Alexander L Yarin

List of Publications by Year
in descending order

252 papers	18,760 citations	22099 59 h-index	13338 130 g-index
271 all docs	271 docs citations	271 times ranked	14562 citing authors

#	Article	IF	Citations
1	Bending instability of electrically charged liquid jets of polymer solutions in electrospinning. Journal of Applied Physics, 2000, 87, 4531-4547.	1.1	2,153
2	Electrospinning jets and polymer nanofibers. Polymer, 2008, 49, 2387-2425.	1.8	1,886
3	Bending instability in electrospinning of nanofibers. Journal of Applied Physics, 2001, 89, 3018-3026.	1.1	871
4	Electrostatic field-assisted alignment of electrospun nanofibres. Nanotechnology, 2001, 12, 384-390.	1.3	749
5	Impact of drops on solid surfaces: self-similar capillary waves, and splashing as a new type of kinematic discontinuity. Journal of Fluid Mechanics, 1995, 283, 141-173.	1.4	740
6	Taylor cone and jetting from liquid droplets in electrospinning of nanofibers. Journal of Applied Physics, 2001, 90, 4836-4846.	1.1	718
7	Renewable and metal-free carbon nanofibre catalysts for carbon dioxide reduction. Nature Communications, 2013, 4, .	5.8	593
8	Carbon Nanotubes Embedded in Oriented Polymer Nanofibers by Electrospinning. Langmuir, 2003, 19, 7012-7020.	1.6	501
9	Electrospun and solution blown three-dimensional carbon fiber nonwovens for application as electrodes in microbial fuel cells. Energy and Environmental Science, 2011, 4, 1417.	15.6	289
10	Formation of nanofiber crossbars in electrospinning. Applied Physics Letters, 2003, 82, 973-975.	1.5	257
11	Evaporation of acoustically levitated droplets. Journal of Fluid Mechanics, 1999, 399, 151-204.	1.4	232
12	Single drop impact onto liquid films: neck distortion, jetting, tiny bubble entrainment, and crown formation. Journal of Fluid Mechanics, 1999, 385, 229-254.	1.4	229
13	Buckling of jets in electrospinning. Polymer, 2007, 48, 6064-6076.	1.8	205
14	Single-Walled Carbon Nanotubes Embedded in Oriented Polymeric Nanofibers by Electrospinning. Langmuir, 2004, 20, 9852-9855.	1.6	202
15	Transient and steady shapes of droplets attached to a surface in a strong electric field. Journal of Fluid Mechanics, 2004, 516, 349-377.	1.4	194
16	A review on corrosion-protective extrinsic self-healing: Comparison of microcapsule-based systems and those based on core-shell vascular networks. Chemical Engineering Journal, 2018, 344, 206-220.	6.6	185
17	On the acoustic levitation of droplets. Journal of Fluid Mechanics, 1998, 356, 65-91.	1.4	176
18	Validation and application of a novel elongational device for polymer solutions. Journal of Rheology, 2000, 44, 595-616.	1.3	168

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19	Desorption-Limited Mechanism of Release from Polymer Nanofibers. Langmuir, 2008, 24, 965-974.	1.6	166
20	Material encapsulation and transport in coreâ€“shell micro/nanofibers, polymer and carbon nanotubes and micro/nanochannels. Journal of Materials Chemistry, 2007, 17, 2585-2599.	6.7	154
21	The dynamics of thin liquid jets in air. Journal of Fluid Mechanics, 1984, 140, 91-111.	1.4	153
22	Branching in electrospinning of nanofibers. Journal of Applied Physics, 2005, 98, 064501.	1.1	153
23	Tensile deformation of electrospun nylon-6,6 nanofibers. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1482-1489.	2.4	152
24	Electrospinning coreâ€shell nanofibers for interfacial toughening and selfâ€healing of carbonâ€fiber/epoxy composites. Journal of Applied Polymer Science, 2013, 129, 1383-1393.	1.3	152
