Assocâ€Prof Craig Priest

List of Publications by Year
in descending order

93 papers	2,665 citations	172457 29 h-index	197818 49 g-index
93 all docs	93 docs citations	93 times ranked	3918 citing authors

#	Article	IF	Citations
1	Continuous monitoring of <scp>EDTA</scp> extractable iron from mineral slurries using a microfluidic chip. Canadian Journal of Chemical Engineering, 2023, 101, 944-952.	1.7	1
2	Sensing Intraâ€•and Extraâ€Cellular Ca²⁺ in the Islet of Langerhans. Advanced Functional Materials, 2022, 32, 2106020.	14.9	0
3	The Australian National Fabrication Facility: Micro/nanotechnologies from Concept to Translation to End Users. Advanced Functional Materials, 2022, 32, .	14.9	0
4	Polymeric Nanoneedle Arrays Mediate Stiffnessâ€Independent Intracellular Delivery (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10	14.9	1
5	Pilot-scale microfluidic solvent extraction of high-value metals. Minerals Engineering, 2022, 182, 107536.	4.3	3
6	Caged-Sphere Optofluidic Sensors: Whispering Gallery Resonators in Wicking Microfluidics. Sensors, 2022, 22, 4135.	3.8	3
7	An Open Microfluidic Chip for Continuous Sampling of Solute from a Turbulent Particle Suspension. Angewandte Chemie - International Edition, 2021, 60, 2654-2657.	13.8	7
8	An Open Microfluidic Chip for Continuous Sampling of Solute from a Turbulent Particle Suspension. Angewandte Chemie, 2021, 133, 2686-2689.	2.0	1
9	Graded-index fiber on-chip absorption spectroscopy. , 2021, , .		0
10	Rapid Fabrication of Superhydrophobic Virtual Walls for Microfluidic Gas Extraction and Sensing. Micromachines, 2021, 12, 514.	2.9	4
11	Plasma Deposited Polyoxazoline Thin Films for the Biofunctionalization of Electrochemical Sensors. Advanced Materials Technologies, 2021, 6, 2001292.	5.8	6
12	On-chip absorption spectroscopy enabled by graded index fiber tips. Biomedical Optics Express, 2021, 12, 181.	2.9	5
13	Microfluidic Screening to Study Acid Mine Drainage. Environmental Science & Technology, 2020, 54, 14000-14006.	10.0	6
14	Evaporation-Driven Flow in Micropillar Arrays: Transport Dynamics and Chemical Analysis under Varied Sample and Ambient Conditions. Analytical Chemistry, 2020, 92, 16043-16050.	6.5	7
15	Microvolume Screening of Extraction and Phase Behavior in a Liquidâ€"Liquid Microsystem. Analytical Chemistry, 2020, 92, 7831-7835.	6.5	0
16	Precipitation of Drug Particles Using a Gas Antisolvent Process on a High-Pressure Microfluidic Platform. Industrial & Engineering Chemistry Research, 2020, 59, 11905-11913.	3.7	6
17	Photometric Sensing of Active Chlorine, Total Chlorine, and pH on a Microfluidic Chip for Online Swimming Pool Monitoring. Sensors, 2020, 20, 3099.	3.8	18
18	Analysis of co-flowing immiscible liquid streamsÂand their interfaces in a high-throughput solvent extraction chip. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	3

