

Ashutosh Sharma

List of Publications by Year in descending order

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337
papers

15,799
citations

13087

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339
all docs

339
docs citations

339
times ranked

12730
citing authors

#	ARTICLE	IF	CITATIONS
1	Pattern Formation in Unstable Thin Liquid Films. <i>Physical Review Letters</i> , 1998, 81, 3463-3466.	2.9	444
2	Instability of Thin Polymer Films on Coated Substrates: Rupture, Dewetting, and Drop Formation. <i>Journal of Colloid and Interface Science</i> , 1996, 178, 383-399.	5.0	382
3	Relationship of thin film stability and morphology to macroscopic parameters of wetting in the apolar and polar systems. <i>Langmuir</i> , 1993, 9, 861-869.	1.6	276
4	Instability and Morphology of Thin Liquid Films on Chemically Heterogeneous Substrates. <i>Physical Review Letters</i> , 2000, 84, 931-934.	2.9	220
5	Templating of Thin Films Induced by Dewetting on Patterned Surfaces. <i>Physical Review Letters</i> , 2001, 86, 4536-4539.	2.9	196
6	Electric Field Induced Instability and Pattern Formation in Thin Liquid Films. <i>Langmuir</i> , 2005, 21, 3710-3721.	1.6	196
7	Thin Film Instability Induced by Long-Range Forces. <i>Langmuir</i> , 1999, 15, 2551-2558.	1.6	187
8	Meniscus Instability in a Thin Elastic Film. <i>Physical Review Letters</i> , 2000, 85, 4329-4332.	2.9	185
9	Two-phase electrohydrodynamic simulations using a volume-of-fluid approach. <i>Journal of Computational Physics</i> , 2007, 227, 1267-1285.	1.9	183
10	Recent advances in the synthesis and application of photocatalytic metal-oxide core-shell nanoparticles for environmental remediation and their recycling process. <i>RSC Advances</i> , 2016, 6, 83589-83612.	1.7	171
11	Improved graphitization and electrical conductivity of suspended carbon nanofibers derived from carbon nanotube/polyacrylonitrile composites by directed electrospinning. <i>Carbon</i> , 2012, 50, 1753-1761.	5.4	159
12	Dual Functional Ta-Doped Electrospun TiO ₂ Nanofibers with Enhanced Photocatalysis and SERS Detection for Organic Compounds. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 28495-28507.	4.0	158
13	Pattern Formation in a Thin Solid Film with Interactions. <i>Physical Review Letters</i> , 2001, 86, 119-122.	2.9	157
14	Microfluidic Immuno-Biochip for Detection of Breast Cancer Biomarkers Using Hierarchical Composite of Porous Graphene and Titanium Dioxide Nanofibers. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20570-20582.	4.0	157
15	Comparative study of removal of volatile organic compounds by cryogenic condensation and adsorption by activated carbon fiber. <i>Separation and Purification Technology</i> , 2004, 39, 23-37.	3.9	156
16	Nonlinear Stability, Rupture, and Morphological Phase Separation of Thin Fluid Films on Apolar and Polar Substrates. <i>Journal of Colloid and Interface Science</i> , 1993, 161, 190-208.	5.0	145
17	Microfluidic Adhesion Induced by Subsurface Microstructures. <i>Science</i> , 2007, 318, 258-261.	6.0	137
18	Highly Sensitive Biofunctionalized Mesoporous Electrospun TiO ₂ Nanofiber Based Interface for Biosensing. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2516-2527.	4.0	136

