

Ick-Soo Kim

List of Publications by Year in descending order

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117
papers

4,645
citations

81900

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times ranked

5019
citing authors

#	ARTICLE	IF	CITATIONS
1	A Review of Structure Construction of Silk Fibroin Biomaterials from Single Structures to Multi-Level Structures. <i>International Journal of Molecular Sciences</i> , 2017, 18, 237.	4.1	333
2	Thiol-functionalized cellulose nanofiber membranes for the effective adsorption of heavy metal ions in water. <i>Carbohydrate Polymers</i> , 2020, 234, 115881.	10.2	180
3	Reusability Comparison of Melt-Blown vs Nanofiber Face Mask Filters for Use in the Coronavirus Pandemic. <i>ACS Applied Nano Materials</i> , 2020, 3, 7231-7241.	5.0	177
4	Cellulose acetate nanofibers embedded with AgNPs anchored TiO ₂ nanoparticles for long term excellent antibacterial applications. <i>Carbohydrate Polymers</i> , 2019, 207, 640-649.	10.2	123
5	Manuka honey incorporated cellulose acetate nanofibrous mats: Fabrication and in vitro evaluation as a potential wound dressing. <i>International Journal of Biological Macromolecules</i> , 2020, 155, 479-489.	7.5	118
6	Tunichrome-inspired pyrogallol functionalized chitosan for tissue adhesion and hemostasis. <i>Carbohydrate Polymers</i> , 2019, 208, 77-85.	10.2	114
7	Copper oxide (CuO) loaded polyacrylonitrile (PAN) nanofiber membranes for antimicrobial breath mask applications. <i>Current Research in Biotechnology</i> , 2019, 1, 1-10.	3.7	101
8	Cationic-cellulose nanofibers: Preparation and dyeability with anionic reactive dyes for apparel application. <i>Carbohydrate Polymers</i> , 2013, 91, 434-443.	10.2	95
9	Noble metal/functionalized cellulose nanofiber composites for catalytic applications. <i>Carbohydrate Polymers</i> , 2015, 132, 554-564.	10.2	91
10	Stabilized nanofibers of polyvinyl alcohol (PVA) crosslinked by unique method for efficient removal of heavy metal ions. <i>Journal of Water Process Engineering</i> , 2020, 33, 101111.	5.6	85
11	Electrospun tri-layered zein/PVP-GO/zein nanofiber mats for providing biphasic drug release profiles. <i>International Journal of Pharmaceutics</i> , 2017, 531, 101-107.	5.2	84
12	Control of the morphology of cellulose acetate nanofibers via electrospinning. <i>Cellulose</i> , 2018, 25, 2829-2837.	4.9	83
13	Design and characterization of dual drug delivery based on in-situ assembled PVA/PAN core-shell nanofibers for wound dressing application. <i>Scientific Reports</i> , 2019, 9, 12640.	3.3	81
14	Ultrasonic-assisted deacetylation of cellulose acetate nanofibers: A rapid method to produce cellulose nanofibers. <i>Ultrasonics Sonochemistry</i> , 2017, 36, 319-325.	8.2	79
15	Electrospun Zein Nanofiber as a Green and Recyclable Adsorbent for the Removal of Reactive Black 5 from the Aqueous Phase. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4340-4351.	6.7	76
16	Construction of aerogels based on nanocrystalline cellulose and chitosan for high efficient oil/water separation and water disinfection. <i>Carbohydrate Polymers</i> , 2020, 243, 116461.	10.2	75
17	Dyeing and characterization of cellulose nanofibers to improve color yields by dual padding method. <i>Cellulose</i> , 2013, 20, 1469-1476.	4.9	74
18	Enhanced Wettability and Thermal Stability of a Novel Polyethylene Terephthalate-Based Poly(Vinylidene Fluoride) Nanofiber Hybrid Membrane for the Separator of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 26400-26406.	8.0	69