25	Selfâ€Healing Reduced Graphene Oxide Films by Supersonic Kinetic Spraying. Advanced Functional Materials, 2014, 24, 4986-4995.	7.8	151
26	Selfâ€functioned Copper Nanofiber Transparent Flexible Conducting Film via Electrospinning and Electroplating. Advanced Materials, 2016, 28, 7149-7154.	11.1	141
27	Viscoelastic electrospun jets: Initial stresses and elongational rheometry. Polymer, 2008, 49, 1651-1658.	1.8	138
28	Biohybrid nanosystems with polymer nanofibers and nanotubes. Applied Microbiology and Biotechnology, 2006, 71, 387-393.	1.7	133
29	Encapsulation of self-healing materials by coelectrospinning, emulsion electrospinning, solution blowing and intercalation. Journal of Materials Chemistry, 2012, 22, 9138.	6.7	129
30	Drop Impact, Spreading, Splashing, and Penetration into Electrospun Nanofiber Mats. Langmuir, 2010, 26, 9516-9523.	1.6	117
31	Highly flexible, stretchable, patternable, transparent copper fiber heater on a complex 3D surface. NPG Asia Materials, 2017, 9, e347-e347.	3.8	113
32	Self-healing transparent coreâ€“shell nanofiber coatings for anti-corrosive protection. Journal of Materials Chemistry A, 2014, 2, 7045.	5.2	111
33	Evolution of a compound droplet attached to a core-shell nozzle under the action of a strong electric field. Physics of Fluids, 2006, 18, 062101.	1.6	110
34	Highly flexible, stretchable, wearable, patternable and transparent heaters on complex 3D surfaces formed from supersonically sprayed silver nanowires. Journal of Materials Chemistry A, 2017, 5, 6677-6685.	5.2	109
35	Failure modes of electrospun nanofibers. Applied Physics Letters, 2003, 82, 3958-3960.	1.5	100
36	Solution Blowing of Soy Protein Fibers. Biomacromolecules, 2011, 12, 2357-2363.	2.6	92

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37	Highly flexible transparent self-healing composite based on electrospun coreâ€“shell nanofibers produced by coaxial electrospinning for anti-corrosion and electrical insulation. Nanoscale, 2015, 7, 17778-17785.	2.8	91
38	Stability of multiple steady states of convection in laterally heated cavities. Journal of Fluid Mechanics, 1999, 388, 315-334.	1.4	88
39	Solution-Blown Coreâ€“Shell Self-Healing Nano- and Microfibers. ACS Applied Materials & Interfaces, 2016, 8, 4955-4962.	4.0	88
40	Advances in self-healing materials based on vascular networks with mechanical self-repair characteristics. Advances in Colloid and Interface Science, 2018, 252, 21-37.	7.0	84
41	Hybrid Self-Healing Matrix Using Coreâ€“Shell Nanofibers and Capsuleless Microdroplets. ACS Applied Materials & Interfaces, 2014, 6, 10461-10468.	4.0	83
42	Pool boiling on nano-textured surfaces. International Journal of Heat and Mass Transfer, 2013, 62, 99-111.	2.5	82
43	Controlled Release of Ciprofloxacin from Coreâ€“Shell Nanofibers with Monolithic or Blended Core. Molecular Pharmaceutics, 2016, 13, 1393-1404.	2.3	82
44	Long-Term Sustained Ciprofloxacin Release from PMMA and Hydrophilic Polymer Blended Nanofibers. Molecular Pharmaceutics, 2016, 13, 295-305.	2.3	80
45	Industrial-Scale Solution Blowing of Soy Protein Nanofibers. Industrial & Engineering Chemistry Research, 2016, 55, 323-333.	1.8	80
46	Recent progress in interfacial toughening and damage selfâ€healing of polymer composites based on electrospun and solutionâ€blown nanofibers: An overview. Journal of Applied Polymer Science, 2013, 130, 2225-2237.	1.3	79