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19	Carbon aerogels through organo-inorganic co-assembly and their application in water desalination by capacitive deionization. <i>Carbon</i> , 2016, 99, 375-383.	5.4	134
20	Auto-Optimization of Dewetting Rates by Rim Instabilities in Slipping Polymer Films. <i>Physical Review Letters</i> , 2001, 87, 166103.	2.9	130
21	Numerical simulation of bubble growth in film boiling using a coupled level-set and volume-of-fluid method. <i>Physics of Fluids</i> , 2005, 17, 112103.	1.6	129
22	An analytical nonlinear theory of thin film rupture and its application to wetting films. <i>Journal of Colloid and Interface Science</i> , 1986, 113, 456-479.	5.0	127
23	Pattern formation in unstable thin liquid films under the influence of antagonistic short- and long-range forces. <i>Journal of Chemical Physics</i> , 1999, 110, 4929-4936.	1.2	125
24	Electrospinning Combined with Nonsolvent-Induced Phase Separation To Fabricate Highly Porous and Hollow Submicrometer Polymer Fibers. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 1761-1766.	1.8	125
25	Instability, self-organization and pattern formation in thin soft films. <i>Soft Matter</i> , 2015, 11, 8717-8740.	1.2	122
26	Dewetting of Thin Films on Periodic Physically and Chemically Patterned Surfaces. <i>Langmuir</i> , 2002, 18, 1893-1903.	1.6	121
27	Regimes during liquid drop impact on a liquid pool. <i>Journal of Fluid Mechanics</i> , 2015, 768, 492-523.	1.4	121
28	Instability of the interface between thin fluid films subjected to electric fields. <i>Journal of Colloid and Interface Science</i> , 2004, 274, 294-308.	5.0	120
29	Equilibrium contact angles and film thicknesses in the apolar and polar systems: role of intermolecular interactions in coexistence of drops with thin films. <i>Langmuir</i> , 1993, 9, 3580-3586.	1.6	116
30	Recent advances in electrospun metal-oxide nanofiber based interfaces for electrochemical biosensing. <i>RSC Advances</i> , 2016, 6, 94595-94616.	1.7	116
31	Gas-Phase Mass Transfer in a Centrifugal Contactor. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 384-392.	1.8	114
32	Development of bi-metal doped micro- and nano multi-functional polymeric adsorbents for the removal of fluoride and arsenic(V) from wastewater. <i>Desalination</i> , 2011, 282, 27-38.	4.0	113
33	Control of morphology in pattern directed dewetting of thin polymer films. <i>Soft Matter</i> , 2008, 4, 2086.	1.2	111
34	Anti-epidermal growth factor receptor conjugated mesoporous zinc oxide nanofibers for breast cancer diagnostics. <i>Nanoscale</i> , 2015, 7, 7234-7245.	2.8	107
35	3D urchin-shaped Ni ₃ (VO ₄) ₂ hollow nanospheres for high-performance asymmetric supercapacitor applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9822-9831.	5.2	107
36	Many paths to dewetting of thin films: anatomy and physiology of surface instability. <i>European Physical Journal E</i> , 2003, 12, 397-408.	0.7	106