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19	Sub-micron silk fibroin film with high humidity sensibility through color changing. RSC Advances, 2017, 7, 17889-17897.	3.6	66
20	Silver sulfadiazine loaded zein nanofiber mats as a novel wound dressing. RSC Advances, 2019, 9, 268-277.	3.6	64
21	Ultrasonic dyeing of cellulose nanofibers. Ultrasonics Sonochemistry, 2016, 31, 350-354.	8.2	63
22	Bioactive Sambong oil-loaded electrospun cellulose acetate nanofibers: Preparation, characterization, and in-vitro biocompatibility. International Journal of Biological Macromolecules, 2021, 166, 1009-1021.	7.5	61
23	Dyeing and characterization of regenerated cellulose nanofibers with vat dyes. Carbohydrate Polymers, 2017, 174, 443-449.	10.2	59
24	Synthesis and attachment of silver and copper nanoparticles on cellulose nanofibers and comparative antibacterial study. Cellulose, 2019, 26, 6629-6640.	4.9	58
25	Rhus verniciflua as a green corrosion inhibitor for mild steel in 1 M H ₂ SO ₄ . RSC Advances, 2016, 6, 57144-57153.	3.6	57
26	Self-Cleaning Properties of Electrospun PVA/TiO ₂ and PVA/ZnO Nanofibers Composites. Nanomaterials, 2018, 8, 644.	4.1	56
27	Cold pad-batch dyeing of cellulose nanofibers with reactive dyes. Cellulose, 2014, 21, 3089-3095.	4.9	55
28	Characterizations and application of CA/ZnO/AgNP composite nanofibers for sustained antibacterial properties. Materials Science and Engineering C, 2019, 105, 110077.	7.3	54
29	Preparation and characterizations of multifunctional PVA/ZnO nanofibers composite membranes for surgical gown application. Journal of Materials Research and Technology, 2019, 8, 1328-1334.	5.8	54
30	Accelerated skin wound healing using electrospun nanofibrous mats blended with mussel adhesive protein and polycaprolactone. Journal of Biomedical Materials Research - Part A, 2017, 105, 218-225.	4.0	52
31	A comparative study on synthesis of AgNPs on cellulose nanofibers by thermal treatment and DMF for antibacterial activities. Materials Science and Engineering C, 2019, 98, 1179-1195.	7.3	51
32	Preparation and In-Vitro Assessment of Hierarchical Organized Antibacterial Breath Mask Based on Polyacrylonitrile/Silver (PAN/AgNPs) Nanofiber. Nanomaterials, 2018, 8, 461.	4.1	50
33	Antibacterial properties of in situ and surface functionalized impregnation of silver sulfadiazine in polyacrylonitrile nanofiber mats. International Journal of Nanomedicine, 2019, Volume 14, 2693-2703.	6.7	48
34	Fabrication of Promising Antimicrobial Aloe Vera/PVA Electrospun Nanofibers for Protective Clothing. Materials, 2020, 13, 3884.	2.9	47
35	Three-dimensional cheese-like carbon nanoarchitecture with tremendous surface area and pore construction derived from corn as superior electrode materials for supercapacitors. Applied Surface Science, 2017, 409, 52-59.	6.1	46
36	Zein nanofibers via deep eutectic solvent electrospinning: tunable morphology with super hydrophilic properties. Scientific Reports, 2020, 10, 15307.	3.3	46

