.	14.7	99
10	Biocompatible shape memory polymer actuators with high force capabilities. European Polymer Journal, 2015, 67, 186-198.	5 . 4	94
11	Design and control of a shape memory alloy based dexterous robot hand. Smart Materials and Structures, 2007, 16, 1401-1414.	3.5	91
12	Effect of Nanoclay on the Mechanical Properties of PMMA/Clay Nanocomposite Foams. Journal of Cellular Plastics, 2006, 42, 325-342.	2.4	90
13	Ultralight Microcellular Polymer–Graphene Nanoplatelet Foams with Enhanced Dielectric Performance. ACS Applied Materials & Interfaces, 2018, 10, 19987-19998.	8.0	79
14	Design and development of novel bio-based functionally graded foams for enhanced acoustic capabilities. Journal of Materials Science, 2015, 50, 1248-1256.	3.7	74
15	A High Performance Triboelectric Nanogenerator Using Porous Polyimide Aerogel Film. Scientific Reports, 2019, 9, 1370.	3.3	72
16	Effect of Processing Parameters on the Mechanical Properties of Injection Molded Thermoplastic Polyolefin (TPO) Cellular Foams. Macromolecular Materials and Engineering, 2008, 293, 605-613.	3.6	69
17	Effect of Supercritical Gas on Crystallization of Linear and Branched Polypropylene Resins with Foaming Additives. Industrial & Engineering Chemistry Research, 2005, 44, 6685-6691.	3.7	68
18	Design and characterization of biocompatible shape memory polymer (SMP) blend foams with a dynamic porous structure. Polymer, 2015, 56, 82-92.	3.8	67

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19	Effect of filler arrangement and networking of hexagonal boron nitride on the conductivity of new thermal management polymeric composites. Composites Part B: Engineering, 2016, 85, 24-30.	12.0	66
20	Characterization of the Structure, Acoustic Property, Thermal Conductivity, and Mechanical Property of Highly Expanded Open ell Polycarbonate Foams. Macromolecular Materials and Engineering, 2015, 300, 48-56.	3.6	63
21	Fabrication and Characterization of Closed-Cell Rubber Foams Based on Natural Rubber/Carbon Black by One-Step Foam Processing. Industrial & Engineering Chemistry Research, 2016, 55, 2407-2416.	3.7	60
22	Study on the morphological, dynamic mechanical and thermal properties of PLA carbon nanofibre composites. Composites Part B: Engineering, 2016, 91, 631-639.	12.0	57
23	The orientation of carbon nanotubes in poly(ethyleneâ€ <i>co</i> a€octene) microcellular foaming and its suppression effect on cell coalescence. Polymer Engineering and Science, 2012, 52, 2078-2089.	3.1	56
24	High thermally conductive PLA based composites with tailored hybrid network of hexagonal boron nitride and graphene nanoplatelets. Polymer Composites, 2016, 37, 2196-2205.	4.6	54
25	Structure to properties relations of BPDA and PMDA backbone hybrid diamine polyimide aerogels. Polymer, 2019, 176, 213-226.	3.8	54
26	Polyurethane aerogel-based triboelectric nanogenerator for high performance energy harvesting and biomechanical sensing. Nano Energy, 2019, 65, 104019.	16.0	52
27	Analytical modeling and characterization of heat transfer in thermally conductive polymer composites filled with spherical particulates. Composites Part B: Engineering, 2013, 45, 43-49.	12.0	49
28	Development of high-porosity resorcinol formaldehyde aerogels with enhanced mechanical properties through improved particle necking under CO 2 supercritical conditions. Journal of Colloid and Interface Science, 2017, 485, 65-74.	9.4	49
29	CO2 sorption and diffusion in polymethyl methacrylate-clay nanocomposites. Polymer Engineering and Science, 2005, 45, 904-914.	3.1	48
30	Increase of open-cell content by plasticizing soft regions with secondary blowing agent. Polymer Engineering and Science, 2005, 45, 1445-1451.	3.1	47
31	Flexible, Reconfigurable, and Self-Healing TPU/Vitrimer Polymer Blend with Copolymerization Triggered by Bond Exchange Reaction. ACS Applied Materials & Exchange Reaction. ACS Applied Materials & Exchange Reaction.	8.0	47
