James F Gilchrist

List of Publications by Year
in descending order

38 papers	1,443 citations	567144 15 h-index	434063 31 g-index
38 all docs	38 docs citations	38 times ranked	1508 citing authors

#	Article	IF	Citations
1	Role of substrate thermal conductivity and vapor pressure in dropwise condensation. Applied Thermal Engineering, 2020, 178, 115529.	3.0	7
2	Chemical vs. mechanical microstructure evolution in drying colloid and polymer coatings. Scientific Reports, 2020, 10, 10264.	1.6	9
3	Effect of added surfactant on convective assembly of monosized microspheres. Applied Physics Letters, 2020, 116, .	1.5	3
4	Frequency Response of Induced-Charge Electrophoretic Metallic Janus Particles. Micromachines, 2020, 11, 334.	1.4	13
5	Heterogeneity, suspension, and yielding in sparse microfibrous cellulose gels 2: strain rate-dependent two-fluid behavior. Rheologica Acta, 2019, 58, 231-239.	1.1	6
6	Heterogeneity, suspension, and yielding in sparse microfibrous cellulose gels 1. Bubble rheometer studies. Rheologica Acta, 2019, 58, 217-229.	1.1	13
7	The effect of inorganic and organic nucleating agents on the electrical breakdown strength of polyethylene. Journal of Applied Polymer Science, 2018, 135, 46325.	1.3	14
8	Estimation of drying length during particle assembly by convective deposition. Journal of Colloid and Interface Science, 2017, 496, 222-227.	5.0	12
9	Uniformly spaced nanoscale cracks in nanoparticle films deposited by convective assembly. Journal of Colloid and Interface Science, 2017, 487, 80-87.	5.0	5
10	Nucleating agents for high-density polyethylene-A review. Polymer Engineering and Science, 2016, 56, 541-554.	1.5	64
11	Large-Area Nanoparticle Films by Continuous Automated Langmuirâ€"Blodgett Assembly and Deposition. Langmuir, 2016, 32, 1220-1226.	1.6	46
12	Flow-induced alignment of (100) fcc thin film colloidal crystals. Soft Matter, 2015, 11, 7092-7100.	1.2	12
13	Effect of Ionic Strength and Surface Charge on Convective Deposition. Langmuir, 2015, 31, 12348-12353.	1.6	15
14	Spacing of Seeded and Spontaneous Streaks during Convective Deposition. Langmuir, 2015, 31, 10935-10938.	1.6	9
15	Microstructure of sheared monosized colloidal suspensions resulting from hydrodynamic and electrostatic interactions. Journal of Chemical Physics, 2014, 140, 204903.	1.2	18
16	Tracking the fate of seed particles in dispersion polymerization: Preparation and application of fluorescent polymer particles. Journal of Applied Polymer Science, 2013, 127, 2635-2640.	1.3	5
17	Enhanced colloidal monolayer assembly via vibration-assisted convective deposition. Applied Physics Letters, 2013, 103, 181603.	1.5	37
18	Light Extraction Efficiency Enhancement of III-Nitride Light-Emitting Diodes by Using 2-D Close-Packed ${hbox{TiO}}_{2}$ Microsphere Arrays. Journal of Display Technology, 2013, 9, 324-332.	1.3	86

#	Article	IF	Citations
19	Fabrication of Macroporous Polymeric Membranes through Binary Convective Deposition. ACS Applied Materials & Interfaces, 2012, 4, 4532-4540.	4.0	13
20	Effect of Surface Nanotopography on Immunoaffinity Cell Capture in Microfluidic Devices. Langmuir, 2011, 27, 11229-11237.	1.6	33
21	Light Extraction Efficiency and Radiation Patterns of III-Nitride Light-Emitting Diodes With Colloidal Microlens Arrays With Various Aspect Ratios. IEEE Photonics Journal, 2011, 3, 489-499.	1.0	196
22	Matching Constituent Fluxes for Convective Deposition of Binary Suspensions. Langmuir, 2010, 26, 2401-2405.	1.6	24
23	Self-assembly of wires in acrylate monomer via nanoparticle dielectrophoresis. Journal Physics D: Applied Physics, 2010, 43, 045402.	1.3	10
24	Optimization of Light Extraction Efficiency of III-Nitride LEDs With Self-Assembled Colloidal-Based Microlenses. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1218-1225.	1.9	120
25	Transitions to vibro-fluidization in a deep granular bed. Powder Technology, 2009, 192, 33-39.	2.1	13
26	Light extraction efficiency enhancement of InGaN quantum wells light-emitting diodes with polydimethylsiloxane concave microstructures. Optics Express, 2009, 17, 13747.	1.7	125
27	Effect of Nanoparticle Concentration on the Convective Deposition of Binary Suspensions. Langmuir, 2009, 25, 6070-6075.	1.6	49
28	Enhancement of light extraction efficiency of InGaN quantum well light-emitting diodes with polydimethylsiloxane concave microstructures. , 2009, , .		5
29	The Use of Polydimethylsiloxane Concave Microstructures Arrays to Enhance Light Extraction Efficiency of InGaN Quantum Wells Light-Emitting Diodes. , 2009, , .		0
30	Investigation of the Deposition of Microsphere Monolayers for Fabrication of Microlens Arrays. Langmuir, 2008, 24, 12150-12157.	1.6	160
31	Optimization and Fabrication of III-Nitride Light-Emitting Diodes with Self-assembled Colloidal-based Convex Microlens Arrays. , 2008, , .		1
32	Size effects and light extraction efficiency optimization of III-nitride light emitting diodes with SiO<inf>2</inf> / polystyrene microlens arrays. , 2008, , .		0
33	Comparison of numerical modeling and experiments of InGaN quantum wells light-emitting diodes with SiO 2 /polystyrene microlens arrays. , 2008, , .		3
34	Enhancement of Light Extraction Efficiency of InGaN Quantum Wells LEDs Using SiO<inf>2</inf> Microspheres. , 2007, , .		0
35	Suspension Mixing and Segregation in 1D, 2D, and 3D Flows. , 2007, , 1023.		0
36	Enhancement of light extraction efficiency of InGaN quantum wells light emitting diodes using SiO2/polystyrene microlens arrays. Applied Physics Letters, 2007, 91, 221107.	1.5	136

#	Article	IF	Citations
37	Phase Behavior and 3D Structure of Strongly Attractive Microsphereâˆ'Nanoparticle Mixtures. Langmuir, 2005, 21, 11040-11047.	1.6	32
38	Segregation-driven organization in chaotic granular flows. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 11701-11706.	3.3	149