47	Self-Healing Nanofiber-Reinforced Polymer Composites. 1. Tensile Testing and Recovery of Mechanical Properties. ACS Applied Materials & Interfaces, 2015, 7, 19546-19554.	4.0	78
48	Multifunctional Platform Based on Electrospun Nanofibers and Plasmonic Hydrogel: A Smart Nanostructured Pillow for Near-Infrared Light-Driven Biomedical Applications. ACS Applied Materials & Interfaces, 2020, 12, 54328-54342.	4.0	78
49	Nano-encapsulated smart tunable phase change materials. Soft Matter, 2011, 7, 8823.	1.2	77
50	Thorny Devil Nanotextured Fibers: The Way to Cooling Rates on the Order of 1 kW/cm². Langmuir, 2011, 27, 215-226.	1.6	76
51	Theoretical and experimental investigation of physical mechanisms responsible for polymer nanofiber formation in solution blowing. Polymer, 2015, 56, 452-463.	1.8	76
52	Coalescence of Two Drops on Partially Wettable Substrates. Langmuir, 2012, 28, 3791-3798.	1.6	74
53	Chaotic rotation of triaxial ellipsoids in simple shear flow. Journal of Fluid Mechanics, 1997, 340, 83-100.	1.4	73
54	Age- and Flow-dependency of Salivary Viscoelasticity. Journal of Dental Research, 2007, 86, 281-285.	2.5	71

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55	Mechanistic Examination of Protein Release from Polymer Nanofibers. Molecular Pharmaceutics, 2009, 6, 641-647.	2.3	70
56	Supersonically Sprayed Washable, Wearable, Stretchable, Hydrophobic, and Antibacterial rGO/AgNW Fabric for Multifunctional Sensors and Supercapacitors. ACS Applied Materials & Interfaces, 2021, 13, 10013-10025.	4.0	70
57	Influence of elastic stresses on the capillary breakup of jets of dilute polymer solutions. Fluid Dynamics, 1984, 19, 21-29.	0.2	68
58	Supersonic Cold Spraying for Energy and Environmental Applications: Oneâ€Step Scalable Coating Technology for Advanced Microâ€and Nanotextured Materials. Advanced Materials, 2020, 32, e1905028.	11.1	67
59	Meltblowing: I-basic physical mechanisms and threadline model. Journal of Applied Physics, 2010, 108, .	1.1	63
60	Drop impacts on electrospun nanofiber membranes. Soft Matter, 2012, 8, 3957.	1.2	62
61	Wearable, Stretchable, Transparent All-in-One Soft Sensor Formed from Supersonically Sprayed Silver Nanowires. ACS Applied Materials & Interfaces, 2019, 11, 40232-40242.	4.0	62
62	Supersonic nanoblowing: a new ultra-stiff phase of nylon 6 in 20â€“50 nm confinement. Journal of Materials Chemistry C, 2013, 1, 3491.	2.7	61
63	Buckling of thin liquid jets. Journal of Fluid Mechanics, 1993, 253, 593.	1.4	60
64	Needleless electrospinning: Electrically driven instability and multiple jetting from the free surface of a spherical liquid layer. Journal of Applied Physics, 2009, 106, .	1.1	60
65	Nanotextured Pillars of Electrosprayed Bismuth Vanadate for Efficient Photoelectrochemical Water Splitting. Langmuir, 2015, 31, 3727-3737.	1.6	59
66	Review of recent progress in electrospinning-derived freestanding and binder-free electrodes for supercapacitors. Coordination Chemistry Reviews, 2022, 460, 214466.	9.5	58
67	Intercalation of anti-inflammatory drug molecules within TiO2 nanotubes. RSC Advances, 2013, 3, 17380.	1.7	57
68	Two-Stage Desorption-Controlled Release of Fluorescent Dye and Vitamin from Solution-Blown and Electrospun Nanofiber Mats Containing Porogens. Molecular Pharmaceutics, 2013, 10, 4509-4526.	2.3	57