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19	A Multiplexed Microfluidic Platform toward Interrogating Endocrine Function: Simultaneous Sensing of Extracellular Ca²⁺ and Hormone. ACS Sensors, 2020, 5, 490-499.	7.8	6
20	Loading of 5-fluorouracil onto Halloysite nanotubes for targeted drug delivery using a subcritical gas antisolvent process (GAS). Journal of Supercritical Fluids, 2020, 159, 104756.	3.2	23
21	Electrochemical Proteus vulgaris whole cell urea sensor in synthetic urine. Current Research in Biotechnology, 2019, 1, 22-27.	3.7	7
22	Multiparameter toxicity screening on a chip: Effects of UV radiation and titanium dioxide nanoparticles on HaCaT cells. Biomicrofluidics, 2019, 13, 044112.	2.4	3
23	Microfluidic process intensification for synthesis and formulation in the pharmaceutical industry. Chemical Engineering and Processing: Process Intensification, 2019, 142, 107559.	3.6	27
24	Intracellular delivery of mRNA to human primary T cells with microfluidic vortex shedding. Scientific Reports, 2019, 9, 3214.	3.3	40
25	Effect of mould roughness on injection moulded poly (methyl methacrylate) surfaces: Roughness and wettability. Journal of Manufacturing Processes, 2019, 48, 313-319.	5.9	15
26	The Timing of Application and Inclusion of a Surfactant Are Important for Absorption and Translocation of Foliar Phosphoric Acid by Wheat Leaves. Frontiers in Plant Science, 2019, 10, 1532.	3.6	23
27	Investigation of Chalcopyrite Leaching Using an Ore-on-a-Chip. Analytical Chemistry, 2019, 91, 1557-1562.	6.5	4
28	Microfluidic Cell Microarray Platform for High Throughput Analysis of Particleâ€“Cell Interactions. Analytical Chemistry, 2018, 90, 4338-4347.	6.5	19
29	Optimization of binding B-lymphocytes in a microfluidic channel: surface modification, stasis time and shear response. Biofabrication, 2018, 10, 014101.	7.1	11
30	Microengineered Bioartificial Liver Chip for Drug Toxicity Screening. Advanced Functional Materials, 2018, 28, 1801825.	14.9	50
31	Microfluidic Platform for High-Throughput Screening of Leach Chemistry. Analytical Chemistry, 2018, 90, 8517-8522.	6.5	6
32	Leaching gold by reactive flow of ammonium thiosulfate solution in high aspect ratio channels: Rate, passivation, and profile. Hydrometallurgy, 2017, 169, 207-212.	4.3	5
33	Intestine-on-a-Chip Microfluidic Model for Efficient in Vitro Screening of Oral Chemotherapeutic Uptake. ACS Biomaterials Science and Engineering, 2017, 3, 951-959.	5.2	78
34	A Multiâ€Stream Microchip for Process Intensification of Liquidâ€Liquid Extraction. Chemical Engineering and Technology, 2017, 40, 1184-1189.	1.5	11
35	Directed Growth of Orthorhombic Crystals in a Micropillar Array. Langmuir, 2017, 33, 1547-1551.	3.5	4
36	Crossed flow microfluidics for high throughput screening of bioactive chemicalâ€“cell interactions. Lab on A Chip, 2017, 17, 501-510.	6.0	20

