

# George G Chase

## List of Publications by Year in descending order

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116  
papers

3,486  
citations

147726

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155592

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121  
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121  
docs citations

121  
times ranked

3657  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of parameters on nanofiber diameter determined from electrospinning model. <i>Polymer</i> , 2007, 48, 6913-6922.	1.8	683
2	Electrospun nanofibers from a porous hollow tube. <i>Polymer</i> , 2008, 49, 4226-4229.	1.8	198
3	Recycled expanded polystyrene nanofibers applied in filter media. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 262, 211-215.	2.3	108
4	Effects of humidity, temperature, and nanofibers on drop coalescence in glass fiber media. <i>Separation and Purification Technology</i> , 2003, 30, 79-88.	3.9	105
5	Separation of water droplets from water-in-diesel dispersion using superhydrophobic polypropylene fibrous membranes. <i>Separation and Purification Technology</i> , 2014, 126, 62-68.	3.9	86
6	Layered hydrophilic/hydrophobic fiber media for water-in-oil coalescence. <i>Separation and Purification Technology</i> , 2012, 85, 157-164.	3.9	81
7	Ion exchanger using electrospun polystyrene nanofibers. <i>Journal of Membrane Science</i> , 2006, 283, 84-87.	4.1	67
8	Nanofibers from recycle waste expanded polystyrene using natural solvent. <i>Polymer Bulletin</i> , 2005, 55, 209-215.	1.7	66
9	Selective emitters for thermophotovoltaics: erbia-modified electrospun titania nanofibers. <i>Solar Energy Materials and Solar Cells</i> , 2005, 85, 477-488.	3.0	63
10	Pd-Au nanoparticles supported by TiO <sub>2</sub> fibers for catalytic NO decomposition by CO. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 33, 91-98.	2.9	62
11	Fabrication, Polarization of Electrospun Polyvinylidene Fluoride Electret Fibers and Effect on Capturing Nanoscale Solid Aerosols. <i>Materials</i> , 2016, 9, 671.	1.3	58
12	The effect of nanofibers on liquid-liquid coalescence filter performance. <i>AIChE Journal</i> , 2005, 51, 3109-3113.	1.8	54
13	Water-diesel secondary dispersion separation using superhydrophobic tubes of nanofibers. <i>Separation and Purification Technology</i> , 2013, 104, 81-88.	3.9	52
14	Effect of aluminum oxide doping on the structural, electrical, and optical properties of zinc oxide (AOZO) nanofibers synthesized by electrospinning. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 166, 61-66.	1.7	51
15	Electrospun nanofibers for potential space-based applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005, 116, 353-358.	1.7	50
16	Effects of roughness on droplet apparent contact angles on a fiber. <i>Separation and Purification Technology</i> , 2017, 180, 107-113.	3.9	50
17	Polymer aerogels for efficient removal of airborne nanoparticles. <i>Separation and Purification Technology</i> , 2015, 156, 803-808.	3.9	47
18	The role of mesopores in achieving high efficiency airborne nanoparticle filtration using aerogel monoliths. <i>Separation and Purification Technology</i> , 2016, 166, 48-54.	3.9	47