69	Self-healing Nanofiber-Reinforced Polymer Composites. 2. Delamination/Debonding and Adhesive and Cohesive Properties. ACS Applied Materials & Interfaces, 2015, 7, 19555-19561.	4.0	57
70	Spongy Gels by a Topâ€Down Approach from Polymer Fibrous Sponges. Angewandte Chemie - International Edition, 2017, 56, 3285-3288.	7.2	56
71	Stimuli-responsive copolymers of n-isopropyl acrylamide with enhanced longevity in water for micro- and nanofluidics, drug delivery and non-woven applications. Journal of Materials Chemistry, 2009, 19, 4732.	6.7	55
72	Elongational and shear rheology of carbon nanotube suspensions. Rheologica Acta, 2009, 48, 597-609.	1.1	54

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73	Production of Flexible Transparent Conducting Films of Selfâ€Fused Nanowires via Oneâ€Step Supersonic Spraying. Advanced Functional Materials, 2017, 27, 1602548.	7.8	54
74	Meltblowing: II-linear and nonlinear waves on viscoelastic polymer jets. Journal of Applied Physics, 2010, 108, .	1.1	53
75	Progress and potential of electrospinning-derived substrate-free and binder-free lithium-ion battery electrodes. Chemical Engineering Journal, 2022, 430, 132876.	6.6	53
76	Computer simulation of the SARS-CoV-2 contamination risk in a large dental clinic. Physics of Fluids, 2021, 33, 033328.	1.6	52
77	Nonisothermal drop impact and evaporation on polymer nanofiber mats. Physical Review E, 2011, 83, 036305.	0.8	51
78	Models of polymer solutions in electrified jets and solution blowing. Reviews of Modern Physics, 2020, 92, .	16.4	51
79	Application of solution-blown 20â€“50nm nanofibers in filtration of nanoparticles: The efficient van der Waals collectors. Journal of Membrane Science, 2015, 485, 132-150.	4.1	50
80	Antibacterial activity of photocatalytic electrospun titania nanofiber mats and solution-blown soy protein nanofiber mats decorated with silver nanoparticles. Catalysis Communications, 2013, 34, 35-40.	1.6	49
81	Reopening dentistry after COVID-19: Complete suppression of aerosolization in dental procedures by viscoelastic Medusa Gorgo. Physics of Fluids, 2020, 32, 083111.	1.6	49
82	Pool boiling of Novec 7300 and self-rewetting fluids on electrically-assisted supersonically solution-blown, copper-plated nanofibers. International Journal of Heat and Mass Transfer, 2016, 95, 83-93.	2.5	47
83	Natural Biopolymer-Based Triboelectric Nanogenerators via Fast, Facile, Scalable Solution Blowing. ACS Applied Materials & Interfaces, 2018, 10, 37749-37759.	4.0	47
84	Sustainable Nanotextured Wave Energy Harvester Based on Ferroelectric Fatigueâ€Free and Flexoelectricityâ€Enhanced Piezoelectric P(VDFâ€TrFE) Nanofibers with BaSrTiO₃ Nanoparticles. Advanced Functional Materials, 2020, 30, 2001150.	7.8	47
85	Spreading of a viscous drop due to gravity and capillarity on a horizontal or an inclined dry wall. Physics of Fluids, 2002, 14, 118-132.	1.6	46
86	Biodegradable and biocompatible soy protein/polymer/adhesive sticky nano-textured interfacial membranes for prevention of esca fungi invasion into pruning cuts and wounds of vines. Journal of Materials Chemistry B, 2015, 3, 2147-2162.	2.9	45
87	Shear and extensional rheological investigations in solutions of grafted and ungrafted polysaccharides. Journal of Applied Polymer Science, 2000, 77, 3200-3209.	1.3	44
88	Biopolymer-Based Nanofiber Mats and Their Mechanical Characterization. Industrial & Engineering Chemistry Research, 2013, 52, 15104-15113.	1.8	43
