Geoff R Willmott

List of Publications by Year
in descending order

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72 papers	1,545 citations	361413 20 h-index	330143 37 g-index

78 all docs	78 docs citations	78 times ranked	1530 citing authors

#	Article	IF	Citations
1	Turning industrial paints superhydrophobic via femtosecond laser surface hierarchical structuring. Progress in Organic Coatings, 2022, 163, 106625.	3.9	11
2	Water drop impacts on regular micropillar arrays: The impact region. Physics of Fluids, 2022, 34, .	4.0	11
3	Biomechanical responses of encysted zoospores of the oomycete Achlya bisexualis to hyperosmotic stress are consistent with an ability to turgor regulate. Fungal Genetics and Biology, 2022, 159, 103676.	2.1	2
4	Wet-core temperature and concentration profiles in a single skim milk droplet drying process. Applied Thermal Engineering, 2022, 212, 118571.	6.0	3
5	Measurement of viscoelastic particle deformation using pipette ion currents. Sensors and Actuators A: Physical, 2022, 344, 113698.	4.1	1
6	On the measurement and prediction of rainfall noise. Applied Acoustics, 2021, 171, 107636.	3.3	11
7	Polymer Brush Functionalization of Polyurethane Tunable Nanopores for Resistive Pulse Sensing. ACS Applied Polymer Materials, 2021, 3, 279-289.	4.4	10
8	Ka rere ngÄ•mea katoa â€“ everything flows. Journal of the Royal Society of New Zealand, 2021, 51, 187-193.	1.9	0
9	Depletion of HP1Î± alters the mechanical properties of MCF7 nuclei. Biophysical Journal, 2021, 120, 2631-2643.	0.5	6
10	Asymmetric assembly of Lennard-Jones Janus dimers. Physical Review E, 2021, 104, 024602.	2.1	2
11	Drop impact of non-Newtonian dairy-based solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 625, 126895.	4.7	10
12	Stability of amphiphilic Janus dimers in shear flow: a molecular dynamics study. Soft Matter, 2020, 16, 7116-7125.	2.7	3
13	High Throughput Analysis of Liquid Droplet Impacts. Journal of Visualized Experiments, 2020, , .	0.3	1
14	Towards Nanomechanical Properties from Pipette Ion Currents. Biophysical Journal, 2020, 118, 601a.	0.5	0
15	Ei¬€ects of a microscale ridge on dynamic wetting during drop impact. Journal of the Royal Society of New Zealand, 2020, 50, 523-537.	1.9	2
16	Inertial capillary uptake of drops. Physical Review E, 2020, 101, 043109.	2.1	5
17	Poly(vinyl pyrrolidone)-modified metal oxide anode interlayers for stable organic solar cells. Journal of Photonics for Energy, 2020, 10, 1.	1.3	3
18	Molecular dynamics simulations of Janus nanoparticles in a fluid flow. Soft Matter, 2019, 15, 6742-6752.	2.7	12

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19	Use of microaspiration to study the mechanical properties of polymer gel microparticles. Soft Matter, 2019, 15, 7286-7294.	2.7	8
20	Preclinical studies evaluating the effect of semifluorinated alkanes on ocular surface and tear fluid dynamics. Ocular Surface, 2019, 17, 241-249.	4.4	19
21	Cellular and Sub-Cellular Mechanics: Measurement of Material Properties. , 2019, , 227-244.		2
22	Mechanical properties of bovine erythrocytes derived from ion current measurements using micropipettes. Bioelectrochemistry, 2019, 128, 204-210.	4.6	10
23	Remotely Controlled in Situ Growth of Silver Microwires Forming Bioelectronic Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 8928-8936.	8.0	9
24	Highâ€speed photography of water drop impacts on sand and soil. European Journal of Soil Science, 2019, 70, 245-256.	3.9	11
25	Tunable Resistive Pulse Sensing: Better Size and Charge Measurements for Submicrometer Colloids. Analytical Chemistry, 2018, 90, 2987-2995.	6.5	29
26	Electrospray-deposited vanadium oxide anode interlayers for high-efficiency organic solar cells. Organic Electronics, 2018, 57, 239-246.	2.6	5
27	Scanning ion conductance microscopy mapping of tunable nanopore membranes. Biomicrofluidics, 2017, 11, 054102.	2.4	4
28	Enumeration of colloidal sub-micron particles using tunable resistive pulse sensing. International Journal of Nanotechnology, 2017, 14, 38.	0.2	1
29	Tunable resistive pulse sensing and nanoindentation of pH-responsive expansile nanoparticles. International Journal of Nanotechnology, 2017, 14, 446.	0.2	0
30	Tunable resistive pulse sensing and nanoindentation of pH-responsive expansile nanoparticles. International Journal of Nanotechnology, 2017, 14, 1.	0.2	1
31	Asymmetries in the spread of drops impacting on hydrophobic micropillar arrays. Soft Matter, 2016, 12, 4853-4865.	2.7	22
32	Pulse Size Distributions in Tunable Resistive Pulse Sensing. Analytical Chemistry, 2016, 88, 8648-8656.	6.5	41
33	Spot Size Engineering in Microscope-Based Laser Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 21104-21113.	3.1	14
34	Dual Nano-Electrospray and Mixing in the Taylor Cone. Mass Spectrometry Letters, 2016, 7, 21-25.	0.5	11
35	Co-ordinated detection of microparticles using tunable resistive pulse sensing and fluorescence spectroscopy. Biomicrofluidics, 2015, 9, 014110.	2.4	13
36	Applications of tunable resistive pulse sensing. Analyst, The, 2015, 140, 3318-3334.	3.5	110

