

Ashutosh Sharma

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337
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339
ext. papers

14,860
ext. citations

5.6
avg, IF

6.87
L-index

#	Paper	IF	Citations
337	Pattern Formation in Unstable Thin Liquid Films. <i>Physical Review Letters</i> , 1998 , 81, 3463-3466	7.4	418
336	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	9.3	361
335	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	4	257
334	Instability and morphology of thin liquid films on chemically heterogeneous substrates. <i>Physical Review Letters</i> , 2000 , 84, 931-4	7.4	211
333	Templating of thin films induced by dewetting on patterned surfaces. <i>Physical Review Letters</i> , 2001 , 86, 4536-9	7.4	188
332	Electric field induced instability and pattern formation in thin liquid films. <i>Langmuir</i> , 2005 , 21, 3710-21	4	181
331	Meniscus instability in a thin elastic film. <i>Physical Review Letters</i> , 2000 , 85, 4329-32	7.4	177
330	Thin Film Instability Induced by Long-Range Forces. <i>Langmuir</i> , 1999 , 15, 2551-2558	4	172
329	Pattern Formation in a Thin Solid Film with Interactions. <i>Physical Review Letters</i> , 2001 , 86, 119-122	7.4	156
328	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	9.3	139
327	Two-phase electrohydrodynamic simulations using a volume-of-fluid approach. <i>Journal of Computational Physics</i> , 2007 , 227, 1267-1285	4.1	132
326	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	10.4	131
325	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	8.3	127
324	Auto-optimization of dewetting rates by rim instabilities in slipping polymer films. <i>Physical Review Letters</i> , 2001 , 87, 166103	7.4	126
323	Recent advances in the synthesis and application of photocatalytic metal-metal oxide core-shell nanoparticles for environmental remediation and their recycling process. <i>RSC Advances</i> , 2016 , 6, 83589-83612	3.7	124
322	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, 20570-82	9.5	123
321	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	3.9	119

320	Microfluidic adhesion induced by subsurface microstructures. <i>Science</i> , 2007 , 318, 258-61	33.3	116
319	Dewetting of Thin Films on Periodic Physically and Chemically Patterned Surfaces. <i>Langmuir</i> , 2002 , 18, 1893-1903	4	116
318	Instability of the interface between thin fluid films subjected to electric fields. <i>Journal of Colloid and Interface Science</i> , 2004 , 274, 294-308	9.3	112
317	Dual Functional Ta-Doped Electrospun TiO Nanofibers with Enhanced Photocatalysis and SERS Detection for Organic Compounds. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 28495-28507	9.5	111
316	Highly sensitive biofunctionalized mesoporous electrospun TiO(2) nanofiber based interface for biosensing. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2516-27	9.5	109
315	Control of morphology in pattern directed dewetting of thin polymer films. <i>Soft Matter</i> , 2008 , 4, 2086	3.6	108
314	Carbon aerogels through organo-inorganic co-assembly and their application in water desalination by capacitive deionization. <i>Carbon</i> , 2016 , 99, 375-383	10.4	107
313	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	4	107
312	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	9.3	107
311	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	3.9	105
310	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	4.4	103
309	Many paths to dewetting of thin films: anatomy and physiology of surface instability. <i>European Physical Journal E</i> , 2003 , 12, 397-407; discussion 408	1.5	101
308	Enhanced instability in thin liquid films by improved compatibility. <i>Physical Review Letters</i> , 2000 , 85, 1432-5	7.4	99
307	Instability, self-organization and pattern formation in thin soft films. <i>Soft Matter</i> , 2015 , 11, 8717-40	3.6	98
306	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	10.3	97
305	Recent advances in electrospun metal-oxide nanofiber based interfaces for electrochemical biosensing. <i>RSC Advances</i> , 2016 , 6, 94595-94616	3.7	92
304	Gas-Phase Mass Transfer in a Centrifugal Contactor. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 384-392	3.9	92
303	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	9.3	91