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37	Pressure-driven diffusive gas flows in micro-channels: from the Knudsen to the continuum regimes. <i>Microfluidics and Nanofluidics</i> , 2009, 6, 679-692.	1.0	104
38	Enhanced Instability in Thin Liquid Films by Improved Compatibility. <i>Physical Review Letters</i> , 2000, 85, 1432-1435.	2.9	103
39	One-step maskless grayscale lithography for the fabrication of 3-dimensional structures in SU-8. <i>Sensors and Actuators B: Chemical</i> , 2011, 153, 125-134.	4.0	103
40	Instability and Pattern Formation in Thin Liquid Films on Chemically Heterogeneous Substrates. <i>Langmuir</i> , 2000, 16, 10243-10253.	1.6	98
41	Instability and Dynamics of Thin Liquid Bilayers. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 1259-1272.	1.8	98
42	Generation of secondary droplets in coalescence of a drop at a liquid-liquid interface. <i>Journal of Fluid Mechanics</i> , 2010, 655, 72-104.	1.4	97
43	Creation of Ordered Patterns by Dewetting of Thin Films on Homogeneous and Heterogeneous Substrates. <i>Journal of Colloid and Interface Science</i> , 2002, 245, 99-115.	5.0	96
44	Enhanced Self-Organized Dewetting of Ultrathin Polymer Films Under Water-Organic Solutions: Fabrication of Sub-micrometer Spherical Lens Arrays. <i>Advanced Materials</i> , 2010, 22, 5306-5309.	11.1	94
45	Scaffolds for bone tissue engineering: role of surface patterning on osteoblast response. <i>RSC Advances</i> , 2013, 3, 11073.	1.7	93
46	Stability and Dewetting of Metal Nanoparticle Filled Thin Polymer Films: Control of Instability Length Scale and Dynamics. <i>ACS Nano</i> , 2010, 4, 3709-3724.	7.3	92
47	Facile synthesis of Cu ₂ O microstructures and their morphology dependent electrochemical supercapacitor properties. <i>RSC Advances</i> , 2016, 6, 3815-3822.	1.7	92
48	Electrospun hollow glassy carbon-reduced graphene oxide nanofibers with encapsulated ZnO nanoparticles: a free standing anode for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 5344-5351.	5.2	91
49	Flux and retention analysis during micellar enhanced ultrafiltration for the removal of phenol and aniline. <i>Separation and Purification Technology</i> , 2001, 24, 541-557.	3.9	86
50	Dynamics and Morphology of Holes in Dewetting of Thin Films. <i>Journal of Colloid and Interface Science</i> , 1999, 212, 483-494.	5.0	83
51	High Performance Supercapacitors from Novel Metal-Doped Ceria-Decorated Aminated Graphene. <i>Journal of Physical Chemistry C</i> , 2016, 120, 3107-3116.	1.5	83
52	Mechanism of tear film rupture and formation of dry spots on cornea. <i>Journal of Colloid and Interface Science</i> , 1985, 106, 12-27.	5.0	81
53	Dewetting of solids by the formation of holes in macroscopic liquid films. <i>Journal of Colloid and Interface Science</i> , 1989, 133, 358-368.	5.0	80
54	Pattern Formation in Spontaneous Dewetting of Thin Apolar Films. <i>Journal of Colloid and Interface Science</i> , 1997, 195, 42-50.	5.0	79

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55	Polymer Patterns in Evaporating Droplets on Dissolving Substrates. Langmuir, 2004, 20, 3456-3463.	1.6	79
56	Equilibrium and Dynamics of Evaporating or Condensing Thin Fluid Domains: Thin Film Stability and Heterogeneous Nucleation. Langmuir, 1998, 14, 4915-4928.	1.6	78
57	Structurally stable hollow mesoporous graphitized carbon nanofibers embedded with NiMoO ₄ nanoparticles for high performance asymmetric supercapacitors. Electrochimica Acta, 2017, 238, 337-348.	2.6	78
58	Fe-Grown Carbon Nanofibers for Removal of Arsenic(V) in Wastewater. Industrial & Engineering Chemistry Research, 2010, 49, 7074-7084.	1.8	77
59	Adsorbents based on carbon microfibers and carbon nanofibers for the removal of phenol and lead from water. Journal of Colloid and Interface Science, 2011, 359, 228-239.	5.0	76
60	Catalytic oxidation of toluene and m-xylene by activated carbon fiber impregnated with transition metals. Carbon, 2005, 43, 3041-3053.	5.4	75
61	Mesopatterning of Thin Liquid Films by Templating on Chemically Patterned Complex Substrates. Langmuir, 2003, 19, 5153-5163.	1.6	74
62	Application of electrochemical impedance spectroscopy in bio-fuel cell characterization: A review. International Journal of Hydrogen Energy, 2014, 39, 20159-20170.	3.8	74
63	Photocatalytic Degradation of Naphthalene by Electrospun Mesoporous Carbon-Doped Anatase TiO ₂ Nanofiber Mats. Industrial & Engineering Chemistry Research, 2014, 53, 18900-18909.	1.8	73
64	Morphological self-organization by dewetting in thin films on chemically patterned substrates. Journal of Chemical Physics, 2002, 116, 3042-3051.	1.2	72
65	Instability, Dynamics, and Morphology of Thin Slipping Films. Langmuir, 2004, 20, 244-253.	1.6	71
66	Generalized integral and similarity solutions of the concentration profiles for osmotic pressure controlled ultrafiltration. Journal of Membrane Science, 1997, 130, 99-121.	4.1	70
67	Iron doped phenolic resin based activated carbon micro and nanoparticles by milling: Synthesis, characterization and application in arsenic removal. Chemical Engineering Science, 2010, 65, 3591-3601.	1.9	70
68	Multiscale Carbon Structures Fabricated by Direct Micropatterning of Electrospun Mats of SU-8 Photoresist Nanofibers. Langmuir, 2010, 26, 2218-2222.	1.6	70
69	Fe ₃ O ₄ Nanoparticles Embedded Hollow Mesoporous Carbon Nanofibers and Polydimethylsiloxane-Based Nanocomposites as Efficient Microwave Absorber. Journal of Physical Chemistry C, 2017, 121, 7810-7820.	1.5	70
70	Computational investigation on bubble detachment from submerged orifice in quiescent liquid under normal and reduced gravity. Physics of Fluids, 2009, 21, .	1.6	68
71	Energetic criteria for the breakup of liquid films on nonwetting solid surfaces. Journal of Colloid and Interface Science, 1990, 137, 433-445.	5.0	67
72	Electric-Field-Induced Patterns in Soft Viscoelastic Films: From Long Waves of Viscous Liquids to Short Waves of Elastic Solids. Physical Review Letters, 2009, 102, 254502.	2.9	67