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37	Analysis of bacteria-derived outer membrane vesicles using tunable resistive pulse sensing. Proceedings of SPIE, 2015, , .	0.8	4
38	Conductive and Biphasic Pulses in Tunable Resistive Pulse Sensing. Journal of Physical Chemistry B, 2015, 119, 5328-5335.	2.6	25
39	MODELLING OF RESISTIVE PULSE SENSING: FLEXIBLE METHODS FOR SUBMICRON PARTICLES. ANZIAM Journal, 2014, 55, 197-213.	0.2	11
40	Actuation of Tunable Elastomeric Pores: Resistance Measurements and Finite Element Modelling. Experimental Mechanics, 2014, 54, 153-163.	2.0	13
41	Small molecule detection in solution via the size contraction response of aptamer functionalized nanoparticles. Biosensors and Bioelectronics, 2014, 57, 262-268.	10.1	87
42	Nanoparticle Î¶-potential measurements using tunable resistive pulse sensing with variable pressure. Journal of Colloid and Interface Science, 2014, 429, 45-52.	9.4	29
43	Tunable SERS using gold nanoaggregates on an elastomeric substrate. Nanoscale, 2013, 5, 8945.	5.6	30
44	Fast piezoelectric actuation of an elastomeric micropore. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3560-3567.	5.0	5
45	Size and charge characterisation of a submicrometre oil-in-water emulsion using resistive pulse sensing with tunable pores. Journal of Colloid and Interface Science, 2013, 394, 243-251.	9.4	37
46	Superhydrophobic New Zealand leaves: contact angle and drop impact experiments. Journal of the Royal Society of New Zealand, 2013, 43, 198-210.	1.9	13
47	Individual nanoparticle zeta potential measurements using tunable resistive pulse sensing. , 2013, , .		3
48	Magnetic microbead transport during resistive pulse sensing. Biomicrofluidics, 2013, 7, 64106.	2.4	16
49	Use of Tunable Pores for Accurate Characterization of Micro- and Nanoparticle Systems in Nanomedicine. Regenerative Medicine, Artificial Cells and Nanomedicine, 2013, , 219-255.	0.1	4
50	Resistive pulse sensing of magnetic beads and supraparticle structures using tunable pores. Biomicrofluidics, 2012, 6, 014103.	2.4	32
51	A Variable Pressure Method for Characterizing Nanoparticle Surface Charge Using Pore Sensors. Analytical Chemistry, 2012, 84, 3125-3131.	6.5	93
52	Comment on â€˜Modeling the conductance and DNA blockade of solid-state nanoporesâ€™. Nanotechnology, 2012, 23, 088001.	2.6	13
53	Resistive Pulse Sensing of Analyteâ€Induced Multicomponent Rod Aggregation Using Tunable Pores. Small, 2012, 8, 2436-2444.	10.0	84
54	Uptake of water droplets by non-wetting capillaries. Soft Matter, 2011, 7, 2357-2363.	2.7	29

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55	Tunable Elastomeric Nanopores. , 2011, , 209-261.		11
56	Quantitative Sizing of Nano/Microparticles with a Tunable Elastomeric Pore Sensor. Analytical Chemistry, 2011, 83, 3499-3506.	6.5	256
57	Resistive pulse asymmetry for nanospheres passing through tunable submicron pores. Journal of Applied Physics, 2011, 109, .	2.5	46
58	Use of tunable nanopore blockade rates to investigate colloidal dispersions. Journal of Physics Condensed Matter, 2010, 22, 454116.	1.8	88
59	Pressure dependence of particle transport through resizable nanopores. , 2010, , .		5
60	An experimental study of interactions between droplets and a nonwetting microfluidic capillary. Faraday Discussions, 2010, 146, 233.	3.2	20
61	Slip-induced dynamics of patterned and Janus-like spheres in laminar flows. Physical Review E, 2009, 79, 066309.	2.1	14
62	Analysis and Finite Element Modelling of Resizable Nanopores. AIP Conference Proceedings, 2009, , .	0.4	10
63	Nanoscale slip measurements using a torsional ultrasonic oscillator. Current Applied Physics, 2008, 8, 433-435.	2.4	1
64	Dynamics of a sphere with inhomogeneous slip boundary conditions in Stokes flow. Physical Review E, 2008, 77, 055302.	2.1	43
65	Reversible mechanical actuation of elastomeric nanopores. Nanotechnology, 2008, 19, 475504.	2.6	40
66	Measurement of Newtonian fluid slip using a torsional ultrasonic oscillator. Physical Review E, 2007, 76, 066306.	2.1	20
67	The shock Hugoniot of Tuffisitic Kimberlite Breccia. International Journal of Rock Mechanics and Minings Sciences, 2007, 44, 228-237.	5.8	11
68	Measurement of Slip and Surface Forces using a Torsional Oscillator. Australian Journal of Chemistry, 2007, 60, 672.	0.9	1
69	A high-speed photographic study of fast cracks in shocked diamond. Philosophical Magazine, 2006, 86, 4305-4318.	1.6	6
70	Taylor impact of glass rods. Journal of Applied Physics, 2005, 97, 093522.	2.5	32
71	The Effect of Structure on Failure Front Velocities in Glass Rods. AIP Conference Proceedings, 2004, , .	0.4	8
72	Shock Properties of Kimberlite. AIP Conference Proceedings, 2004, , .	0.4	2