302	Instability and Pattern Formation in Thin Liquid Films on Chemically Heterogeneous Substrates. <i>Langmuir</i> , 2000 , 16, 10243-10253	4	90
301	Instability and Dynamics of Thin Liquid Bilayers. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 1259-1272	3.9	88
300	Anti-epidermal growth factor receptor conjugated mesoporous zinc oxide nanofibers for breast cancer diagnostics. <i>Nanoscale</i> , 2015 , 7, 7234-45	7.7	87
299	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	8.5	87
298	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, 5306-9	24	87
297	Stability and dewetting of metal nanoparticle filled thin polymer films: control of instability length scale and dynamics. <i>ACS Nano</i> , 2010 , 4, 3709-24	16.7	86
296	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	13	85
295	Pressure-driven diffusive gas flows in micro-channels: from the Knudsen to the continuum regimes. <i>Microfluidics and Nanofluidics</i> , 2009 , 6, 679-692	2.8	83
294	Regimes during liquid drop impact on a liquid pool. <i>Journal of Fluid Mechanics</i> , 2015 , 768, 492-523	3.7	81
293	Dynamics and Morphology of Holes in Dewetting of Thin Films. <i>Journal of Colloid and Interface Science</i> , 1999 , 212, 483-494	9.3	79
292	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	8.3	78
291	Scaffolds for bone tissue engineering: role of surface patterning on osteoblast response. <i>RSC Advances</i> , 2013 , 3, 11073	3.7	76
290	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	13	75
289	Dewetting of solids by the formation of holes in macroscopic liquid films. <i>Journal of Colloid and Interface Science</i> , 1989 , 133, 358-368	9.3	75
288	Pattern Formation in Spontaneous Dewetting of Thin Apolar Films. <i>Journal of Colloid and Interface Science</i> , 1997 , 195, 42-50	9.3	74
287	Mesopatterning of Thin Liquid Films by Templating on Chemically Patterned Complex Substrates. <i>Langmuir</i> , 2003 , 19, 5153-5163	4	73
286	Generation of secondary droplets in coalescence of a drop at a liquid-liquid interface. <i>Journal of Fluid Mechanics</i> , 2010 , 655, 72-104	3.7	72
285	Mechanism of tear film rupture and formation of dry spots on cornea. <i>Journal of Colloid and Interface Science</i> , 1985 , 106, 12-27	9.3	72

284	Fe-Grown Carbon Nanofibers for Removal of Arsenic(V) in Wastewater. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 7074-7084	3.9	70
283	Equilibrium and Dynamics of Evaporating or Condensing Thin Fluid Domains: Thin Film Stability and Heterogeneous Nucleation. <i>Langmuir</i> , 1998 , 14, 4915-4928	4	70
282	Facile synthesis of Cu ₂ O microstructures and their morphology dependent electrochemical supercapacitor properties. <i>RSC Advances</i> , 2016 , 6, 3815-3822	3.7	69
281	Polymer patterns in evaporating droplets on dissolving substrates. <i>Langmuir</i> , 2004 , 20, 3456-63	4	69
280	Morphological self-organization by dewetting in thin films on chemically patterned substrates. <i>Journal of Chemical Physics</i> , 2002 , 116, 3042-3051	3.9	69
279	High Performance Supercapacitors from Novel Metal-Doped Ceria-Decorated Aminated Graphene. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3107-3116	3.8	67
278	Adsorbents based on carbon microfibers and carbon nanofibers for the removal of phenol and lead from water. <i>Journal of Colloid and Interface Science</i> , 2011 , 359, 228-39	9.3	67
277	Multiscale carbon structures fabricated by direct micropatterning of electrospun mats of SU-8 photoresist nanofibers. <i>Langmuir</i> , 2010 , 26, 2218-22	4	66
276	Stability of a thin elastic film interacting with a contactor. <i>Journal of the Mechanics and Physics of Solids</i> , 2002 , 50, 1155-1173	5	66
275	Electric-field-induced patterns in soft viscoelastic films: from long waves of viscous liquids to short waves of elastic solids. <i>Physical Review Letters</i> , 2009 , 102, 254502	7.4	65
274	Instability, dynamics, and morphology of thin slipping films. <i>Langmuir</i> , 2004 , 20, 244-53	4	65
273	Generalized integral and similarity solutions of the concentration profiles for osmotic pressure controlled ultrafiltration. <i>Journal of Membrane Science</i> , 1997 , 130, 99-121	9.6	64
272	Electric-Field-Controlled Surface Instabilities in Soft Elastic Films. <i>Advanced Materials</i> , 2006 , 18, 660-663	2.4	64
271	Catalytic oxidation of toluene and m-xylene by activated carbon fiber impregnated with transition metals. <i>Carbon</i> , 2005 , 43, 3041-3053	10.4	64
270	Application of electrochemical impedance spectroscopy in bio-fuel cell characterization: A review. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 20159-20170	6.7	63
269	Patterns, Forces, and Metastable Pathways in Debonding of Elastic Films. <i>Physical Review Letters</i> , 2004 , 93,	7.4	63
268	Iron doped phenolic resin based activated carbon micro and nanoparticles by milling: Synthesis, characterization and application in arsenic removal. <i>Chemical Engineering Science</i> , 2010 , 65, 3591-3601	4.4	62
267	Instability of thin liquid films by density variations: a new mechanism that mimics spinodal dewetting. <i>Physical Review Letters</i> , 2002 , 89, 186101	7.4	62

