Aaron Elbourne

List of Publications by Year
in descending order

59	3,587	168829	156644
papers	citations	31 h-index	58 g-index

62	62	62	4656
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Impact of Water on the Lateral Nanostructure of a Deep Eutectic Solventâ€“Solid Interface. Australian Journal of Chemistry, 2022, 75, 111-125.	0.5	7
2	Bulk and interfacial nanostructure and properties in deep eutectic solvents: Current perspectives and future directions. Journal of Colloid and Interface Science, 2022, 608, 2430-2454.	5.0	45
3	Illuminating the biochemical interaction of antimicrobial few-layer black phosphorus with microbial cells using synchrotron macro-ATR-FTIR. Journal of Materials Chemistry B, 2022, 10, 7527-7539.	2.9	8
4	Interactions between Liquid Metal Droplets and Bacterial, Fungal, and Mammalian Cells. Advanced Materials Interfaces, 2022, 9, .	1.9	19
5	Liquid metals: an ideal platform for the synthesis of two-dimensional materials. Chemical Society Reviews, 2022, 51, 1253-1276.	18.7	45
6	Characterizing the Dynamic Disassembly/Reassembly Mechanisms of Encapsulin Protein Nanocages. ACS Omega, 2022, 7, 823-836.	1.6	11
7	Doped 2D SnS materials derived from liquid metal-solution for tunable optoelectronic devices. Nanoscale, 2022, 14, 6802-6810.	2.8	17
8	Deep eutectic solvents as cryoprotective agents for mammalian cells. Journal of Materials Chemistry B, 2022, 10, 4546-4560.	2.9	22
9	Selfâ€Deposition of 2D Molybdenum Sulfides on Liquid Metals. Advanced Functional Materials, 2021, 31, 2005866.	7.8	41
10	Ultrathin oxysulfide semiconductors from liquid metal: a wet chemical approach. Journal of Materials Chemistry C, 2021, 9, 11815-11826.	2.7	19
11	An exploration into two-dimensional metal oxides, and other 2D materials, synthesised via liquid metal printing and transfer techniques. Dalton Transactions, 2021, 50, 7513-7526.	1.6	37
12	The Multiomics Analyses of Fecal Matrix and Its Significance to Coeliac Disease Gut Profiling. International Journal of Molecular Sciences, 2021, 22, 1965.	1.8	6
13	High-mobility p-type semiconducting two-dimensional Î²-TeO2. Nature Electronics, 2021, 4, 277-283.	13.1	75
14	Broad-Spectrum Solvent-free Layered Black Phosphorus as a Rapid Action Antimicrobial. ACS Applied Materials & Interfaces, 2021, 13, 17340-17352.	4.0	24
15	Analysis of Pathogenic Bacterial and Yeast Biofilms Using the Combination of Synchrotron ATR-FTIR Microspectroscopy and Chemometric Approaches. Molecules, 2021, 26, 3890.	1.7	28
16	Antipathogenic properties and applications of low-dimensional materials. Nature Communications, 2021, 12, 3897.	5.8	63
17	Nanostructure of a deep eutectic solvent at solid interfaces. Journal of Colloid and Interface Science, 2021, 591, 38-51.	5.0	27
18	Investigating virusâ€“host cell interactions: Comparative binding forces between hepatitis C virus-like particles and host cell receptors in 2D and 3D cell culture models. Journal of Colloid and Interface Science, 2021, 592, 371-384.	5.0	15

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19	Systematic Comparison of the Structural and Dynamic Properties of Commonly Used Water Models for Molecular Dynamics Simulations. Journal of Chemical Information and Modeling, 2021, 61, 4521-4536.	2.5	94
20	Doping Process of 2D Materials Based on the Selective Migration of Dopants to the Interface of Liquid Metals. Advanced Materials, 2021, 33, e2104793.	11.1	38
21	Cryopreservation of mammalian cells using protic ionic liquid solutions. Journal of Colloid and Interface Science, 2021, 603, 491-500.	5.0	10
22	Facile Route of Fabricating Long-Term Microbicidal Silver Nanoparticle Clusters against Shiga Toxin-Producing Escherichia coli O157:H7 and Candida auris. Coatings, 2020, 10, 28.	1.2	10
23	Antibacterial Liquid Metals: Biofilm Treatment via Magnetic Activation. ACS Nano, 2020, 14, 802-817.	7.3	198
24	Broad-spectrum treatment of bacterial biofilms using magneto-responsive liquid metal particles. Journal of Materials Chemistry B, 2020, 8, 10776-10787.	2.9	31
25	Conformationally tuned antibacterial oligomers target the peptidoglycan of Gram-positive bacteria. Journal of Colloid and Interface Science, 2020, 580, 850-862.	5.0	24
26	Micro- to nano-scale chemical and mechanical mapping of antimicrobial-resistant fungal biofilms. Nanoscale, 2020, 12, 19888-19904.	2.8	12
27	Ultra-thin lead oxide piezoelectric layers for reduced environmental contamination using a liquid metal-based process. Journal of Materials Chemistry A, 2020, 8, 19434-19443.	5.2	29
28	Chemometrics for environmental monitoring: a review. Analytical Methods, 2020, 12, 4597-4620.	1.3	31
29	Combining Chemometrics and Sensors: Toward New Applications in Monitoring and Environmental Analysis. Chemical Reviews, 2020, 120, 6048-6069.	23.0	68
30	Nano-plastics and their analytical characterisation and fate in the marine environment: From source to sea. Science of the Total Environment, 2020, 732, 138792.	3.9	96
31	The multi-faceted mechano-bactericidal mechanism of nanostructured surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12598-12605.	3.3	119
32	Cobalt-Directed Assembly of Antibodies onto Metalâ€“Phenolic Networks for Enhanced Particle Targeting. Nano Letters, 2020, 20, 2660-2666.	4.5	39
33	Atomically thin TiO₂ nanosheets synthesized using liquid metal chemistry. Chemical Communications, 2020, 56, 4914-4917.	2.2	30
34	Significant Enhancement of Antimicrobial Activity in Oxygen-Deficient Zinc Oxide Nanowires. ACS Applied Bio Materials, 2020, 3, 2997-3004.	2.3	36
35	Liquid metal-based synthesis of high performance monolayer SnS piezoelectric nanogenerators. Nature Communications, 2020, 11, 3449.	5.8	128
36	Antimicrobial Metal Nanomaterials: From Passive to Stimuliâ€Activated Applications. Advanced Science, 2020, 7, 1902913.	5.6	192