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19	The influence of salt and solvent concentrations on electrospun polyvinylpyrrolidone fiber diameters and bead formation. <i>Polymer</i> , 2013, 54, 2166-2173.	1.8	46
20	Polyvinylidene fluoride molecules in nanofibers, imaged at atomic scale by aberration corrected electron microscopy. <i>Nanoscale</i> , 2016, 8, 120-128.	2.8	45
21	Electrostatically Active Polymer Hybrid Aerogels for Airborne Nanoparticle Filtration. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 6401-6410.	4.0	45
22	Effects of Surfactants on the Morphology and Properties of Electrospun Polyetherimide Fibers. <i>Fibers</i> , 2017, 5, 33.	1.8	41
23	Separation of Water-in-Oil Emulsions Using Glass Fiber Media Augmented with Polymer Nanofibers. <i>Journal of Dispersion Science and Technology</i> , 2006, 27, 517-522.	1.3	40
24	Characterization of TiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> composite fibers formed by electrospinning a sol-gel and polymer mixture. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 167, 55-59.	1.7	39
25	Contact angles of drops on curved superhydrophobic surfaces. <i>Journal of Colloid and Interface Science</i> , 2012, 367, 472-477.	5.0	39
26	Mechanical properties of titania nanofiber mats fabricated by electrospinning of sol-gel precursor. <i>Journal of Sol-Gel Science and Technology</i> , 2010, 54, 188-194.	1.1	37
27	The effect of wettability on drop attachment to glass rods. <i>Journal of Colloid and Interface Science</i> , 2004, 272, 186-190.	5.0	36
28	Electrospun polyvinylidene fluoride containing nanoscale graphite platelets as electret membrane and its application in air filtration under extreme environment. <i>Polymer</i> , 2017, 131, 143-150.	1.8	36
29	Vertical rod method for electrospinning polymer fibers. <i>Polymer</i> , 2015, 65, 26-33.	1.8	35
30	The effect of surface energy of woven drainage channels in coalescing filters. <i>Separation and Purification Technology</i> , 2012, 87, 54-61.	3.9	34
31	Correlations for transverse motion of liquid drops on fibers. <i>Separation and Purification Technology</i> , 2010, 72, 282-287.	3.9	33
32	Drag correlation for axial motion of drops on fibers. <i>Separation and Purification Technology</i> , 2008, 60, 6-13.	3.9	32
33	Coalescence filtration performance of blended microglass and electrospun polypropylene fiber filter media. <i>Separation and Purification Technology</i> , 2014, 124, 1-8.	3.9	30
34	Effect of electrospinning conditions on $\beta$ -phase and surface charge potential of PVDF fibers. <i>Polymer</i> , 2021, 228, 123902.	1.8	30
35	Comparison of nonwoven glass and stainless steel microfiber media in aerosol coalescence filtration. <i>Separation and Purification Technology</i> , 2016, 162, 14-19.	3.9	29
36	NO decomposition by CO over Pd catalyst supported on TiO <sub>2</sub> nanofibers. <i>Chemical Engineering Journal</i> , 2013, 225, 340-349.	6.6	28

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37	Identification of CO <sub>2</sub> sequestered in electrospun metal oxide nanofibers. <i>Chemical Physics Letters</i> , 2006, 423, 302-305.	1.2	26
38	Gravity orientation and woven drainage structures in coalescing filters. <i>Separation and Purification Technology</i> , 2010, 75, 392-401.	3.9	26
39	Electrospun Superhydrophobic Poly(vinylidene fluoride-co-hexafluoropropylene) Fibrous Membranes for the Separation of Dispersed Water from Ultralow Sulfur Diesel. <i>Energy &amp; Fuels</i> , 2013, 27, 2458-2464.	2.5	26
40	Drop movement along a fiber axis due to pressure driven air flow in a thin slit. <i>Separation and Purification Technology</i> , 2015, 140, 77-83.	3.9	26
41	Separation of Water from Ultralow Sulfur Diesel Using Novel Polymer Nanofiber-Coated Glass Fiber Media. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 21683-21690.	4.0	26
42	Barrel shaped droplet movement at junctions of perpendicular fibers with different orientations to the air flow direction. <i>Separation and Purification Technology</i> , 2016, 162, 1-5.	3.9	26
43	A preliminary examination of zeta potential and deep bed filtration activity. <i>Separation and Purification Technology</i> , 2001, 21, 219-226.	3.9	25
44	Palladium nanoparticles supported by alumina nanofibers synthesized by electrospinning. <i>Journal of Materials Research</i> , 2008, 23, 1193-1196.	1.2	25
45	Incompressible Cake Filtration of a Yield Stress Fluid. <i>Separation Science and Technology</i> , 2003, 38, 745-766.	1.3	24
46	Modified electric fields to control the direction of electrospinning jets. <i>Polymer</i> , 2013, 54, 1397-1404.	1.8	24
47	Thermomechanical Characterization of SiC/SiC Ceramic Matrix Composites in a Combustion Facility. <i>Ceramics</i> , 2019, 2, 407-425.	1.0	24
48	Specific Cake Resistance: Myth or Reality?. <i>Water Science and Technology</i> , 1993, 28, 91-101.	1.2	23
49	Ultrathin Polydopamine-Graphene Oxide Hybrid Coatings on Polymer Filters with Improved Filtration Performance and Functionalities. <i>ACS Applied Bio Materials</i> , 2021, 4, 5180-5188.	2.3	23
50	Electrokinetic Removal of Manganese from River Sediment. <i>Water, Air, and Soil Pollution</i> , 2009, 197, 131-141.	1.1	22
51	Core-Shell Electrospun Hollow Aluminum Oxide Ceramic Fibers. <i>Fibers</i> , 2015, 3, 450-462.	1.8	22
52	Electrospun elastic acrylonitrile butadiene copolymer fibers. <i>Polymer</i> , 2016, 97, 440-448.	1.8	22
53	A correlation for yield stress fluid flow through packed beds. <i>Rheologica Acta</i> , 2005, 44, 495-501.	1.1	20
54	Permeability of Electrospun Superhydrophobic Nanofiber Mats. <i>Journal of Nanotechnology</i> , 2012, 2012, 1-7.	1.5	20