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37	Enhancement of mechanical properties of polymeric nanofibers by controlling crystallization behavior using a simple freezing/thawing process. RSC Advances, 2017, 7, 43994-44000.	3.6	45
38	Needle-like MnO ₂ /activated carbon nanocomposites derived from human hair as versatile electrode materials for supercapacitors. RSC Advances, 2015, 5, 81492-81498.	3.6	44
39	Lignin-mediated in-situ synthesis of CuO nanoparticles on cellulose nanofibers: A potential wound dressing material. International Journal of Biological Macromolecules, 2021, 173, 315-326.	7.5	42
40	Carboxymethyl Cellulose (CMC) Based Electrospun Composite Nanofiber Mats for Food Packaging. Polymers, 2021, 13, 302.	4.5	42
41	Antibacterial mechanisms of various copper species incorporated in polymeric nanofibers against bacteria. Materials Today Communications, 2020, 25, 101377.	1.9	41
42	Cellulose acetate/multi-wall carbon nanotube/Ag nanofiber composite for antibacterial applications. Materials Science and Engineering C, 2020, 110, 110679.	7.3	41
43	Highly dispersed nanoscale hydroxyapatite on cellulose nanofibers for bone regeneration. Materials Letters, 2016, 168, 56-61.	2.6	40
44	Fabrication and characterization of nanofibers of honey/poly(1,4-cyclohexane dimethylene isosorbide) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7.3	39
45	Ultrasonic-assisted dyeing of Nylon-6 nanofibers. Ultrasonics Sonochemistry, 2017, 39, 34-38.	8.2	38
46	Fabrication of Two Polyester Nanofiber Types Containing the Biobased Monomer Isosorbide: Poly (Ethylene Glycol 1,4-Cyclohexane Dimethylene Isosorbide Terephthalate) and Poly (1,4-Cyclohexane) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7.3	37
47	Antibacterial efficacy of poly(vinyl alcohol) composite nanofibers embedded with silver-anchored silica nanoparticles. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1121-1128.	3.4	36
48	Thiol-based chemistry as versatile routes for the effective functionalization of cellulose nanofibers. Carbohydrate Polymers, 2019, 226, 115259.	10.2	36
49	Electrospun Momordica charantia incorporated polyvinyl alcohol (PVA) nanofibers for antibacterial applications. Materials Today Communications, 2020, 24, 101161.	1.9	36
50	Preparation of colored recycled polyethylene terephthalate nanofibers from waste bottles: Physicochemical studies. Advances in Polymer Technology, 2018, 37, 2820-2827.	1.7	35
51	Effect of molecular weight on the structure and mechanical properties of silk sericin gel, film, and sponge. International Journal of Biological Macromolecules, 2018, 119, 821-832.	7.5	35
52	Electrospun tungsten trioxide nanofibers decorated with palladium oxide nanoparticles exhibiting enhanced photocatalytic activity. RSC Advances, 2017, 7, 6108-6113.	3.6	34
53	Highly efficient and robust electrospun nanofibers for selective removal of acid dye. Journal of Molecular Liquids, 2017, 244, 478-488.	4.9	32
54	Optimized Loading of Carboxymethyl Cellulose (CMC) in Tri-component Electrospun Nanofibers Having Uniform Morphology. Polymers, 2020, 12, 2524.	4.5	32