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73	Spontaneous Dewetting and Ordered Patterns in Evaporating Thin Liquid Films on Homogeneous and Heterogeneous Substrates. <i>Langmuir</i> , 2001, 17, 1294-1305.	1.6	66
74	Instability of Thin Liquid Films by Density Variations: A New Mechanism that Mimics Spinodal Dewetting. <i>Physical Review Letters</i> , 2002, 89, 186101.	2.9	66
75	Stability of a thin elastic film interacting with a contactor. <i>Journal of the Mechanics and Physics of Solids</i> , 2002, 50, 1155-1173.	2.3	66
76	Fabrication and electrical conductivity of suspended carbon nanofiber arrays. <i>Carbon</i> , 2011, 49, 1727-1732.	5.4	66
77	Highly sensitive porous carbon and metal/carbon conducting nanofiber based enzymatic biosensors for triglyceride detection. <i>Sensors and Actuators B: Chemical</i> , 2017, 246, 202-214.	4.0	65
78	Patterns, Forces, and Metastable Pathways in Debonding of Elastic Films. <i>Physical Review Letters</i> , 2004, 93, .	2.9	64
79	Electric-Field-Controlled Surface Instabilities in Soft Elastic Films. <i>Advanced Materials</i> , 2006, 18, 660-663.	11.1	64
80	Adsorptive Removal of Fluoride by Micro-nanohierarchical Web of Activated Carbon Fibers. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 9697-9707.	1.8	64
81	Increased Graphitization in Electrospun Single Suspended Carbon Nanowires Integrated with Carbon-MEMS and Carbon-NEMS Platforms. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 34-39.	4.0	64
82	Quantum dot sensitized electrospun mesoporous titanium dioxide hollow nanofibers for photocatalytic applications. <i>RSC Advances</i> , 2016, 6, 48109-48119.	1.7	64
83	Microporous Nanocomposite Enabled Microfluidic Biochip for Cardiac Biomarker Detection. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 33576-33588.	4.0	63
84	Finite-amplitude instability of thin free and wetting films: prediction of lifetimes. <i>Langmuir</i> , 1986, 2, 480-494.	1.6	61
85	Carbon microelectromechanical systems as a substratum for cell growth. <i>Biomedical Materials (Bristol)</i> , 2008, 3, 034116.	1.7	58
86	Fe-nanoparticles dispersed carbon micro and nanofibers: Surfactant-mediated preparation and application to the removal of gaseous VOCs. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 399, 46-55.	2.3	57
87	In situ integration of graphene foam-titanium nitride based bio-scaffolds and microfluidic structures for soil nutrient sensors. <i>Lab on A Chip</i> , 2017, 17, 274-285.	3.1	57
88	Nickel tungstate-graphene nanocomposite for simultaneous electrochemical detection of heavy metal ions with application to complex aqueous media. <i>RSC Advances</i> , 2017, 7, 42146-42158.	1.7	56
89	Preparation and characterization of ACF for the adsorption of BTX and SO ₂ . <i>Chemical Engineering and Processing: Process Intensification</i> , 2006, 45, 1-13.	1.8	55
90	Electric-field induced instabilities and morphological phase transitions in soft elastic films. <i>Physical Review E</i> , 2008, 77, 031604.	0.8	55