89	Pool boiling on nano-textured surfaces comprised of electrically-assisted supersonically solution-blown, copper-plated nanofibers: Experiments and theory. International Journal of Heat and Mass Transfer, 2015, 87, 521-535.	2.5	43
90	Drop impact cooling enhancement on nano-textured surfaces. Part I: Theory and results of the ground (1g) experiments. International Journal of Heat and Mass Transfer, 2014, 70, 1095-1106.	2.5	42

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91	Elongational behavior of gelled propellant simulants. Journal of Rheology, 2004, 48, 101-116.	1.3	41
92	Effect of Chemical and Physical Cross-Linking on Tensile Characteristics of Solution-Blown Soy Protein Nanofiber Mats. Industrial & Engineering Chemistry Research, 2012, 51, 15109-15121.	1.8	41
93	Fatigue of Self-Healing Nanofiber-based Composites: Static Test and Subcritical Crack Propagation. ACS Applied Materials & Interfaces, 2016, 8, 18462-18470.	4.0	40
94	Wearable transparent thermal sensors and heaters based on metal-plated fibers and nanowires. Nanoscale, 2018, 10, 19825-19834.	2.8	40
95	Self-healing three-dimensional bulk materials based on core-shell nanofibers. Chemical Engineering Journal, 2018, 334, 1093-1100.	6.6	39
96	Electrostatic Transparent Air Filter Membranes Composed of Metallized Microfibers for Particulate Removal. ACS Applied Materials & Interfaces, 2019, 11, 26323-26332.	4.0	39
97	Electrostatically Sprayed Nanostructured Electrodes for Energy Conversion and Storage Devices. Advanced Functional Materials, 2021, 31, 2008181.	7.8	39
98	Dean vortices-induced enhancement of mass transfer through an interface separating two immiscible liquids. Physics of Fluids, 2003, 15, 330-347.	1.6	38
99	Numerical prediction of the effect of uptake velocity on three-dimensional structure, porosity and permeability of meltblown nonwoven laydown. Polymer, 2016, 85, 19-27.	1.8	38
100	Lines of dense nanoparticle colloidal suspensions evaporating on a flat surface: Formation of non-uniform dried deposits. Journal of Colloid and Interface Science, 2006, 294, 343-354.	5.0	37
101	Dynamic Electrowetting-on-Dielectric (DEWOD) on Unstretched and Stretched Teflon. Langmuir, 2013, 29, 7758-7767.	1.6	37
102	Pool boiling of Novec 7300 and DI water on nano-textured heater covered with supersonically-blown or electrospun polymer nanofibers. International Journal of Heat and Mass Transfer, 2017, 106, 482-490.	2.5	37
103	Stress-strain dependence for soy-protein nanofiber mats. Journal of Applied Physics, 2012, 111, .	1.1	35
104	Foam Consolidation and Drainage. Langmuir, 2012, 28, 5323-5330.	1.6	35
105	Drop impact cooling enhancement on nano-textured surfaces. Part II: Results of the parabolic flight experiments [zero gravity (0g) and supergravity (1.8g)]. International Journal of Heat and Mass Transfer, 2014, 70, 1107-1114.	2.5	34
106	Prediction of blood back spatter from a gunshot in bloodstain pattern analysis. Physical Review Fluids, 2016, 1, .	1.0	34
107	Liquid drop growth on a fiber. AICHE Journal, 2006, 52, 217-227.	1.8	33
108	Room-temperature, open-air, wet intercalation of liquids, surfactants, polymers and nanoparticles within nanotubes and microchannels. Journal of Materials Chemistry, 2008, 18, 696-702.	6.7	32

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109	Blowing drops off a filament. Soft Matter, 2013, 9, 6053.	1.2	32