32	Novel origami-inspired metamaterials: Design, mechanical testing and finite element modelling. Materials and Design, 2020, 186, 108242.	7.0	46
33	Synergistic effects of hybrid fillers on the development of thermally conductive polyphenylene sulfide composites. Journal of Applied Polymer Science, 2013, 127, 3293-3301.	2.6	45
34	Modeling and performance analysis of duck-shaped triboelectric and electromagnetic generators for water wave energy harvesting. International Journal of Energy Research, 2017, 41, 2392-2404.	4.5	45
35	Toward a 0.33â€W piezoelectric and electromagnetic hybrid energy harvester: Design, experimental studies and self-powered applications. Applied Energy, 2019, 255, 113805.	10.1	45
36	Constitutive modeling for mechanical behavior of PMMA microcellular foams. Polymer, 2005, 46, 11896-11903.	3.8	43

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37	Development, characterization, and modeling of environmentally friendly openâ€cell acoustic foams. Polymer Engineering and Science, 2013, 53, 1979-1989.	3.1	43
38	Development of polylactide openâ€cell foams with bimodal structure for highâ€acoustic absorption. Journal of Applied Polymer Science, 2014, 131, .	2.6	43
39	Standardized static and dynamic evaluation of myocardial tissue properties. Biomedical Materials (Bristol), 2017, 12, 025013.	3.3	41
40	Dielectric Properties of Sustainable Nanocomposites Based on Zein Protein and Lignin for Biodegradable Insulators. Advanced Functional Materials, 2017, 27, 1605142.	14.9	41
41	A heaving point absorber-based triboelectric-electromagnetic wave energy harvester: An efficient approach toward blue energy. International Journal of Energy Research, 2018, 42, 2431-2447.	4.5	41
42	Instantaneous peak 2.1 W-level hybrid energy harvesting from human motions for self-charging battery-powered electronics. Nano Energy, 2021, 81, 105629.	16.0	41
43	Effects of microsized and nanosized carbon fillers on the thermal and electrical properties of polyphenylene sulfide based composites. Polymer Engineering and Science, 2013, 53, 2398-2406.	3.1	40
44	Fabrication and Characterization of PLA/PHBV-Chitin Nanocomposites and Their Foams. Journal of Polymers and the Environment, 2014, 22, 119-130.	5.0	40
45	Porosity and composition dependence on electrical and piezoresistive properties of thermoplastic polyurethane nanocomposites. Journal of Materials Research, 2013, 28, 2415-2425.	2.6	39
46	The effect of graphene-nanoplatelets on gelation and structural integrity of a polyvinyltrimethoxysilane-based aerogel. RSC Advances, 2019, 9, 11503-11520.	3.6	39
47	Recent advances in tailoring and improving the properties of polyimide aerogels and their application. Advances in Colloid and Interface Science, 2022, 304, 102646.	14.7	39
48	Study of Shear and Extensional Viscosities of Biodegradable PBS/CO2 Solutions. Journal of Cellular Plastics, 2001, 37, 109-148.	2.4	38
49	Constitutive modeling of HDPE polymer/clay nanocomposite foams. Polymer, 2007, 48, 3349-3360.	3.8	38
50	Synthesis and characterization of openâ€eell foams for sound absorption with rotational molding method. Polymer Engineering and Science, 2009, 49, 1744-1754.	3.1	38
51	Theoretical modeling and experimental verification of percolation threshold with MWCNTs' rotation and translation around a growing bubble in conductive polymer composite foams. Composites Science and Technology, 2020, 199, 108345.	7.8	38
52	4D-printed hybrids with localized shape memory behaviour: Implementation in a functionally graded structure. Scientific Reports, 2019, 9, 18754.	3.3	37
53	Study on the thermoelectric properties of PVDF/MWCNT and PVDF/GNP composite foam. Smart Materials and Structures, 2015, 24, 085034.	3.5	36