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91	Morphologically tailored activated carbon derived from waste tires as high-performance anode for Li-ion battery. <i>Journal of Applied Electrochemistry</i> , 2018, 48, 1-13.	1.5	55
92	Estimation and Influence of Long Range Solute. Membrane Interactions in Ultrafiltration. <i>Industrial & Engineering Chemistry Research</i> , 1996, 35, 3108-3121.	1.8	54
93	A unified model for flux prediction during batch cell ultrafiltration. <i>Journal of Membrane Science</i> , 1996, 111, 243-258.	4.1	54
94	Electric-Field-Induced Interfacial Instabilities and Morphologies of Thin Viscous and Elastic Bilayers. <i>Langmuir</i> , 2009, 25, 9108-9118.	1.6	54
95	Cytotoxic Evaluation of the Hierarchical Web of Carbon Micronanofibers. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 4672-4682.	1.8	54
96	PZT/PDMS composite for active damping of vibrations. <i>Composites Science and Technology</i> , 2013, 77, 42-51.	3.8	54
97	Electrohydrodynamic instability of a confined viscoelastic liquid film. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007, 143, 120-130.	1.0	53
98	A Unified Theory of Instabilities in Viscoelastic Thin Films: From Wetting to Confined Films, From Viscous to Elastic Films, and From Short to Long Waves. <i>Langmuir</i> , 2010, 26, 8464-8473.	1.6	53
99	Free-standing NiV ₂ S ₄ nanosheet arrays on a 3D Ni framework via an anion exchange reaction as a novel electrode for asymmetric supercapacitor applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17512-17520.	5.2	52
100	Instability and dewetting of evaporating thin water films on partially and completely wettable substrates. <i>Journal of Chemical Physics</i> , 1999, 110, 1735-1744.	1.2	50
101	Nonlinear instabilities and pathways of rupture in thin liquid bilayers. <i>Journal of Chemical Physics</i> , 2006, 125, 054711.	1.2	50
102	Mesoporous Few-Layer Graphene Platform for Affinity Biosensing Application. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 7646-7656.	4.0	50
103	Control of Self-Organized Contact Instability and Patterning in Soft Elastic Films. <i>Langmuir</i> , 2006, 22, 7066-7071.	1.6	49
104	Synthesis of carbon xerogel particles and fractal-like structures. <i>Chemical Engineering Science</i> , 2009, 64, 1536-1543.	1.9	49
105	Development of novel in situ nickel-doped, phenolic resin-based micro-nano-activated carbon adsorbents for the removal of vitamin B-12. <i>Chemical Engineering Journal</i> , 2012, 197, 250-260.	6.6	49
106	Direct Immersion Annealing of Thin Block Copolymer Films. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 21639-21645.	4.0	48
107	Dewetting of Glassy Polymer Films. <i>Physical Review Letters</i> , 2002, 88, 236101.	2.9	47
108	Magnetorheology of Polydimethylsiloxane Elastomer/FeCo ₃ Nanocomposite. <i>Journal of Physical Chemistry C</i> , 2014, 118, 25684-25703.	1.5	47