#	Article	IF	Citations
37	The Use of Microfluidics in Cytotoxicity and Nanotoxicity Experiments. Micromachines, 2017, 8, 124.	2.9	22
38	Influence of Sample Volume and Solvent Evaporation on Absorbance Spectroscopy in a Microfluidic â€œPillar-Cuvetteâ€• Analytical Sciences, 2016, 32, 103-108.	1.6	7
39	Interfacial Phenomena and Fluid Control in Micro/Nanofluidics. Analytical Sciences, 2016, 32, 11-21.	1.6	21
40	Low-temperature bonding process for the fabrication of hybrid glassâ€“membrane organ-on-a-chip devices. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2016, 15, 044502.	0.9	5
41	Microfluidic solvent extraction of rare earth elements from a mixed oxide concentrate leach solution using CyanexÂ® 572. Chemical Engineering Science, 2016, 148, 212-218.	3.8	77
42	Influence of Water on the Interfacial Nanostructure and Wetting of [Rmim][NTf2] Ionic Liquids at Mica Surfaces. Langmuir, 2016, 32, 8818-8825.	3.5	39
43	Numbering-up Yâ€“Y microfluidic chips for higher-throughput solvent extraction of platinum(IV) chloride. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	23
44	Uptake of phosphorus from surfactant solutions by wheat leaves: spreading kinetics, wetted area, and drying time. Soft Matter, 2016, 12, 209-218.	2.7	22
45	Surface protein gradients generated in sealed microchannels using spatially varying helium microplasma. Biomicrofluidics, 2015, 9, 014124.	2.4	8
46	Microfluidic solvent extraction, stripping, and phase disengagement for high-value platinum chloride solutions. Chemical Engineering Science, 2015, 138, 827-833.	3.8	20
47	Low-temperature bonded glass-membrane microfluidic device for in vitro organ-on-a-chip cell culture models. Proceedings of SPIE, 2015, , .	0.8	1
48	Pillar Cuvettes: Capillary-Filled, Microliter Quartz Cuvettes with Microscale Path Lengths for Optical Spectroscopy. Analytical Chemistry, 2015, 87, 4757-4764.	6.5	16
49	Microbial cell lysis and nucleic acid extraction via nanofluidic channel. RSC Advances, 2015, 5, 23886-23891.	3.6	4
50	Capillary Filling of Nanoscale Channels and Surface Structure. Israel Journal of Chemistry, 2014, 54, 1519-1532.	2.3	17
51	The Influence of Nanopore Dimensions on the Electrochemical Properties of Nanopore Arrays Studied by Impedance Spectroscopy. Sensors, 2014, 14, 21316-21328.	3.8	22
52	Evaluating the antifouling effects of silver nanoparticles regenerated by TiO2 on forward osmosis membrane. Journal of Membrane Science, 2014, 454, 264-271.	8.2	68
53	Pinning and wicking in regular pillar arrays. Soft Matter, 2014, 10, 5739-5748.	2.7	50
54	Impedance nanopore biosensor: influence of pore dimensions on biosensing performance. Analyst, The, 2014, 139, 1134.	3.5	41

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55	Dynamics of capillary-driven liquidâ€“liquid displacement in open microchannels. Physical Chemistry Chemical Physics, 2014, 16, 24473-24478.	2.8	27
56	Characterization of impedance biosensing performance of single and nanopore arrays of anodic porous alumina fabricated by focused ion beam (FIB) milling. Electrochimica Acta, 2014, 139, 225-231.	5.2	15
57	Impedance Spectroscopy Study of Nanopore Arrays for Biosensing Applications. Science of Advanced Materials, 2014, 6, 1375-1381.	0.7	8
58	Capillary rise dynamics of aqueous glycerol solutions in glass capillaries: A critical examination of the Washburn equation. Journal of Colloid and Interface Science, 2013, 411, 257-264.	9.4	36
59	A quantitative experimental study of wetting hysteresis on discrete and continuous chemical heterogeneities. Colloid and Polymer Science, 2013, 291, 271-277.	2.1	14
60	Patterning of wettability for controlling capillary-driven flow in closed channels. Journal of Colloid and Interface Science, 2013, 402, 259-266.	9.4	10
61	Impact of Nanoscale Surface Heterogeneity on Precursor Film Growth and Macroscopic Spreading of [Rmim][NTf₂] Ionic Liquids on Mica. Langmuir, 2013, 29, 11344-11353.	3.5	31
62	Microfluidic Solvent Extraction of Metal Ions from Industrial Grade Leach Solutions: Extraction Performance and Channel Aging. Journal of Flow Chemistry, 2013, 3, 76-80.	1.9	14
63	Electrowetting of Ionic Liquids on Teflon AF1600 in Ambient Hexadecane. Journal of Adhesion Science and Technology, 2012, 26, 2047-2067.	2.6	9
64	Microplasma arrays: a new approach for maskless and localized patterning of materials surfaces. RSC Advances, 2012, 2, 12007.	3.6	20
65	Femtoliter Droplet Handling in Nanofluidic Channels: A Laplace Nanovalve. Analytical Chemistry, 2012, 84, 10812-10816.	6.5	46
66	Fabrication and Operation of a Microcavity Plasma Array Device for Microscale Surface Modification. Plasma Processes and Polymers, 2012, 9, 638-646.	3.0	23
67	Microfluidic Solvent Extraction of Metal Ions and Complexes from Leach Solutions Containing Nanoparticles. Chemical Engineering and Technology, 2012, 35, 1312-1319.	1.5	48
68	Structure-induced spreading of liquid in micropillar arrays. Microsystem Technologies, 2012, 18, 167-173.	2.0	9
69	Microplasma patterning of bonded microchannels using high-precision â€œinjectedâ€•electrodes. Lab on A Chip, 2011, 11, 541-544.	6.0	50
70	Chemical and biomolecule patterning on 2D surfaces using atmospheric pressure microcavity plasma array devices. Proceedings of SPIE, 2011, , .	0.8	1
71	Formation and stability of nanoparticle-stabilised oil-in-water emulsions in a microfluidic chip. Journal of Colloid and Interface Science, 2011, 363, 301-306.	9.4	47
72	Dynamics of Capillary-Driven Flow in Open Microchannels. Journal of Physical Chemistry C, 2011, 115, 18761-18769.	3.1	120