54	Preparation of microcellular poly(ethyleneâ€ <i>co</i> â€octene) rubber foam with supercritical carbon dioxide. Journal of Applied Polymer Science, 2010, 116, 1994-2004.	2.6	35

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55	Double Dianhydride Backbone Polyimide Aerogels with Enhanced Thermal Insulation for Highâ€Temperature Applications. Macromolecular Materials and Engineering, 2020, 305, 1900777.	3.6	35
56	Novel, flexible, and transparent thin film polyimide aerogels with enhanced thermal insulation and high service temperature. Journal of Materials Chemistry C, 2022, 10, 5088-5108.	5.5	35
57	Toward the low actuation temperature of flexible shape memory polymer composites with room temperature deformability <i>via</i> induced plasticizing effect. Journal of Materials Chemistry B, 2017, 5, 8845-8853.	5.8	34
58	Nanostructure to thermal property relationship of resorcinol formaldehyde aerogels using the fractal technique. Nanoscale, 2018, 10, 10564-10575.	5.6	34
59	Hybrid Electroactive Shape Memory Polymer Composites with Room Temperature Deformability. Macromolecular Materials and Engineering, 2019, 304, 1900196.	3.6	33
60	Robust and Multifunctional Conductive Yarns for Biomedical Textile Computing. ACS Applied Electronic Materials, 2020, 2, 1554-1566.	4.3	33
61	Effect of Processing Parameters on Cellular Structures and Mechanical Properties of PMMA Microcellular Foams. Frontiers in Forests and Global Change, 2005, 24, 177-195.	1.1	32
62	A review on high thermally conductive polymeric composites. Polymer Composites, 2022, 43, 692-711.	4.6	32
63	Novel polyurethane elastomeric composites reinforced with alumina, aramid, and poly(p-phenylene-2,6-benzobisoxazole) short fibers, development and characterization of the thermal and dynamic mechanical properties. Composites Part B: Engineering, 2017, 122, 192-201.	12.0	31
64	In Situ Interface Design in Graphene-Embedded Polymeric Silica Aerogel with Organic/Inorganic Hybridization. ACS Applied Materials & Samp; Interfaces, 2020, 12, 26635-26648.	8.0	31
65	Design, simulation, and experimental characterization of a heaving triboelectric-electromagnetic wave energy harvester. Nano Energy, 2018, 50, 281-290.	16.0	30
66	An interlocked flexible piezoresistive sensor with 3D micropyramidal structures for electronic skin applications. Soft Matter, 2018, 14, 6912-6920.	2.7	29
67	High Performance Triboelectric Nanogenerator by Hot Embossing on Selfâ€Assembled Microâ€Particles. Advanced Engineering Materials, 2019, 21, 1700957.	3.5	28
68	Polyimide aerogels with novel bimodal micro and nano porous structure assembly for airborne nano filtering applications. RSC Advances, 2020, 10, 22909-22920.	3.6	28
69	Theoretical and experimental investigation of MWCNT dispersion effect on the elastic modulus of flexible PDMS/MWCNT nanocomposites. Nanotechnology Reviews, 2021, 11, 55-64.	5.8	28
70	Synthesis and characterization of novel low density polyethylene–multiwall carbon nanotube porous composites. Smart Materials and Structures, 2009, 18, 104002.	3.5	27
71	A numerical scheme for investigating the effect of bimodal structure on acoustic behavior of polylactide foams. Applied Acoustics, 2015, 88, 75-83.	3.3	27
72	Insights into in-situ sol-gel conversion in graphene modified polymer-based silica gels for multifunctional aerogels. Chemical Engineering Journal, 2020, 392, 123813.	12.7	27

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73	Hierarchically Structured Nitrogen-Doped Multilayer Reduced Graphene Oxide for Flexible Intercalated Supercapacitor Electrodes. ACS Applied Energy Materials, 2020, 3, 987-997.	5.1	27
74	Zinc oxide/carbon nanotube nanocomposite for high-performance flexible supercapacitor with sensing ability. Electrochimica Acta, 2020, 350, 136353.	5.2	27