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109	Contact Instability in Adhesion and Debonding of Thin Elastic Films. <i>Physical Review Letters</i> , 2006, 97, 018303.	2.9	46
110	Submicrometer Pattern Fabrication by Intensification of Instability in Ultrathin Polymer Films under a Water-Solvent Mix. <i>Macromolecules</i> , 2011, 44, 4928-4935.	2.2	46
111	Synthesis of hierarchical fabrics by electrospinning of PAN nanofibers on activated carbon microfibers for environmental remediation applications. <i>Chemical Engineering Journal</i> , 2011, 171, 1194-1200.	6.6	46
112	Dewetting of Stable Thin Polymer Films Induced by a Poor Solvent: Role of Polar Interactions. <i>Macromolecules</i> , 2012, 45, 6628-6633.	2.2	46
113	Vertical electric field stimulated neural cell functionality on porous amorphous carbon electrodes. <i>Biomaterials</i> , 2013, 34, 9252-9263.	5.7	46
114	A new mechanism of film thinning: Enhancement of Reynolds' velocity by surface waves. <i>Journal of Colloid and Interface Science</i> , 1987, 119, 1-13.	5.0	45
115	Confinement-induced instability and adhesive failure between dissimilar thin elastic films. <i>European Physical Journal E</i> , 2006, 20, 47-53.	0.7	45
116	The role of lipid abnormalities, aqueous and mucus deficiencies in the tear film breakup, and implications for tear substitutes and contact lens tolerance. <i>Journal of Colloid and Interface Science</i> , 1986, 111, 8-34.	5.0	44
117	Stability, critical thickness, and the time of rupture of thinning foam and emulsion films. <i>Langmuir</i> , 1987, 3, 760-768.	1.6	44
118	Surface Interactions in Osmotic Pressure Controlled Flux Decline during Ultrafiltration. <i>Langmuir</i> , 1994, 10, 4710-4720.	1.6	44
119	Contact instability of thin elastic films on patterned substrates. <i>Journal of Chemical Physics</i> , 2007, 127, 064703.	1.2	44
120	Micro-Nano Hierarchical Web of Activated Carbon Fibers for Catalytic Gas Adsorption and Reaction. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 3700-3707.	1.8	43
121	Hydrodynamics of Meniscus-Induced Thinning of the Tear Film. <i>Advances in Experimental Medicine and Biology</i> , 1998, 438, 425-431.	0.8	42
122	Morphological Phase Separation in Thin Liquid Films. <i>Journal of Colloid and Interface Science</i> , 1994, 164, 416-427.	5.0	41
123	PEDOT:PSS/PVA Nanofibers Decorated Conducting Paper for Cancer Diagnostics. <i>Advanced Materials Technologies</i> , 2016, 1, 1600056.	3.0	41
124	Energetics of corneal epithelial cell-ocular mucus-tear film interactions: Some surface-chemical pathways of corneal defense. <i>Biophysical Chemistry</i> , 1993, 47, 87-99.	1.5	40
125	Instability and dynamics of thin viscoelastic liquid films. <i>European Physical Journal E</i> , 2006, 20, 185-200.	0.7	40
126	Meso-Patterning of Thin Polymer Films by Controlled Dewetting: From Nano-Droplet Arrays to Membranes. <i>Journal of Nanoscience and Nanotechnology</i> , 2007, 7, 2069-2075.	0.9	40