110	Blood rheology in shear and uniaxial elongation. Rheologica Acta, 2016, 55, 901-908.	1.1	31
111	Theoretical and experimental investigation of aqueous liquids contained in carbon nanotubes. Journal of Applied Physics, 2005, 97, 124309.	1.1	30
112	Silver-decorated and palladium-coated copper-electroplated fibers derived from electrospun polymer nanofibers. Chemical Engineering Journal, 2017, 327, 336-342.	6.6	30
113	Release of Self-Healing Agents in a Material: What Happens Next?. ACS Applied Materials & Interfaces, 2017, 9, 17449-17455.	4.0	29
114	Self-Cleaning Anticondensing Glass via Supersonic Spraying of Silver Nanowires, Silica, and Polystyrene Nanoparticles. ACS Applied Materials & Interfaces, 2017, 9, 35325-35332.	4.0	29
115	Oxidation-resistant metallized nanofibers as transparent conducting films and heaters. Acta Materialia, 2018, 143, 174-180.	3.8	29
116	Programmable soft robotics based on nano-textured thermo-responsive actuators. Nanoscale, 2019, 11, 2065-2070.	2.8	29
117	Ion-specific effects in foams. Advances in Colloid and Interface Science, 2015, 225, 98-113.	7.0	28
118	High-speed video analysis of forward and backward spattered blood droplets. Forensic Science International, 2017, 276, 134-141.	1.3	28
119	Transparent Body-Attachable Multifunctional Pressure, Thermal, and Proximity Sensor and Heater. Scientific Reports, 2020, 10, 2701.	1.6	28
120	Control of Direct Written Ink Droplets Using Electrowetting. Langmuir, 2019, 35, 11023-11036.	1.6	27
121	Onset of folding in plane liquid films. Journal of Fluid Mechanics, 1996, 307, 85-99.	1.4	26
122	A blister-like soft nano-textured thermo-pneumatic actuator as an artificial muscle. Nanoscale, 2018, 10, 16591-16600.	2.8	26
123	Mechanoresponsive polymer nanoparticles, nanofibers and coatings as drug carriers and components of microfluidic devices. Journal of Materials Chemistry, 2011, 21, 8269.	6.7	25
124	Dynamic hydrophobicity of superhydrophobic PTFE-SiO2 electrospun fibrous membranes. Journal of Membrane Science, 2021, 619, 118810.	4.1	25
125	Supersonically Blown Ultrathin Thorny Devil Nanofibers for Efficient Air Cooling. ACS Applied Materials & Interfaces, 2014, 6, 13657-13666.	4.0	24
126	Supersonically Sprayed Copperâ€“Nickel Microparticles as Flexible and Printable Thinâ€Film Highâ€Temperature Heaters. Advanced Materials Interfaces, 2017, 4, 1700075.	1.9	24

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127	Self-Healing Nanotextured Vascular-like Materials: Mode I Crack Propagation. ACS Applied Materials & Interfaces, 2017, 9, 27223-27231.	4.0	23
128	Reusable Filters Augmented with Heating Microfibers for Antibacterial and Antiviral Sterilization. ACS Applied Materials & Interfaces, 2021, 13, 857-867.	4.0	23
129	Self-healing of nanofiber-based composites in the course of stretching. Polymer, 2016, 103, 180-188.	1.8	22
130	Self-Healing Nanotextured Vascular Engineering Materials. Advanced Structured Materials, 2019, , .	0.3	22
131	Transparent Metallized Microfibers as Recyclable Electrostatic Air Filters with Ionization. ACS Applied Materials & Interfaces, 2020, 12, 25266-25275.	4.0	22
132	Hydrodynamics of back spatter by blunt bullet gunshot with a link to bloodstain pattern analysis. Physical Review Fluids, 2017, 2, .	1.0	22
133	Stationary d.c. streaming due to shape oscillations of a droplet and its effect on mass transfer in liquidâ€“liquid systems. Journal of Fluid Mechanics, 2001, 444, 321-342.	1.4	21