75	Effect of processing parameters on the cellular morphology and mechanical properties of thermoplastic polyolefin (TPO) microcellular foams. Advances in Polymer Technology, 2007, 26, 232-246.	1.7	26
76	PPDA-PMDA polyimide aerogels with tailored nanostructure assembly for air filtering applications. Separation and Purification Technology, 2020, 250, 117279.	7.9	26
77	Novel, Flexible, and Ultrathin Pressure Feedback Sensor for Miniaturized Intraventricular Neurosurgery Robotic Tools. IEEE Transactions on Industrial Electronics, 2021, 68, 4415-4425.	7.9	26
78	Relation of impact strength to the microstructure of functionally graded porous structures of acrylonitrile butadiene styrene (ABS) foamed by thermally activated microspheres. Polymer, 2016, 98, 270-281.	3.8	25
79	Shape programming of polymeric based electrothermal actuator (ETA) via artificially induced stress relaxation. Scientific Reports, 2019, 9, 11445.	3.3	25
80	Foaming behavior of microcellular thermoplastic olefin blends. Journal of Cellular Plastics, 2013, 49, 223-244.	2.4	24
81	Constitutive modeling and experimental validation of the thermo-mechanical response of a shape memory composite containing shape memory alloy fibers and shape memory polymer matrix. Journal of Intelligent Material Systems and Structures, 2016, 27, 625-641.	2.5	24
82	Evolution of the Coefficient of Friction with Surface Wear for Advanced Surface Textured Composites. Advanced Materials Interfaces, 2017, 4, 1600983.	3.7	24
83	Reinforced resorcinol formaldehyde aerogel with Co-assembled polyacrylonitrile nanofibers and graphene oxide nanosheets. Materials and Design, 2018, 151, 154-163.	7.0	24
84	Design and Studies on a Low-Frequency Truss-Based Compressive-Mode Piezoelectric Energy Harvester. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2849-2858.	5.8	24
85	Porous poly(lactic acid) and PLAâ€nanocomposite structures. Journal of Applied Polymer Science, 2012, 124, 585-594.	2.6	23
86	Flexible multiwalled carbon nanotubes/conductive polymer composite electrode for supercapacitor applications. Smart Materials and Structures, 2015, 24, 115008.	3.5	23
87	Towards development of nanofibrous large strain flexible strain sensors with programmable shape memory properties. Smart Materials and Structures, 2018, 27, 055002.	3.5	23
88	Effect of Nanoclay and Foaming Conditions on the Mechanical Properties of HDPE–Clay Nanocomposite Foams. Journal of Cellular Plastics, 2007, 43, 111-121.	2.4	22
89	Towards the development of uniform closed cell nanocomposite foams using natural rubber containing pristine and organo-modified nanoclays. RSC Advances, 2016, 6, 53981-53990.	3.6	22
90	A constriction resistance model of conjugated polymer based piezoresistive sensors for electronic skin applications. Soft Matter, 2016, 12, 4180-4189.	2.7	22

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91	Room temperature deformable shape memory composite with fineâ€ŧuned crystallization induced via nanoclay particles. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1197-1206.	2.1	22
92	Self-Assembled Nanorod Structures on Nanofibers for Textile Electrochemical Capacitor Electrodes with Intrinsic Tactile Sensing Capabilities. ACS Applied Materials & Samp; Interfaces, 2018, 10, 19037-19046.	8.0	22
93	Freestanding Laser-Assisted Reduced Graphene Oxide Microribbon Textile Electrode Fabricated on a Liquid Surface for Supercapacitors and Breath Sensors. ACS Applied Materials & Samp; Interfaces, 2019, 11, 27183-27191.	8.0	22
94	Kinetostatic design of asymmetric notch joints for surgical robots. , 2016, , .		21
95	Development of synthetic simulators for endoscope-assisted repair of metopic and sagittal craniosynostosis. Journal of Neurosurgery: Pediatrics, 2018, 22, 128-136.	1.3	21
96	Fabrication of 3D electrospun structures from poly(lactideâ€ <i>co</i> â€glycolide) Tj ETQq0 0 0 rgBT /Overlock 2242-249.	10 Tf 50 5 2.1	47 Td (acid)â€ 20