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73	Microfluidic extraction of copper from particle-laden solutions. International Journal of Mineral Processing, 2011, 98, 168-173.	2.6	55
74	Integration of microplasma and microfluidic technologies for localised microchannel surface modification. Proceedings of SPIE, 2011, , .	0.8	2
75	Contact Line Pinning on Microstructured Surfaces for Liquids in the Wenzel State. Langmuir, 2010, 26, 860-865.	3.5	127
76	Electrowetting of Aqueous Solutions of Ionic Liquid in Solidâˆ'Liquidâˆ'Liquid Systems. Journal of Physical Chemistry C, 2010, 114, 8383-8388.	3.1	48
77	Surface patterning of bonded microfluidic channels. Biomicrofluidics, 2010, 4, 32206.	2.4	38
78	Static and Dynamic Electrowetting of an Ionic Liquid in a Solid/Liquid/Liquid System. Journal of the American Chemical Society, 2010, 132, 8301-8308.	13.7	84
79	Discrete microfluidics: Reorganizing droplet arrays at a bend. Applied Physics Letters, 2009, 95, .	3.3	15
80	Asymmetric Wetting Hysteresis on Hydrophobic Microstructured Surfaces. Langmuir, 2009, 25, 5655-5660.	3.5	69
81	Manipulation of gel emulsions by variable microchannel geometry. Lab on A Chip, 2009, 9, 325-330.	6.0	36
82	In situ formation, manipulation, and imaging of droplet-encapsulated fibrin networks. Lab on A Chip, 2009, 9, 1933.	6.0	25
83	Microfluidic Solvent Extraction of Copper for Mineral Processing. , 2009, , .		0
84	Dynamic x-ray optics with microfluidics: stabilization of gas bubbles by surface ordering and freezing. Houille Blanche, 2009, 95, 129-134.	0.3	0
85	Inferring wettability of heterogeneous surfaces by ToF-SIMS. Journal of Colloid and Interface Science, 2008, 320, 563-568.	9.4	32
86	Microfluidic polymer multilayer adsorption on liquid crystal droplets for microcapsule synthesis. Lab on A Chip, 2008, 8, 2182.	6.0	107
87	Influence of the Work of Adhesion on the Dynamic Wetting of Chemically Heterogeneous Surfaces. Langmuir, 2008, 24, 13007-13012.	3.5	40
88	Asymmetric Wetting Hysteresis on Chemical Defects. Physical Review Letters, 2007, 99, 026103.	7.8	54
89	Directed crystallisation of zinc oxide on patterned surfaces. Journal of Colloid and Interface Science, 2006, 303, 333-336.	9.4	17
90	Controlled electrocoalescence in microfluidics: Targeting a single lamella. Applied Physics Letters, 2006, 89, 134101.	3.3	213

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91	Generation of monodisperse gel emulsions in a microfluidic device. Applied Physics Letters, 2006, 88, 024106.	3.3	139
92	Wettability of Photoresponsive Titanium Dioxide Surfaces. Langmuir, 2003, 19, 3272-3275.	3.5	138
93	Novel Approach to the Formation of Smooth Gold Surfaces. Langmuir, 2002, 18, 2438-2440.	3.5	12