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55	Fabrication and characterization of TiO <sub>2</sub> @ZnO composite nanofibers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011, 43, 857-861.	1.3	19
56	Enhanced oxidation resistance of SiC/SiC minicomposites via slurry infiltration of oxide layers. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3241-3253.	2.8	18
57	Performance of hydrophilic glass fiber media to separate dispersed water drops from ultra low sulfur diesel supplemented by vibrations. <i>Separation and Purification Technology</i> , 2015, 156, 665-672.	3.9	17
58	Vibration assisted water-diesel separation by electrospun PVDF-HFP fiber mats. <i>Separation and Purification Technology</i> , 2016, 171, 280-288.	3.9	16
59	Comparative dissolution of electrospun Al <sub>2</sub> O <sub>3</sub> nanofibres in artificial human lung fluids. <i>Environmental Science: Nano</i> , 2015, 2, 251-261.	2.2	15
60	Polarization treatments of electrospun PVDF fiber mats. <i>Polymer</i> , 2021, 212, 123152.	1.8	15
61	Measurement of uni-axial fiber angle in non-woven fibrous media. <i>Chemical Engineering Science</i> , 2000, 55, 2151-2160.	1.9	14
62	Drag Correlation of Drop Motion on Fibers. <i>Drying Technology</i> , 2006, 24, 1283-1288.	1.7	14
63	Effects of Electrospinning Solution Properties on Formation of Beads in TiO <sub>2</sub> Fibers with PdO Particles. <i>Journal of Engineered Fibers and Fabrics</i> , 2015, 10, 155892501501000.	0.5	14
64	Substantial Improvement of Oil Aerosol Filtration Performance Using In-Plane Asymmetric Wettability. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 28852-28860.	4.0	14
65	Performance of E-glass fiber media in coalescence filtration. <i>Journal of Aerosol Science</i> , 2004, 35, 83-91.	1.8	13
66	Continuum Model Evaluation of the Effect of Saturation on Coalescence Filtration. <i>Separation Science and Technology</i> , 2008, 43, 1955-1973.	1.3	13
67	Evaluation of electrowet coalescer in series with PVDF-HFP electrospun fiber membranes for separation of water from ULSD. <i>Fuel</i> , 2018, 225, 111-117.	3.4	13
68	Effect of pore size and wettability of multilayered coalescing filters on water-in-ULSD coalescence. <i>Separation and Purification Technology</i> , 2019, 221, 236-248.	3.9	13
69	Modeling of filler retention in compressible fibrous media. <i>Separation and Purification Technology</i> , 1999, 15, 153-161.	3.9	12
70	Nanofibers and spheres by polymerization of cyanoacrylate monomer. <i>Polymer</i> , 2006, 47, 4328-4332.	1.8	12
71	Averaging volume size determination of electroconductive porosity probes. <i>International Journal of Multiphase Flow</i> , 1990, 16, 103-112.	1.6	11
72	Effect of Calcination Temperature on NO <sub>x</sub> /CO Decomposition by Pd Catalyst Nanoparticles Supported on Alumina Nanofibers. <i>Fibers</i> , 2017, 5, 22.	1.8	10