97	Analysis and homogenization of functionally graded viscoelastic porous structures with a higher order plate theory and statistical based model of cellular distribution. Applied Mathematical Modelling, 2016, 40, 2190-2205.	4.2	20
98	Multi-functional flexible carbon fiber composites with controlled fiber alignment using additive manufacturing. Additive Manufacturing, 2018, 22, 360-367.	3.0	20
99	3D printing of Ron-Resch-like origami cores for compression and impact load damping. Smart Materials and Structures, 2019, 28, 015027.	3.5	20
100	Multifunctional Textured Surfaces with Enhanced Friction and Hydrophobic Behaviors Produced by Fiber Debonding and Pullout. ACS Applied Materials & Interfaces, 2016, 8, 29818-29826.	8.0	19
101	Effects of chitin nanowhiskers on the thermal, barrier, mechanical, and rheological properties of polypropylene nanocomposites. RSC Advances, 2016, 6, 72086-72095.	3.6	19
102	A Comparative Study on the Mechanical Properties of Different Natural Fiber Reinforced Free-Rise Polyurethane Foam Composites. Industrial & Engineering Chemistry Research, 2020, 59, 21745-21755.	3.7	19
103	Natural fillers as reinforcement for closed-molded polyurethane foam plaques: Mechanical, morphological, and thermal properties. Materials Today Communications, 2021, 27, 102187.	1.9	19
104	A review of 4D printing: Materials, structures, and designs towards the printing of biomedical wearable devices. Bioprinting, 2022, 27, e00217.	5.8	19
105	Development and characterization of solid and porous polylactideâ€multiwall carbon nanotube composites. Polymer Engineering and Science, 2011, 51, 43-53.	3.1	18
106	Novel Thermally Conductive Thermoplastic/Ceramic Composite Foams. Macromolecular Materials and Engineering, 2012, 297, 1014-1020.	3.6	18
107	A robust ink deposition system for binder jetting and material jetting. Additive Manufacturing, 2019, 29, 100820.	3.0	18
108	Novel 3D printing technology for CT phantom coronary arteries with high geometrical accuracy for biomedical imaging applications. Bioprinting, 2020, 18, e00074.	5.8	18

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109	Constitutive modeling for intercalated PMMA/clay nanocomposite foams. Polymer Engineering and Science, 2006, 46, 1787-1796.	3.1	17
110	Fabrication and percolation behaviour of novel porous conductive polyblends of polyaniline and poly(methyl methacrylate). Synthetic Metals, 2010, 160, 1832-1837.	3.9	17
111	Effect of biopolymer blends on physical and Acoustical properties of biocomposite foams. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1002-1013.	2.1	17
112	Mechanical stability analysis of carrageenan-based polymer gel for magnetic resonance imaging liver phantom with lesion particles. Journal of Medical Imaging, 2014, 1, 035502.	1.5	16
113	Effect of Recycling on the Rheological Properties and Foaming Behaviors of Branched Polypropylene. Frontiers in Forests and Global Change, 2003, 22, 1-22.	1.1	15
114	Mechanical and acoustic performance of compressionâ€molded openâ€cell polypropylene foams. Journal of Applied Polymer Science, 2010, 116, 1106-1115.	2.6	15
115	Thermal Composites of Biobased Polyamide with Boron Nitride Micro Networks. Journal of Polymers and the Environment, 2015, 23, 566-579.	5.0	15
116	Double-layer membrane cathode with improved oxygen diffusivity in zinc-air batteries. Energy Storage Materials, 2017, 8, 1-9.	18.0	15
117	1D/2D CNF/GNP Hybrid Nanofillers: Evaluation of the Effect of Surfactant on the Morphological, Mechanical, Fracture, and Thermal Characteristics of Their Nanocomposites with Epoxy Resin. Industrial & Description (1988) 1888 1889 1889 1889 1889 1889 1889	3.7	15
118	Ionic liquids facilitated dispersion of chitin nanowhiskers for reinforced epoxy composites. Carbohydrate Polymers, 2020, 247, 116746.	10.2	15