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55	Pad dyeing of cellulose acetate nanofibres with disperse dyes. <i>Coloration Technology</i> , 2013, 129, 159-163.	1.5	31
56	Sonication induced effective approach for coloration of compact polyacrylonitrile (PAN) nanofibers. <i>Ultrasonics Sonochemistry</i> , 2019, 51, 399-405.	8.2	30
57	Graphene oxide as a polymeric N-halamine carrier and release platform: Highly-efficient, sustained-release antibacterial property and great storage stability. <i>Materials Science and Engineering C</i> , 2019, 103, 109877.	7.3	29
58	Handspinning Enabled Highly Concentrated Carbon Nanotubes with Controlled Orientation in Nanofibers. <i>Scientific Reports</i> , 2016, 6, 37590.	3.3	28
59	Facile Mechanochemical Synthesis of Nickel/Graphene Oxide Nanocomposites with Unique and Tunable Morphology: Applications in Heterogeneous Catalysis and Supercapacitors. <i>Catalysts</i> , 2019, 9, 486.	3.5	27
60	Wet-spun bi-component alginate based hydrogel fibers: Development and in-vitro evaluation as a potential moist wound care dressing. <i>International Journal of Biological Macromolecules</i> , 2021, 168, 601-610.	7.5	27
61	Evaluating Antibacterial Efficacy and Biocompatibility of PAN Nanofibers Loaded with Diclofenac Sodium Salt. <i>Polymers</i> , 2021, 13, 510.	4.5	27
62	Aqueous hardness removal by anionic functionalized electrospun cellulose nanofibers. <i>Cellulose</i> , 2018, 25, 5985-5997.	4.9	26
63	Cyclodextrin functionalized cellulose nanofiber composites for the faster adsorption of toluene from aqueous solution. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 70, 352-358.	5.3	24
64	Fabricating Antibacterial and Antioxidant Electrospun Hydrophilic Polyacrylonitrile Nanofibers Loaded with AgNPs by Lignin-Induced In-Situ Method. <i>Polymers</i> , 2021, 13, 748.	4.5	24
65	Zn/Carbon nanofibers for efficient adsorption of lead from aqueous solutions. <i>Environmental Technology (United Kingdom)</i> , 2020, 41, 2731-2741.	2.2	23
66	Comparison of fabrication methods for the effective loading of Ag onto PVA nanofibers. <i>Textile Reseach Journal</i> , 2019, 89, 625-634.	2.2	22
67	Readily Functionalizable and Stabilizable Polymeric Particles with Controlled Size and Morphology by Electrospray. <i>Scientific Reports</i> , 2018, 8, 15725.	3.3	21
68	Synthesis of Highly Conductive Electrospun Recycled Polyethylene Terephthalate Nanofibers Using the Electroless Deposition Method. <i>Nanomaterials</i> , 2021, 11, 531.	4.1	21
69	Fabrication of silk fibroin/eggshell nanofiber membranes for facemasks. <i>Fibers and Polymers</i> , 2016, 17, 1776-1781.	2.1	20
70	Human Hair: A Suitable Platform for Catalytic Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5409-5414.	6.7	19
71	Utilization of Human Hair as a Synergistic Support for Ag, Au, Cu, Ni, and Ru Nanoparticles: Application in Catalysis. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 1926-1939.	3.7	19
72	The development of nanofiber tubes based on nanocomposites of polyvinylpyrrolidone incorporated gold nanoparticles as scaffolds for neuroscience application in axons. <i>Textile Reseach Journal</i> , 2019, 89, 2713-2720.	2.2	19