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73	Measurement of inflection angle and correlation of shape factor of barrel-shaped droplets on horizontal fibers. Separation and Purification Technology, 2018, 204, 127-132.	3.9	10
74	Electrospun poly(vinylidene fluoride) membranes functioning as static charge storage device with controlled crystalline phase by inclusions of nanoscale graphite platelets. Journal of Materials Science, 2018, 53, 3038-3048.	1.7	10
75	Use of genetic algorithms as an aid in modeling deep bed filtration. Computers and Chemical Engineering, 2003, 27, 281-292.	2.0	9
76	Temperature-induced changes in morphology and structure of TiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> fibers. Current Applied Physics, 2012, 12, 919-923.	1.1	9
77	Influence of calcination temperature on the surface area of submicron-sized Al <sub>2</sub> O <sub>3</sub> electrospun fibers. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	9
78	Filler particle retention in paper fiber beds. Separation and Purification Technology, 1997, 11, 17-26.	3.9	8
79	Electrospun jets launched from polymeric bubbles. Journal of Engineered Fibers and Fabrics, 2009, 4, 155892500900400.	0.5	8
80	New Methods to Electrospin Nanofibers. Journal of Engineered Fibers and Fabrics, 2011, 6, 155892501100600.	0.5	8
81	Liquid Phase Selective Hydrogenation of Phenol to Cyclohexanone over Electrospun Pd/PVDF-HFP Catalyst. Fibers, 2019, 7, 28.	1.8	8
82	Charge measurement of electrospun polyvinylidene fluoride fibers using a custom-made Faraday bucket. Review of Scientific Instruments, 2020, 91, 075107.	0.6	8
83	Computer program for filter media design optimization. Journal of the Taiwan Institute of Chemical Engineers, 2008, 39, 161-167.	1.4	7
84	Microscopy analysis and production rate data for needleless vertical rods electrospinning parameters. Data in Brief, 2015, 5, 41-44.	0.5	7
85	Functionalized Polyvinylidene Fluoride Electrospun Nanofibers and Applications. , 2018, , .		7
86	Flow Resistance in Filter Cakes Due to Air. Separation Science and Technology, 1991, 26, 117-126.	1.3	6
87	Fitting of kinetic parameters of NO reduction by CO in fibrous media using a genetic algorithm. Computers and Chemical Engineering, 2010, 34, 485-490.	2.0	6
88	Functional nanofibers for filtration applications. , 2012, , 121-152.		6
89	Glass fiber coalescing filter media augmented with polymeric submicron fibers and modified with angled drainage channels. Separation and Purification Technology, 2013, 120, 230-238.	3.9	6
90	Thickness shrinkage of microfiber media in gas-liquid coalescence filtration. Separation and Purification Technology, 2015, 141, 188-196.	3.9	6