119	Binder Jetting Fabrication of Highly Flexible and Electrically Conductive Graphene/PVOH Composites. Additive Manufacturing, 2020, 36, 101565.	3.0	15
120	Green and Sustainable Layered Chitin–Vitrimer Composite with Enhanced Modulus, Reprocessability, and Smart Actuator Function. ACS Sustainable Chemistry and Engineering, 2020, 8, 15168-15178.	6.7	15
121	Preparation of a novel double crosslinked chitin aerogel via etherification with high strength. Carbohydrate Polymers, 2021, 265, 118014.	10.2	15
122	3Dâ€Knit Dry Electrodes using Conductive Elastomeric Fibers for Longâ€Term Continuous Electrophysiological Monitoring. Advanced Materials Technologies, 2022, 7, .	5.8	15
123	The Effect of Clay Content on PMMA-Clay Nanocomposite Foams. Frontiers in Forests and Global Change, 2005, 24, 49-70.	1.1	14
124	A Study on the Thermomechanical Properties of Shape Memory Alloys-based Actuators used in Artificial Muscles. Journal of Intelligent Material Systems and Structures, 2007, 18, 11-18.	2.5	14
125	Viscoelastic properties of poly(εâ€eaprolactone) – hydroxyapatite micro―and nanoâ€eomposites. Polymers for Advanced Technologies, 2013, 24, 144-150.	3.2	14
126	Chitin nano-whiskers (CNWs) as a bio-based bio-degradable reinforcement for epoxy: evaluation of the impact of CNWs on the morphological, fracture, mechanical, dynamic mechanical, and thermal characteristics of DGEBA epoxy resin. RSC Advances, 2019, 9, 11063-11076.	3.6	14

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127	Constitutive modeling for characterizing the compressive behavior of PMMA open-cell foams. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 436-443.	2.1	13
128	Study on Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Boron Nitride Composites for Hybrid Heat Sinks. Industrial & Liquid Crystal Polymer-Hexagonal Research, 2013, 52, 8332-8339.	3.7	13
129	Fabrication and microstructural characterization of functionally graded porous acrylonitrile butadiene styrene and the effect of cellular morphology on creep behavior. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 795-803.	2.1	13
130	Carbon nano fibers reinforced composites origami inspired mechanical metamaterials with passive and active properties. Smart Materials and Structures, 2017, 26, 105039.	3.5	13
131	3D printing complex lattice structures for permeable liver phantom fabrication. Bioprinting, 2018, 10, e00025.	5. 8	13
132	Electric Field Application i>In Vivo / i>Regulates Neural Precursor Cell Behavior in the Adult Mammalian Forebrain. ENeuro, 2020, 7, ENEURO.0273-20.2020.	1.9	13
133	A semi-empirical model relating micro structure to acoustic properties of bimodal porous material. Journal of Applied Physics, 2015, 117, .	2.5	11
134	A 3D Printed Device for Low Cost Neural Stimulation in Mice. Frontiers in Neuroscience, 2019, 13, 784.	2.8	11
135	Novel Electrode Designs for Neurostimulation in Regenerative Medicine: Activation of Stem Cells. Bioelectricity, 2020, 2, 348-361.	1.1	11
136	Synthesis, structures and properties of hydrophobic Alkyltrimethoxysilane-Polyvinyltrimethoxysilane hybrid aerogels with different alkyl chain lengths. Journal of Colloid and Interface Science, 2022, 608, 720-734.	9.4	11
137	Development of High Thermally Conductive and Electrically Insulative Polylactic Acid (PLA) and Hexagonal Boron Nitride (hBN) Composites for Electronic Packaging Applications. Journal of Biobased Materials and Bioenergy, 2015, 9, 145-154.	0.3	11
138	A unified multiphysics finite element model of the polypyrrole trilayer actuation mechanism. Journal of Intelligent Material Systems and Structures, 2013, 24, 548-558.	2.5	10
139	Fabrication and characterization of ceramic-filled thermoplastics composites with enhanced multifunctional properties. Journal of Thermoplastic Composite Materials, 2014, 27, 541-557.	4.2	10