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73	Ultrasonic-assisted dyeing of silk fibroin nanofibers: an energy-efficient coloration at room temperature. <i>Applied Nanoscience (Switzerland)</i> , 2020, 10, 917-930.	3.1	19
74	In-vitro assessment of appropriate hydrophilic scaffolds by co-electrospinning of poly(1,4-tetrahydro-2H-pyridin-2-one) and poly(2-vinylpyridine). <i>Journal of Membrane Science</i> , 2020, 610, 118187.	3.3	19
75	Post-electrospinning thermal treatments on poly(4-methyl-1-pentene) nanofiber membranes for improved mechanical properties. <i>Polymer Bulletin</i> , 2017, 74, 5221-5230.	3.3	18
76	Ultrasonic energy-assisted coloration of polyurethane nanofibers. <i>Applied Nanoscience (Switzerland)</i> , 2018, 8, 1505-1514.	3.1	18
77	In vitro assessment of dual-network electrospun tubes from poly(1,4-cyclohexane dimethylene terephthalate) and poly(2-vinylpyridine). <i>Journal of Membrane Science</i> , 2019, 136, 47222.	2.6	18
78	A facile approach to synthesize highly conductive electrospun aramid nanofibers via electroless deposition. <i>Materials Chemistry and Physics</i> , 2020, 255, 123614.	4.0	18
79	Fabrication and Characterization of Electrospun Folic Acid/Hybrid Fibers: In Vitro Controlled Release Study and Cytocompatibility Assays. <i>Polymers</i> , 2021, 13, 3594.	4.5	18
80	Self-cleaning effect of electrospun poly (1,4-cyclohexanedimethylene isosorbide terephthalate) nanofibers embedded with zinc oxide nanoparticles. <i>Textile Research Journal</i> , 2018, 88, 2493-2498.	2.2	17
81	Fabrication and Characterization of Novel Antibacterial Ultrafine Nylon-6 Nanofibers Impregnated by Garlic Sour. <i>Fibers and Polymers</i> , 2020, 21, 2780-2787.	2.1	17
82	Fabrication of Poly(Ethylene-glycol 1,4-Cyclohexane Dimethylene-Isosorbide-Terephthalate) Electrospun Nanofiber Mats for Potential Infiltration of Fibroblast Cells. <i>Polymers</i> , 2021, 13, 1245.	4.5	16
83	Cellulose acetate nanofiber mat with honeycomb-like surface structure. <i>Materials Letters</i> , 2016, 169, 33-36.	2.6	15
84	Effect of graphene incorporation in carbon nanofiber decorated with TiO ₂ for photoanode applications. <i>RSC Advances</i> , 2017, 7, 6574-6582.	3.6	15
85	Processing of metallic fiber hybrid spun yarns for better electrical conductivity. <i>Materials and Manufacturing Processes</i> , 2019, 34, 1008-1015.	4.7	15
86	Active loading graphite/hydroxyapatite into the stable hydroxyethyl cellulose scaffold nanofibers for artificial cornea application. <i>Cellulose</i> , 2020, 27, 3319-3334.	4.9	15
87	Conductive and antibacterial cellulose nanofibers decorated with copper nanoparticles for potential application in wearable devices. <i>Journal of Applied Polymer Science</i> , 2021, 138, 51381.	2.6	15
88	Structural design and optimization of metal-organic framework-derived FeO@rGO anode materials for constructing high-performance hybrid supercapacitors. <i>Composites Part B: Engineering</i> , 2022, 236, 109812.	12.0	15
89	The Chemical Deposition Method for the Decoration of Palladium Particles on Carbon Nanofibers with Rapid Conductivity Changes. <i>Nanomaterials</i> , 2016, 6, 226.	4.1	14
90	Nanofibers: Emerging Progress on Fabrication Using Mechanical Force and Recent Applications. <i>Polymer Reviews</i> , 2018, 58, 688-716.	10.9	14