134	Bio-inspired, colorful, flexible, defrostable light-scattering hybrid films for the effective distribution of LED light. Nanoscale, 2017, 9, 9139-9147.	2.8	21
135	Modeling of Droplet Impact onto Polarized and Nonpolarized Dielectric Surfaces. Langmuir, 2018, 34, 10169-10180.	1.6	21
136	On the nature of the superspreaders. Advances in Colloid and Interface Science, 2019, 263, 1-18.	7.0	21
137	Bubble nucleation during devolatilization of polymer melts. AICHE Journal, 1999, 45, 2590-2605.	1.8	20
138	Shear and extensional investigations in solutions of grafted/ungrafted amylopectin and polyacrylamide. Journal of Applied Polymer Science, 1999, 74, 2773-2782.	1.3	20
139	Pressure-driven fluidic delivery through carbon tube bundles. Lab on A Chip, 2008, 8, 152-160.	3.1	20
140	Nano-textured copper oxide nanofibers for efficient air cooling. Journal of Applied Physics, 2016, 119, 065306.	1.1	20
141	Swing-like pool boiling on nano-textured surfaces for microgravity applications related to cooling of high-power microelectronics. Npj Microgravity, 2017, 3, 9.	1.9	20
142	Pool boiling in deep and shallow vessels and the effect of surface nano-texture and self-rewetting. International Journal of Heat and Mass Transfer, 2018, 127, 857-866.	2.5	20
143	Determining the region of origin of blood spatter patterns considering fluid dynamics and statistical uncertainties. Forensic Science International, 2019, 298, 323-331.	1.3	20
144	Theoretical and experimental investigation of forward spatter of blood from a gunshot. Physical Review Fluids, 2018, 3, .	1.0	20

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145	Facile processes for producing robust, transparent, conductive platinum nanofiber mats. Nanoscale, 2017, 9, 6076-6084.	2.8	19
146	Highly transparent, conducting, body-attachable metallized fibers as a flexible and stretchable film. Journal of Alloys and Compounds, 2019, 790, 1127-1136.	2.8	19
147	Effect of nano-textured heater surfaces on evaporation at a single meniscus. International Journal of Heat and Mass Transfer, 2017, 108, 2444-2450.	2.5	18
148	Drop impact onto polarized dielectric surface for controlled coating. Physics of Fluids, 2021, 33, .	1.6	18
149	Breakup mechanisms of electrostatic atomization of corn oil and diesel fuel. Journal of Applied Physics, 2010, 108, .	1.1	17
150	Spongy Gels by a Topâ€Đown Approach from Polymer Fibrous Sponges. Angewandte Chemie, 2017, 129, 3333-3336.	1.6	17
151	Theoretical and experimental study of dissolution mechanism of cellulose. Journal of Molecular Liquids, 2020, 312, 113450.	2.3	17
152	Surface-tension-driven flows at low Reynolds number arising in optoelectronic technology. Journal of Fluid Mechanics, 1995, 286, 173-200.	1.4	16
153	Forced vibration of a heated wire subjected to nucleate boiling. International Journal of Heat and Mass Transfer, 2019, 135, 44-51.	2.5	16
154	Three-dimensional instability of a two-layer Dean flow. Physics of Fluids, 2001, 13, 3185-3195.	1.6	15
155	Electrospinning of a blend of a liquid crystalline polymer with poly(ethylene oxide): Vectran nanofiber mats and their mechanical properties. Journal of Materials Chemistry C, 2013, 1, 351-358.	2.7	15
156	Solution Blowing Synthesis of Li-Conductive Ceramic Nanofibers. ACS Applied Materials & Interfaces, 2020, 12, 16200-16208.	4.0	15