266	Energetic criteria for the breakup of liquid films on nonwetting solid surfaces. <i>Journal of Colloid and Interface Science</i> , 1990 , 137, 433-445	9.3	62
265	Computational investigation on bubble detachment from submerged orifice in quiescent liquid under normal and reduced gravity. <i>Physics of Fluids</i> , 2009 , 21, 062103	4.4	61
264	Structurally stable hollow mesoporous graphitized carbon nanofibers embedded with NiMoO ₄ nanoparticles for high performance asymmetric supercapacitors. <i>Electrochimica Acta</i> , 2017 , 238, 337-348	6.7	60
263	Spontaneous Dewetting and Ordered Patterns in Evaporating Thin Liquid Films on Homogeneous and Heterogeneous Substrates. <i>Langmuir</i> , 2001 , 17, 1294-1305	4	60
262	Photocatalytic Degradation of Naphthalene by Electrospun Mesoporous Carbon-Doped Anatase TiO ₂ Nanofiber Mats. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 18900-18909	3.9	59
261	Finite-amplitude instability of thin free and wetting films: prediction of lifetimes. <i>Langmuir</i> , 1986 , 2, 480-494	4.94	59
260	Quantum dot sensitized electrospun mesoporous titanium dioxide hollow nanofibers for photocatalytic applications. <i>RSC Advances</i> , 2016 , 6, 48109-48119	3.7	59
259	Fe ₃ O ₄ Nanoparticles Embedded Hollow Mesoporous Carbon Nanofibers and Polydimethylsiloxane-Based Nanocomposites as Efficient Microwave Absorber. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 7810-7820	3.8	57
258	Adsorptive Removal of Fluoride by Micro-nano-hierarchical Web of Activated Carbon Fibers. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 9697-9707	3.9	56
257	Increased graphitization in electrospun single suspended carbon nanowires integrated with carbon-MEMS and carbon-NEMS platforms. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 34-9	9.5	54
256	Fabrication and electrical conductivity of suspended carbon nanofiber arrays. <i>Carbon</i> , 2011 , 49, 1727-1732	10.4	54
255	Electric-field induced instabilities and morphological phase transitions in soft elastic films. <i>Physical Review E</i> , 2008 , 77, 031604	2.4	53
254	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	8.5	52
253	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	5.1	52
252	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	3.7	52
251	A unified model for flux prediction during batch cell ultrafiltration. <i>Journal of Membrane Science</i> , 1996 , 111, 243-258	9.6	52
250	Electric-field-induced interfacial instabilities and morphologies of thin viscous and elastic bilayers. <i>Langmuir</i> , 2009 , 25, 9108-18	4	51
249	Electrohydrodynamic instability of a confined viscoelastic liquid film. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007 , 143, 120-130	2.7	51

