

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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121
all docs

121
docs citations

121
times ranked

3657
citing authors

#	ARTICLE	IF	CITATIONS
1	Coalescence of emulsified water drops in ULSD using a steel mesh electrowet coalescer. Separation and Purification Technology, 2021, 254, 117675.	3.9	6
2	Polarization treatments of electrospun PVDF fiber mats. Polymer, 2021, 212, 123152.	1.8	15
3	Ultrathin Polydopamine-Graphene Oxide Hybrid Coatings on Polymer Filters with Improved Filtration Performance and Functionalities. ACS Applied Bio Materials, 2021, 4, 5180-5188.	2.3	23
4	Correlations between air drag and movement of water droplets in fibrous media. Separation and Purification Technology, 2021, 267, 118602.	3.9	3
5	Effect of electrospinning conditions on β -phase and surface charge potential of PVDF fibers. Polymer, 2021, 228, 123902.	1.8	30
6	Charge measurement of electrospun polyvinylidene fluoride fibers using a custom-made Faraday bucket. Review of Scientific Instruments, 2020, 91, 075107.	0.6	8
7	Substantial Improvement of Oil Aerosol Filtration Performance Using In-Plane Asymmetric Wettability. ACS Applied Materials & Interfaces, 2020, 12, 28852-28860.	4.0	14
8	A customized instrument with laser interferometry for measuring electrospun mat thickness. Review of Scientific Instruments, 2019, 90, 075110.	0.6	1
9	Thermomechanical Characterization of SiC/SiC Ceramic Matrix Composites in a Combustion Facility. Ceramics, 2019, 2, 407-425.	1.0	24
10	Polarized Catalytic Polymer Nanofibers. Materials, 2019, 12, 2859.	1.3	6
11	Liquid Phase Selective Hydrogenation of Phenol to Cyclohexanone over Electrospun Pd/PVDF-HFP Catalyst. Fibers, 2019, 7, 28.	1.8	8
12	Effect of pore size and wettability of multilayered coalescing filters on water-in-ULSD coalescence. Separation and Purification Technology, 2019, 221, 236-248.	3.9	13
13	Motion of water drops on hydrophobic expanded polymer mat surfaces due to tangential air flow. Journal of the Taiwan Institute of Chemical Engineers, 2019, 94, 24-30.	2.7	4
14	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
15	Evaluation of electrowet coalescer in series with PVDF-HFP electrospun fiber membranes for separation of water from ULSD. Fuel, 2018, 225, 111-117.	3.4	13
16	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
17	Functionalized Polyvinylidene Fluoride Electrospun Nanofibers and Applications. , 2018, , .		7
18	Effects of roughness on droplet apparent contact angles on a fiber. Separation and Purification Technology, 2017, 180, 107-113.	3.9	50