140	Highly flexible binder-free core–shell nanofibrous electrode for lightweight electrochemical energy storage using recycled water bottles. Nanotechnology, 2016, 27, 325402.	2.6	10
141	Introducing revolute joints into piezoelectric energy harvesters. Energy, 2020, 192, 116604.	8.8	10
142	Highly stable bifunctional catalyst for Zn-Air batteries: The effect of a nitrated carbon support on Co3O4 activity. Journal of Power Sources, 2020, 453, 227834.	7.8	10
143	Flexible, Air Dryable, and Fiber Modified Aerogel-Based Wet Electrode for Electrophysiological Monitoring. IEEE Transactions on Biomedical Engineering, 2021, 68, 1820-1827.	4.2	10
144	Polypyrrole Nanofoam/Carbon Nanotube Multilayered Electrode for Flexible Electrochemical Capacitors. ACS Applied Energy Materials, 2022, 5, 4059-4069.	5.1	10

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145	Challenge to fortyfold expansion of biodegradable polyester foams by using carbon dioxide as a blowing agent. Journal of Vinyl and Additive Technology, 2000, 6, 39-48.	3.4	9
146	Development and modeling of multi-phase polymeric origami inspired architecture by using pre-molded geometrical features. Smart Materials and Structures, 2017, 26, 025012.	3.5	9
147	Development of a phantom network for optimization of coronary artery disease imaging using computed tomography. Biomedical Physics and Engineering Express, 2019, 5, 045019.	1.2	9
148	Processing and properties of melt spun polylactide-multiwall carbon nanotube fiber composites. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 477-484.	2.1	8
149	Electroactive polymer actuators for active optical components. Journal of Intelligent Material Systems and Structures, 2015, 26, 2556-2564.	2.5	8
150	Soft flexible conductive CNT nanocomposites for ECG monitoring. Smart Materials and Structures, 2021, 30, 065003.	3.5	8
151	Fiber-matrix adhesion between high-density polyethylene and carbon fiber. Polymer Testing, 2022, 105, 107423.	4.8	8
152	A binder jet 3D printed MXene composite for strain sensing and energy storage application. Nanoscale Advances, 2022, 4, 916-925.	4.6	8
153	Triangular-based origami: Modelling and testing the parameterized design for geometrical and mechanical analysis. Thin-Walled Structures, 2022, 173, 108993.	5.3	8
154	A Study of the Mechanics of Porous Plga 85/15 Scaffold in Compression. Polymers and Polymer Composites, 2007, 15, 437-443.	1.9	7
155	Study of the effects of processing parameters on the sound absorption of open-cell microcellular polymeric foams. Noise Control Engineering Journal, 2010, 58, 18.	0.3	7
156	Solvent-assisted electrospun fibers with ultrahigh stretchability and strain sensing capabilities. Smart Materials and Structures, 2019, 28, 055018.	3.5	7
157	Effect of revolute joint mechanism on the performance of cantilever piezoelectric energy harvester. Smart Materials and Structures, 2019, 28, 085043.	3.5	7
158	Role of interfacial adhesion and fiber length on the mechanical performance fiber reinforced thermoplastic elastomers. Composites Science and Technology, 2021, 213, 108928.	7.8	7
159	A Parametric Study on the Processing and Physical Characterization of PLGA 50/50 Bioscaffolds. Journal of Cellular Plastics, 2008, 44, 189-202.	2.4	6
160	Scalable sensing of hydrocarbon pollutants using soluble chemiresistive polymer composites. Materials Chemistry and Physics, 2020, 239, 122119.	4.0	6
161	Template-Assisted Self-Assembly of Conductive Polymer Electrodes for Ionic Electroactive Polymers. Frontiers in Bioengineering and Biotechnology, 2020, 8, 837.	4.1	6
162	Position control of an experimental robotic arm driven by artificial muscles based on shape memory alloys. International Journal of Mechanics and Materials in Design, 2006, 3, 223-236.	3.0	5

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