248	Cytotoxic Evaluation of the Hierarchical Web of Carbon Micronanofibers. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 4672-4682	3.9	50
247	Carbon microelectromechanical systems as a substratum for cell growth. <i>Biomedical Materials (Bristol)</i> , 2008 , 3, 034116	3.5	50
246	Control of self-organized contact instability and patterning in soft elastic films. <i>Langmuir</i> , 2006 , 22, 7066-71	4.71	49
245	Estimation and Influence of Long Range Solute. Membrane Interactions in Ultrafiltration. <i>Industrial & Engineering Chemistry Research</i> , 1996 , 35, 3108-3121	3.9	47
244	Development of novel in situ nickel-doped, phenolic resin-based microflano-activated carbon adsorbents for the removal of vitamin B-12. <i>Chemical Engineering Journal</i> , 2012 , 197, 250-260	14.7	46
243	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, 8464-73	4	46
242	Dewetting of glassy polymer films. <i>Physical Review Letters</i> , 2002 , 88, 236101	7.4	45
241	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	7.2	44
240	Contact instability in adhesion and debonding of thin elastic films. <i>Physical Review Letters</i> , 2006 , 97, 018303	3.03	44
239	Confinement-induced instability and adhesive failure between dissimilar thin elastic films. <i>European Physical Journal E</i> , 2006 , 20, 47-53	1.5	44
238	Instability and dewetting of evaporating thin water films on partially and completely wettable substrates. <i>Journal of Chemical Physics</i> , 1999 , 110, 1735-1744	3.9	44
237	Microporous Nanocomposite Enabled Microfluidic Biochip for Cardiac Biomarker Detection. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 33576-33588	9.5	43
236	Contact instability of thin elastic films on patterned substrates. <i>Journal of Chemical Physics</i> , 2007 , 127, 064703	3.9	43
235	Submicrometer Pattern Fabrication by Intensification of Instability in Ultrathin Polymer Films under a WaterSolvent Mix. <i>Macromolecules</i> , 2011 , 44, 4928-4935	5.5	42
234	Nonlinear instabilities and pathways of rupture in thin liquid bilayers. <i>Journal of Chemical Physics</i> , 2006 , 125, 054711	3.9	42
233	Free-standing NiV2S4 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	13	42
232	Mesoporous Few-Layer Graphene Platform for Affinity Biosensing Application. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 7646-56	9.5	41
231	Synthesis of carbon xerogel particles and fractal-like structures. <i>Chemical Engineering Science</i> , 2009 , 64, 1536-1543	4.4	41

230	Meso-patterning of thin polymer films by controlled dewetting: from nano-droplet arrays to membranes. <i>Journal of Nanoscience and Nanotechnology</i> , 2007 , 7, 2069-75	1.3	40
229	Surface Interactions in Osmotic Pressure Controlled Flux Decline during Ultrafiltration. <i>Langmuir</i> , 1994 , 10, 4710-4720	4	40
228	Direct Immersion Annealing of Thin Block Copolymer Films. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 21639-45	9.5	39
227	Dewetting of Stable Thin Polymer Films Induced by a Poor Solvent: Role of Polar Interactions. <i>Macromolecules</i> , 2012 , 45, 6628-6633	5.5	39
226	Magnetorheology of Polydimethylsiloxane Elastomer/FeCo ₃ Nanocomposite. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 25684-25703	3.8	38
225	Vertical electric field stimulated neural cell functionality on porous amorphous carbon electrodes. <i>Biomaterials</i> , 2013 , 34, 9252-63	15.6	38
224	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	3.7	38
223	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	14.7	38
222	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	9.3	38
221	Stability, critical thickness, and the time of rupture of thinning foam and emulsion films. <i>Langmuir</i> , 1987 , 3, 760-768	4	38
220	PZT/DMS composite for active damping of vibrations. <i>Composites Science and Technology</i> , 2013 , 77, 42-51	8.6	37
219	Contact Instability of Elastic Bilayers: Miniaturization of Instability Patterns. <i>Advanced Functional Materials</i> , 2007 , 17, 2356-2364	15.6	37
218	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	3.9	37
217	Electrospun functional micro/nanochannels embedded in porous carbon electrodes for microfluidic biosensing. <i>Sensors and Actuators B: Chemical</i> , 2016 , 229, 82-91	8.5	36
216	Adhesion and debonding of soft elastic films: crack patterns, metastable pathways, and forces. <i>Langmuir</i> , 2005 , 21, 1457-69	4	36
215	Application of positron annihilation: Study of pervaporation dense membranes. <i>Polymer</i> , 2006 , 47, 1300-1307	3.307	36
214	Instability and dynamics of thin viscoelastic liquid films. <i>European Physical Journal E</i> , 2006 , 20, 185-200	1.5	36
213	Pervaporation from a dense membrane: roles of permeant-membrane interactions, Kelvin effect, and membrane swelling. <i>Langmuir</i> , 2004 , 20, 4708-14	4	36