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127	Patterned growth and differentiation of neural cells on polymer derived carbon substrates with micro/nano structures in vitro. <i>Carbon</i> , 2013, 65, 140-155.	5.4	40
128	Superhydrophobic polymethylsilsesquioxane pinned one dimensional ZnO nanostructures for water remediation through photo-catalysis. <i>RSC Advances</i> , 2015, 5, 45897-45907.	1.7	40
129	Long term biopotential recording by body conformable photolithography fabricated low cost polymeric microneedle arrays. <i>Sensors and Actuators A: Physical</i> , 2015, 236, 164-172.	2.0	40
130	Self-organized structures in thin liquid films on chemically heterogeneous substrates: Effect of antagonistic short and long range interactions. <i>Journal of Chemical Physics</i> , 2001, 114, 7211-7221.	1.2	39
131	Carbon nanofibers containing metal-doped porous carbon beads for environmental remediation applications. <i>Chemical Engineering Journal</i> , 2013, 229, 72-81.	6.6	39
132	Pervaporation from a Dense Membrane: Roles of Permeant Membrane Interactions, Kelvin Effect, and Membrane Swelling. <i>Langmuir</i> , 2004, 20, 4708-4714.	1.6	38
133	Pattern Formation and Dewetting in Thin Films of Liquids Showing Complete Macroscale Wetting: From Pancakes to Swiss Cheese. <i>Langmuir</i> , 2004, 20, 10337-10345.	1.6	38
134	Templated one step electrodeposition of high aspect ratio n-type ZnO nanowire arrays. <i>Journal of Colloid and Interface Science</i> , 2010, 344, 1-9.	5.0	38
135	CLSVOF method to study consecutive drop impact on liquid pool. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2013, 23, 143-158.	1.6	38
136	Nongassing Long-Lasting Electro-osmotic Pump with Polyaniline-wrapped Aminated Graphene Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 593-601.	4.0	38
137	Contact Instability of Elastic Bilayers: Miniaturization of Instability Patterns. <i>Advanced Functional Materials</i> , 2007, 17, 2356-2364.	7.8	37
138	Intracellular reactive oxidative stress, cell proliferation and apoptosis of Schwann cells on carbon nanofibrous substrates. <i>Biomaterials</i> , 2013, 34, 4891-4901.	5.7	37
139	Electrospun functional micro/nanochannels embedded in porous carbon electrodes for microfluidic biosensing. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 82-91.	4.0	37
140	The Strength of Long-Range Forces across Thin Liquid Films. <i>Journal of Colloid and Interface Science</i> , 1999, 214, 126-128.	5.0	36
141	Adhesion and Debonding of Soft Elastic Films: Crack Patterns, Metastable Pathways, and Forces. <i>Langmuir</i> , 2005, 21, 1457-1469.	1.6	36
142	Application of positron annihilation: Study of pervaporation dense membranes. <i>Polymer</i> , 2006, 47, 1300-1307.	1.8	36
143	Dewetting of the Thin Liquid Bilayers on Topographically Patterned Substrates: Formation of Microchannel and Microdot Arrays. <i>Langmuir</i> , 2008, 24, 14048-14058.	1.6	36
144	Multimode analysis of bubble growth in saturated film boiling. <i>Physics of Fluids</i> , 2008, 20, .	1.6	36

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145	Multiscale Pattern Generation in Viscoelastic Polymer Films by Spatiotemporal Modulation of Electric Field and Control of Rheology. <i>Advanced Functional Materials</i> , 2011, 21, 324-335.	7.8	36
146	Critical thickness and lifetimes of foams and emulsions: Role of surface wave-induced thinning. <i>Journal of Colloid and Interface Science</i> , 1987, 119, 14-29.	5.0	35
147	Stability and Breakup of Thin Polar Films on Coated Substrates: A Relationship to Macroscopic Parameters of Wetting. <i>Industrial & Engineering Chemistry Research</i> , 1996, 35, 3081-3092.	1.8	35
148	Instability and Dewetting of Thin Films Induced by Density Variations. <i>Langmuir</i> , 2002, 18, 10213-10220.	1.6	35
149	Composite membranes for hydrophobic pervaporation: study with the toluene-water system. <i>Chemical Engineering Journal</i> , 2004, 102, 171-184.	6.6	35
150	Elastic Contact Induced Self-Organized Patterning of Hydrogel Films. <i>Macromolecules</i> , 2006, 39, 3365-3368.	2.2	35
151	Self-organized nano-lens arrays by intensified dewetting of electron beam modified polymer thin-films. <i>Soft Matter</i> , 2011, 7, 11119.	1.2	35
152	On steady two-fluid electroosmotic flow with full interfacial electrostatics. <i>Journal of Colloid and Interface Science</i> , 2011, 357, 521-526.	5.0	35
153	Spontaneous surface roughening induced by surface interactions between two compressible elastic films. <i>Physical Review E</i> , 2003, 67, 031607.	0.8	34
154	Bilayer staggered herringbone micro-mixers with symmetric and asymmetric geometries. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 271-286.	1.0	34
155	Synthesis of phenolic precursor-based porous carbon beads in situ dispersed with copper-silver bimetal nanoparticles for antibacterial applications. <i>Journal of Colloid and Interface Science</i> , 2014, 418, 216-224.	5.0	34
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