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91	Fabrication of Antibacterial Nanofibers Composites by Functionalizing the Surface of Cellulose Acetate Nanofibers. <i>ChemistrySelect</i> , 2020, 5, 1315-1321.	1.5	14
92	Sea-Island-Like Morphology of CuNi Bimetallic Nanoparticles Uniformly Anchored on Single Layer Graphene Oxide as a Highly Efficient and Noble-Metal-Free Catalyst for Cyanation of Aryl Halides. <i>Scientific Reports</i> , 2020, 10, 677.	3.3	14
93	Dopa-based facile procedure to synthesize AgNP/cellulose nanofiber composite for antibacterial applications. <i>Applied Nanoscience (Switzerland)</i> , 2019, 9, 1661-1670.	3.1	13
94	Development of Antibacterial and Hemostatic PCL/Zein/ZnO Quaternary Ammonium Salts NPs Composite Mats as Wound Dressings. <i>Macromolecular Materials and Engineering</i> , 2021, 306, .	3.6	13
95	Salts and water-free dyeing of cellulose nanofibers using novel green deep eutectic solvents: Isotherm, kinetics, and thermodynamic studies. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	13
96	Castor oil-based polyols with gradually increasing functionalities for biopolyurethane synthesis. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48304.	2.6	12
97	An Experimental Study on Modelling the Physical Properties of Composite Psyllium, Alginate and Chitosan Fibers Using Box-Behnken Technique. <i>Fibers and Polymers</i> , 2020, 21, 2494-2504.	2.1	12
98	Thermal Insulation, Antibacterial and Mold Properties of Breathable Nanofiber-Laminated Wallpapers. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 4929-4933.	0.9	11
99	Epoxy-Containing Copolymers: A Versatile Toolbox for Functional Nanofiber Mats with Desired Chemical Functionalities. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800506.	3.7	11
100	Deodorant activity of phthalocyanine complex nanofiber. <i>Textile Research Journal</i> , 2018, 88, 630-635.	2.2	10
101	Pretreatment of Microfibrillated Cellulose on Polylactide Composites. <i>Macromolecular Research</i> , 2020, 28, 110-117.	2.4	10
102	Development and characterization of conductive ring spun hybrid yarns. <i>Journal of the Textile Institute</i> , 2019, 110, 141-150.	1.9	9
103	Adsorptive defluoridation from aqueous solution using a novel blend of eggshell powder and chitosan nanofibers. <i>Materials Research Express</i> , 2020, 7, 125005.	1.6	9
104	Regenerated Silk Nanofibers for Robust and Cyclic Adsorption-Desorption on Anionic Dyes. <i>Langmuir</i> , 2022, 38, 6376-6386.	3.5	8
105	Effective Formation of Well-Defined Polymeric Microfibers and Nanofibers with Exceptional Uniformity by Simple Mechanical Needle Spinning. <i>Polymers</i> , 2018, 10, 980.	4.5	6
106	Preparation and characterization of Juniperus chinensis extract-loaded polyurethane nanofiber laminate with polyurethane resin on polyethylene terephthalate fabric. <i>Polymer Bulletin</i> , 2020, 77, 919-928.	3.3	6
107	Compatibilization of immiscible blends of polypropylene and isosorbide containing copolyester with silica nanoparticles. <i>Polymer Engineering and Science</i> , 2020, 60, 1365-1376.	3.1	5
108	Introducing Deep Eutectic Solvents as a Water-Free Dyeing Medium for Poly (1,4-cyclohexane) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	4.5	5

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109	Frictional Properties of Electrospun Polyurethane Nanofiber Web. Tribology Online, 2010, 5, 262-265.	0.9	3
110	Interactions between Halloysite Nanotubes and Poly(styrene sulfonate) in Solution. Bulletin of the Korean Chemical Society, 2017, 38, 107-111.	1.9	3
111	Cytocompatibility and Osteogenesis of Adipose Tissue-Derived Stem Cells on POSS-PEG Coated Collagen. Journal of Nanoscience and Nanotechnology, 2018, 18, 4439-4444.	0.9	3
112	Electroless Deposition: A Superficial Route to Synthesis of Highly Conductive Electrospun Nylon 6 Nanofibers. Fibers and Polymers, 2022, 23, 680-689.	2.1	3
113	Electrospun Composite Nanofibers for Functional Applications. Polymers, 2022, 14, 2290.	4.5	3
114	Characterization of nano-structured poly(ϵ -caprolactone) membranes with DNA-doped polypyrrole via sonication-induced layer-by-layer assembly. Textile Reseach Journal, 2019, 89, 1267-1275.	2.2	2
115	Development of a Multifunctional Intelligent Elbow Brace (MIEB) Using a Knitted Textile Strain Sensor. Fibres and Textiles in Eastern Europe, 2022, 30, 22-30.	0.5	2
116	Fabrication of Low-Twist and High-Strength Metallic Fibre Hybrid Spun Yarns. Applied Sciences (Switzerland), 2022, 12, 3413.	2.5	1
117	A facile method for the preparation of a high-performance, hybrid separator for use in lithium-ion batteries. Textile Reseach Journal, 2021, 91, 2508-2517.	2.2	0