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19	Electrostatically Active Polymer Hybrid Aerogels for Airborne Nanoparticle Filtration. ACS Applied Materials & Interfaces, 2017, 9, 6401-6410.	4.0	45
20	Enhanced oxidation resistance of SiC/SiC minicomposites via slurry infiltration of oxide layers. Journal of the European Ceramic Society, 2017, 37, 3241-3253.	2.8	18
21	Electrospun polyvinylidene fluoride containing nanoscale graphite platelets as electret membrane and its application in air filtration under extreme environment. Polymer, 2017, 131, 143-150.	1.8	36
22	Effect of Calcination Temperature on NO _x /CO Decomposition by Pd Catalyst Nanoparticles Supported on Alumina Nanofibers. Fibers, 2017, 5, 22.	1.8	10
23	Effects of Surfactants on the Morphology and Properties of Electrospun Polyetherimide Fibers. Fibers, 2017, 5, 33.	1.8	41
24	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
25	Fabrication, Polarization of Electrospun Polyvinylidene Fluoride Electret Fibers and Effect on Capturing Nanoscale Solid Aerosols. Materials, 2016, 9, 671.	1.3	58
26	The role of mesopores in achieving high efficiency airborne nanoparticle filtration using aerogel monoliths. Separation and Purification Technology, 2016, 166, 48-54.	3.9	47
27	Vibration assisted water-diesel separation by electrospun PVDF-HFP fiber mats. Separation and Purification Technology, 2016, 171, 280-288.	3.9	16
28	Separation of Water from Ultralow Sulfur Diesel Using Novel Polymer Nanofiber-Coated Glass Fiber Media. ACS Applied Materials & Interfaces, 2016, 8, 21683-21690.	4.0	26
29	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
30	Electrospun elastic acrylonitrile butadiene copolymer fibers. Polymer, 2016, 97, 440-448.	1.8	22
31	Barrel shaped droplet movement at junctions of perpendicular fibers with different orientations to the air flow direction. Separation and Purification Technology, 2016, 162, 1-5.	3.9	26
32	Comparison of nonwoven glass and stainless steel microfiber media in aerosol coalescence filtration. Separation and Purification Technology, 2016, 162, 14-19.	3.9	29
33	Influence of calcination temperature on the surface area of submicron-sized Al ₂ O ₃ electrospun fibers. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	9
34	Pd ²⁺ /Au nanoparticles supported by TiO ₂ fibers for catalytic NO decomposition by CO. Journal of Industrial and Engineering Chemistry, 2016, 33, 91-98.	2.9	62
35	Polyvinylidene fluoride molecules in nanofibers, imaged at atomic scale by aberration corrected electron microscopy. Nanoscale, 2016, 8, 120-128.	2.8	45
36	Core-Shell Electrospun Hollow Aluminum Oxide Ceramic Fibers. Fibers, 2015, 3, 450-462.	1.8	22

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37	Effects of Electrospinning Solution Properties on Formation of Beads in TiO ₂ Fibers with PdO Particles. Journal of Engineered Fibers and Fabrics, 2015, 10, 155892501501000.	0.5	14
38	Polymer aerogels for efficient removal of airborne nanoparticles. Separation and Purification Technology, 2015, 156, 803-808.	3.9	47
39	Simulation of electrostatic field in electrospinning of polymer nanofibers. Mathematics of Quantum Technologies, 2015, 4, .	0.3	2
40	A Versatile Microparticle-Based Immunoaggregation Assay for Macromolecular Biomarker Detection and Quantification. PLoS ONE, 2015, 10, e0115046.	1.1	5
41	Comparative dissolution of electrospun Al ₂ O ₃ nanofibres in artificial human lung fluids. Environmental Science: Nano, 2015, 2, 251-261.	2.2	15
42	Vertical rod method for electrospinning polymer fibers. Polymer, 2015, 65, 26-33.	1.8	35
43	Microscopy analysis and production rate data for needleless vertical rods electrospinning parameters. Data in Brief, 2015, 5, 41-44.	0.5	7
44	Performance of hydrophilic glass fiber media to separate dispersed water drops from ultra low sulfur diesel supplemented by vibrations. Separation and Purification Technology, 2015, 156, 665-672.	3.9	17
45	Thickness shrinkage of microfiber media in gas-liquid coalescence filtration. Separation and Purification Technology, 2015, 141, 188-196.	3.9	6
46	Drop movement along a fiber axis due to pressure driven air flow in a thin slit. Separation and Purification Technology, 2015, 140, 77-83.	3.9	26
47	Coalescence filtration performance of blended microglass and electrospun polypropylene fiber filter media. Separation and Purification Technology, 2014, 124, 1-8.	3.9	30
48	Separation of water droplets from water-in-diesel dispersion using superhydrophobic polypropylene fibrous membranes. Separation and Purification Technology, 2014, 126, 62-68.	3.9	86
49	Coalescence Filter Media with Drainage Channels. Drying Technology, 2013, 31, 185-192.	1.7	5
50	NO decomposition by CO over Pd catalyst supported on TiO ₂ nanofibers. Chemical Engineering Journal, 2013, 225, 340-349.	6.6	28
51	Physical structure behavior to wettability of electrospun poly(lactic acid)/polysaccharide composite nanofibers. Advanced Composite Materials, 2013, 22, 401-409.	1.0	4
52	Water-diesel secondary dispersion separation using superhydrophobic tubes of nanofibers. Separation and Purification Technology, 2013, 104, 81-88.	3.9	52
53	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
54	Modified electric fields to control the direction of electrospinning jets. Polymer, 2013, 54, 1397-1404.	1.8	24