157	Solution-Blown Poly(hydroxybutyrate) and Îµ-Poly-<scp>l</scp>-lysine Submicro- and Microfiber-Based Sustainable Nonwovens with Antimicrobial Activity for Single-Use Applications. ACS Biomaterials Science and Engineering, 2021, 7, 3980-3992.	2.6	15
158	Trains of Taylor bubbles over hot nano-textured mini-channel surface. International Journal of Heat and Mass Transfer, 2016, 93, 827-833.	2.5	14
159	Wearable multifunctional soft sensor and contactless 3D scanner using supersonically sprayed silver nanowires, carbon nanotubes, zinc oxide, and PEDOT:PSS. NPG Asia Materials, 2022, 14, .	3.8	14
160	Enhanced release of liquid from carbon nanotubes due to entrainment by an air layer. Nanotechnology, 2009, 20, 095711.	1.3	13
161	Numerical modeling and experimental study of solution-blown nonwovens formed on a rotating drum. Polymer, 2016, 105, 255-263.	1.8	13
162	Faradaic reactionsâ€™ mechanisms and parameters in charging of oils. Electrochimica Acta, 2018, 268, 173-186.	2.6	13

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163	Exponential vaporization fronts and critical heat flux in pool boiling. International Communications in Heat and Mass Transfer, 2018, 98, 171-176.	2.9	13
164	Point-bonded polymer nonwovens and their rupture in stretching. Polymer, 2018, 146, 209-221.	1.8	13
165	Implications of two backward blood spatter models based on fluid dynamics for bloodstain pattern analysis. Forensic Science International, 2019, 301, 299-305.	1.3	12
166	Dynamics of sprinkler jets. Fluid Dynamics, 1986, 20, 715-722.	0.2	11
167	Strong squeeze flows of yield-stress fluids: The effect of normal deviatoric stresses. Journal of Rheology, 2013, 57, 719-742.	1.3	11
168	Prevention of mold invasion by eco-friendly lignin/polycaprolactone nanofiber membranes for amelioration of public hygiene. Cellulose, 2017, 24, 951-965.	2.4	11
169	Transparent Conducting Electrodes from Conducting Polymer Nanofibers and Their Application as Thinâ€Film Heaters. Macromolecular Materials and Engineering, 2017, 302, 1700188.	1.7	11
170	Modeling of spunbond formation process of polymer nonwovens. Polymer, 2020, 187, 121902.	1.8	11
171	Electrowetting-assisted direct ink writing for low-viscosity liquids. Journal of Manufacturing Processes, 2021, 69, 173-180.	2.8	11
172	Reusable and durable electrostatic air filter based on hybrid metallized microfibers decorated with metalâ€“organicâ€“framework nanocrystals. Journal of Materials Science and Technology, 2021, 85, 44-55.	5.6	11
173	Flow-induced on-line crystallization of rodlike molecules in fiber spinning. Journal of Applied Polymer Science, 1992, 46, 873-878.	1.3	10
174	Convection-induced enhancement of mass transfer through an interface separating two immiscible liquids in a two-layer horizontal annulus. Physics of Fluids, 2003, 15, 790-800.	1.6	10
175	Supersonically sprayed thermal barrier layers using clay micro-particles. Applied Clay Science, 2016, 120, 142-146.	2.6	10
176	Self-similar turbulent vortex rings: interaction of propellant gases with blood backspatter and the transport of gunshot residue. Journal of Fluid Mechanics, 2019, 876, 859-880.	1.4	10
177	Theoretical model of swirling thick film flow inside converging nozzles of various geometries. Fuel, 2020, 280, 118215.	3.4	10
178	Non-Symmetric Convective Flows in Laterally Heated Rectangular Cavities. International Journal of Computational Fluid Dynamics, 1999, 11, 261-273.	0.5	9
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