212	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	3.5	36
211	A new mechanism of film thinning: Enhancement of reynoldsQvelocity by surface waves. <i>Journal of Colloid and Interface Science</i> , 1987 , 119, 1-13	9.3	36
210	MicroNano Hierarchal Web of Activated Carbon Fibers for Catalytic Gas Adsorption and Reaction. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 3700-3707	3.9	35
209	Elastic Contact Induced Self-Organized Patterning of Hydrogel Films. <i>Macromolecules</i> , 2006 , 39, 3365-3368	3.6	35
208	Morphological Phase Separation in Thin Liquid Films. <i>Journal of Colloid and Interface Science</i> , 1994 , 164, 416-427	9.3	35
207	Hydrodynamics of meniscus-induced thinning of the tear film. <i>Advances in Experimental Medicine and Biology</i> , 1998 , 438, 425-31	3.6	35
206	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	9.3	34
205	Dewetting of the thin liquid bilayers on topographically patterned substrates: formation of microchannel and microdot arrays. <i>Langmuir</i> , 2008 , 24, 14048-58	4	34
204	Pattern formation and dewetting in thin films of liquids showing complete macroscale wetting: from "pancakes"to "swiss cheese". <i>Langmuir</i> , 2004 , 20, 10337-45	4	34
203	Instability and Dewetting of Thin Films Induced by Density Variations. <i>Langmuir</i> , 2002 , 18, 10213-10220	4	34
202	Intracellular reactive oxidative stress, cell proliferation and apoptosis of Schwann cells on carbon nanofibrous substrates. <i>Biomaterials</i> , 2013 , 34, 4891-901	15.6	33
201	Creating self-organized submicrometer contact instability patterns in soft elastic bilayers with a topographically patterned stamp. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 355-62	9.5	33
200	Carbon nanofibers containing metal-doped porous carbon beads for environmental remediation applications. <i>Chemical Engineering Journal</i> , 2013 , 229, 72-81	14.7	33
199	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	15.6	33
198	Self-organized nano-lens arrays by intensified dewetting of electron beam modified polymer thin-films. <i>Soft Matter</i> , 2011 , 7, 11119	3.6	33
197	Spontaneous surface roughening induced by surface interactions between two compressible elastic films. <i>Physical Review E</i> , 2003 , 67, 031607	2.4	33
196	Nongassing long-lasting electro-osmotic pump with polyaniline-wrapped aminated graphene electrodes. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 593-601	9.5	32
195	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	10.4	32

194	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	4.5	32
193	Instability and dynamics of thin slipping films. <i>Applied Physics Letters</i> , 2003 , 83, 3549-3551	3.4	32
192	The Strength of Long-Range Forces across Thin Liquid Films. <i>Journal of Colloid and Interface Science</i> , 1999 , 214, 126-128	9.3	32
191	Stability and Breakup of Thin Polar Films on Coated Substrates: Relationship to Macroscopic Parameters of Wetting. <i>Industrial & Engineering Chemistry Research</i> , 1996 , 35, 3081-3092	3.9	32
190	Self-Organized Microstructures in Thin Bilayers on Chemically Patterned Substrates. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2237-2247	3.8	31
189	Spinodal instability and pattern formation in thin liquid films confined between two plates. <i>Journal of Colloid and Interface Science</i> , 2006 , 296, 220-32	9.3	31
188	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	9.3	31
187	PEDOT:PSS/PVA-Nanofibers-Decorated Conducting Paper for Cancer Diagnostics. <i>Advanced Materials Technologies</i> , 2016 , 1, 1600056	6.8	31
186	Exceptionally robust and conductive superhydrophobic free-standing films of mesoporous carbon nanocapsule/polymer composite for multifunctional applications. <i>Carbon</i> , 2015 , 93, 492-501	10.4	30
185	On steady two-fluid electroosmotic flow with full interfacial electrostatics. <i>Journal of Colloid and Interface Science</i> , 2011 , 357, 521-6	9.3	30
184	Multimode analysis of bubble growth in saturated film boiling. <i>Physics of Fluids</i> , 2008 , 20, 092101	4.4	30
183	Electric field induced instabilities in thin confined bilayers. <i>Journal of Colloid and Interface Science</i> , 2007 , 311, 595-608	9.3	30
182	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, 216-24	9.3	29
181	Self-Organized Ordered Arrays of CoreShell Columns in Viscous Bilayers Formed by Spatially Varying Electric Fields. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 21020-21028	3.8	29
180	Solvent Vapor-Assisted Imprinting of Polymer Films Coated on Curved Surfaces with Flexible PVA Stamps. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 8812-8818	3.9	29
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14	Charge Leakage Mediated Pattern Miniaturization in the Electric Field Induced Instabilities of an Elastic Membrane. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 18840-18851	3.9	2
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