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55	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
56	Electrospun Superhydrophobic Poly(vinylidene fluoride-co-hexafluoropropylene) Fibrous Membranes for the Separation of Dispersed Water from Ultralow Sulfur Diesel. <i>Energy & Fuels</i> , 2013, 27, 2458-2464.	2.5	26
57	Functional nanofibers for filtration applications. , 2012, , 121-152.		6
58	Permeability of Electrospun Superhydrophobic Nanofiber Mats. <i>Journal of Nanotechnology</i> , 2012, 2012, 1-7.	1.5	20
59	Temperature-induced changes in morphology and structure of TiO ₂ –Al ₂ O ₃ fibers. <i>Current Applied Physics</i> , 2012, 12, 919-923.	1.1	9
60	Contact angles of drops on curved superhydrophobic surfaces. <i>Journal of Colloid and Interface Science</i> , 2012, 367, 472-477.	5.0	39
61	Layered hydrophilic/hydrophobic fiber media for water-in-oil coalescence. <i>Separation and Purification Technology</i> , 2012, 85, 157-164.	3.9	81
62	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
63	New Methods to Electrospin Nanofibers. <i>Journal of Engineered Fibers and Fabrics</i> , 2011, 6, 155892501100600.	0.5	8
64	Electrospinning of Metal Doped Alumina Nanofibers for Catalyst Applications. , 2011, , .		2
65	Fabrication and characterization of TiO ₂ –ZnO composite nanofibers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011, 43, 857-861.	1.3	19
66	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
67	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
68	Correlations for transverse motion of liquid drops on fibers. <i>Separation and Purification Technology</i> , 2010, 72, 282-287.	3.9	33
69	Gravity orientation and woven drainage structures in coalescing filters. <i>Separation and Purification Technology</i> , 2010, 75, 392-401.	3.9	26
70	Characterization of TiO ₂ –Al ₂ O ₃ 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
71	Fitting of kinetic parameters of NO reduction by CO in fibrous media using a genetic algorithm. <i>Computers and Chemical Engineering</i> , 2010, 34, 485-490.	2.0	6
72	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

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73	Electrospun jets launched from polymeric bubbles. <i>Journal of Engineered Fibers and Fabrics</i> , 2009, 4, 155892500900400.	0.5	8
74	Electrokinetic Removal of Manganese from River Sediment. <i>Water, Air, and Soil Pollution</i> , 2009, 197, 131-141.	1.1	22
75	An experimental study of electrorheological fluid flow through a packed bed of glass beads. <i>Transport in Porous Media</i> , 2008, 72, 25-35.	1.2	1
76	Computer program for filter media design optimization. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2008, 39, 161-167.	1.4	7
77	Electrospun nanofibers from a porous hollow tube. <i>Polymer</i> , 2008, 49, 4226-4229.	1.8	198
78	Drag correlation for axial motion of drops on fibers. <i>Separation and Purification Technology</i> , 2008, 60, 6-13.	3.9	32
79	Palladium nanoparticles supported by alumina nanofibers synthesized by electrospinning. <i>Journal of Materials Research</i> , 2008, 23, 1193-1196.	1.2	25
80	Continuum Model Evaluation of the Effect of Saturation on Coalescence Filtration. <i>Separation Science and Technology</i> , 2008, 43, 1955-1973.	1.3	13
81	Oriented Fiber Filter Media. <i>Journal of Engineered Fibers and Fabrics</i> , 2008, 3, 155892500800300.	0.5	3
82	Effects of parameters on nanofiber diameter determined from electrospinning model. <i>Polymer</i> , 2007, 48, 6913-6922.	1.8	683
83	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
84	Identification of CO ₂ sequestered in electrospun metal oxide nanofibers. <i>Chemical Physics Letters</i> , 2006, 423, 302-305.	1.2	26
85	Nanofibers and spheres by polymerization of cyanoacrylate monomer. <i>Polymer</i> , 2006, 47, 4328-4332.	1.8	12
86	Ion exchanger using electrospun polystyrene nanofibers. <i>Journal of Membrane Science</i> , 2006, 283, 84-87.	4.1	67
87	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
88	Drag Correlation of Drop Motion on Fibers. <i>Drying Technology</i> , 2006, 24, 1283-1288.	1.7	14
89	Selective emitters for thermophotovoltaics: erbia-modified electrospun titania nanofibers. <i>Solar Energy Materials and Solar Cells</i> , 2005, 85, 477-488.	3.0	63
90	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