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91	Polarized Catalytic Polymer Nanofibers. <i>Materials</i> , 2019, 12, 2859.	1.3	6
92	Coalescence of emulsified water drops in ULSD using a steel mesh electrowet coalescer. <i>Separation and Purification Technology</i> , 2021, 254, 117675.	3.9	6
93	Comparison of Ion Exchange Performance of Polystyrene Nanofiber Cation Exchanger and Glass Fibers Coated with Poly(styrene-co-divinylbenzene). <i>Chemical Engineering and Technology</i> , 2006, 29, 364-367.	0.9	5
94	Coalescence Filter Media with Drainage Channels. <i>Drying Technology</i> , 2013, 31, 185-192.	1.7	5
95	A Versatile Microparticle-Based Immunoaggregation Assay for Macromolecular Biomarker Detection and Quantification. <i>PLoS ONE</i> , 2015, 10, e0115046.	1.1	5
96	Unified Analysis of Compressive Packed Beds, Filter Cakes, and Thickeners. <i>Separation Science and Technology</i> , 1992, 27, 1093-1114.	1.3	4
97	Microscopic observation of filter cake formation. <i>Separation and Purification Technology</i> , 1994, 4, 118-122.	0.7	4
98	Analysis of drag and particulate stress in porous media flows. <i>Chemical Engineering Science</i> , 1995, 50, 1961-1969.	1.9	4
99	Acetone extraction of 2,4 DNT from contaminated soil. <i>Separation and Purification Technology</i> , 1999, 16, 1-6.	3.9	4
100	Physical structure behavior to wettability of electrospun poly(lactic acid)/polysaccharide composite nanofibers. <i>Advanced Composite Materials</i> , 2013, 22, 401-409.	1.0	4
101	Motion of water drops on hydrophobic expanded polymer mat surfaces due to tangential air flow. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 94, 24-30.	2.7	4
102	Orthogonal Curvilinear Cake Filtration. <i>Separation Science and Technology</i> , 1991, 26, 689-715.	1.3	3
103	Oriented Fiber Filter Media. <i>Journal of Engineered Fibers and Fabrics</i> , 2008, 3, 155892500800300.	0.5	3
104	Correlations between air drag and movement of water droplets in fibrous media. <i>Separation and Purification Technology</i> , 2021, 267, 118602.	3.9	3
105	Analysis of primary and secondary current distributions in a wedge-type aluminum-air cell. <i>Journal of Applied Electrochemistry</i> , 1988, 18, 499-503.	1.5	2
106	Stress-strain relation of compressive solka floc cakes. <i>Journal of Food Engineering</i> , 1995, 25, 373-386.	2.7	2
107	Physical Characteristics of Titania Nanofibers Synthesized by Sol-Gel and Electrospinning Techniques. <i>Journal of Engineered Fibers and Fabrics</i> , 2010, 5, 155892501000500.	0.5	2
108	Electrospinning of Metal Doped Alumina Nanofibers for Catalyst Applications. , 2011, , .		2

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109	Simulation of electrostatic field in electrospinning of polymer nanofibers. Mathematics of Quantum Technologies, 2015, 4, .	0.3	2
110	Water drop movement on woven fiber mat surfaces due to flow of diesel fuel. Separation and Purification Technology, 2016, 171, 123-130.	3.9	2
111	Solid Aerosol Filtration by Electrospun Poly Vinyl Pyrrolidone Fiber Mats and Dependence on Pore Size. Journal of Textile Engineering & Fashion Technology, 2017, 1, .	0.1	2
112	Thermodynamic separation efficiency and sedimentation criteria for multiphase processes: A comparison of rigorous and approximate models. Separation and Purification Technology, 1995, 5, 153-164.	0.7	1
113	Thickening of Clay Slurries by Periodic Pressure Flow through a Porous Polyethylene Tube. Separation Science and Technology, 1995, 30, 585-607.	1.3	1
114	An experimental study of electrorheological fluid flow through a packed bed of glass beads. Transport in Porous Media, 2008, 72, 25-35.	1.2	1
115	A customized instrument with laser interferometry for measuring electrospun mat thickness. Review of Scientific Instruments, 2019, 90, 075110.	0.6	1
116	Polarization of Electrospun PVDF Fiber Mats and Fiber Yarns. , 0, , .		0