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91	The effect of nanofibers on liquid-liquid coalescence filter performance. <i>AICHE Journal</i> , 2005, 51, 3109-3113.	1.8	54
92	Nanofibers from recycle waste expanded polystyrene using natural solvent. <i>Polymer Bulletin</i> , 2005, 55, 209-215.	1.7	66
93	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
94	A correlation for yield stress fluid flow through packed beds. <i>Rheologica Acta</i> , 2005, 44, 495-501.	1.1	20
95	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
96	Performance of E-glass fiber media in coalescence filtration. <i>Journal of Aerosol Science</i> , 2004, 35, 83-91.	1.8	13
97	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
98	Use of genetic algorithms as an aid in modeling deep bed filtration. <i>Computers and Chemical Engineering</i> , 2003, 27, 281-292.	2.0	9
99	Incompressible Cake Filtration of a Yield Stress Fluid. <i>Separation Science and Technology</i> , 2003, 38, 745-766.	1.3	24
100	A preliminary examination of zeta potential and deep bed filtration activity. <i>Separation and Purification Technology</i> , 2001, 21, 219-226.	3.9	25
101	Measurement of uni-axial fiber angle in non-woven fibrous media. <i>Chemical Engineering Science</i> , 2000, 55, 2151-2160.	1.9	14
102	Acetone extraction of 2,4 DNT from contaminated soil. <i>Separation and Purification Technology</i> , 1999, 16, 1-6.	3.9	4
103	Modeling of filler retention in compressible fibrous media. <i>Separation and Purification Technology</i> , 1999, 15, 153-161.	3.9	12
104	Filler particle retention in paper fiber beds. <i>Separation and Purification Technology</i> , 1997, 11, 17-26.	3.9	8
105	Analysis of drag and particulate stress in porous media flows. <i>Chemical Engineering Science</i> , 1995, 50, 1961-1969.	1.9	4
106	Stress-strain relation of compressive solka floc cakes. <i>Journal of Food Engineering</i> , 1995, 25, 373-386.	2.7	2
107	Thermodynamic separation efficiency and sedimentation criteria for multiphase processes: A comparison of rigorous and approximate models. <i>Separation and Purification Technology</i> , 1995, 5, 153-164.	0.7	1
108	Thickening of Clay Slurries by Periodic Pressure Flow through a Porous Polyethylene Tube. <i>Separation Science and Technology</i> , 1995, 30, 585-607.	1.3	1

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109	Microscopic observation of filter cake formation. Separation and Purification Technology, 1994, 4, 118-122.	0.7	4
110	Specific Cake Resistance: Myth or Reality?. Water Science and Technology, 1993, 28, 91-101.	1.2	23
111	Unified Analysis of Compressive Packed Beds, Filter Cakes, and Thickeners. Separation Science and Technology, 1992, 27, 1093-1114.	1.3	4
112	Flow Resistance in Filter Cakes Due to Air. Separation Science and Technology, 1991, 26, 117-126.	1.3	6
113	Orthogonal Curvilinear Cake Filtration. Separation Science and Technology, 1991, 26, 689-715.	1.3	3
114	Averaging volume size determination of electroconductive porosity probes. International Journal of Multiphase Flow, 1990, 16, 103-112.	1.6	11
115	Analysis of primary and secondary current distributions in a wedge-type aluminum-air cell. Journal of Applied Electrochemistry, 1988, 18, 499-503.	1.5	2
116	Polarization of Electrospun PVDF Fiber Mats and Fiber Yarns. , 0, , .		0