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37	Multi-directional electrodeposited gold nanospikes for antibacterial surface applications. Nanoscale Advances, 2019, 1, 203-212.	2.2	65
38	Measuring the mechanical properties of flexible crystals using bi-modal atomic force microscopy. Physical Chemistry Chemical Physics, 2019, 21, 20219-20224.	1.3	10
39	Not All Fluorescent Nanodiamonds Are Created Equal: A Comparative Study. Particle and Particle Systems Characterization, 2019, 36, 1900009.	1.2	56
40	Engineering the Interface: Nanodiamond Coating on 3D-Printed Titanium Promotes Mammalian Cell Growth and Inhibits Staphylococcus aureus Colonization. ACS Applied Materials & Interfaces, 2019, 11, 24588-24597.	4.0	60
41	The use of nanomaterials for the mitigation of pathogenic biofilm formation. Methods in Microbiology, 2019, , 61-92.	0.4	31
42	From Academia to Reality Check: A Theoretical Framework on the Use of Chemometric in Food Sciences. Foods, 2019, 8, 164.	1.9	30
43	Bacterial-nanostructure interactions: The role of cell elasticity and adhesion forces. Journal of Colloid and Interface Science, 2019, 546, 192-210.	5.0	120
44	Probing and pressing surfaces of hepatitis C virus-like particles. Journal of Colloid and Interface Science, 2019, 545, 259-268.	5.0	23
45	Antibacterial Properties of Graphene Oxideâ€“Copper Oxide Nanoparticle Nanocomposites. ACS Applied Bio Materials, 2019, 2, 5687-5696.	2.3	57
46	The membrane effects of melittin on gastric and colorectal cancer. PLoS ONE, 2019, 14, e0224028.	1.1	39
47	Wafer-Sized Ultrathin Gallium and Indium Nitride Nanosheets through the Ammonolysis of Liquid Metal Derived Oxides. Journal of the American Chemical Society, 2019, 141, 104-108.	6.6	107
48	Imaging the air-water interface: Characterising biomimetic and natural hydrophobic surfaces using in situ atomic force microscopy. Journal of Colloid and Interface Science, 2019, 536, 363-371.	5.0	20
49	A review of methods for the detection of pathogenic microorganisms. Analyst, The, 2019, 144, 396-411.	1.7	342
50	Polycrystalline Diamond Coating of Additively Manufactured Titanium for Biomedical Applications. ACS Applied Materials & Interfaces, 2018, 10, 8474-8484.	4.0	61
51	Nano-structured antimicrobial surfaces: From nature to synthetic analogues. Journal of Colloid and Interface Science, 2017, 508, 603-616.	5.0	268
52	Molecular Resolution in situ Imaging of Spontaneous Graphene Exfoliation. Journal of Physical Chemistry Letters, 2016, 7, 3118-3122.	2.1	34
53	Metal ion adsorption at the ionic liquidâ€“mica interface. Nanoscale, 2016, 8, 906-914.	2.8	36
54	Ion structure controls ionic liquid near-surface and interfacial nanostructure. Chemical Science, 2015, 6, 527-536.	3.7	93

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55	Nanostructure of the Ionic Liquidâ€“Graphite Stern Layer. ACS Nano, 2015, 9, 7608-7620.	7.3	156
56	Near surface properties of mixtures of propylammonium nitrate with n-alkanols 1. Nanostructure. Physical Chemistry Chemical Physics, 2015, 17, 26621-26628.	1.3	14
57	3-Dimensional atomic scale structure of the ionic liquidâ€“graphite interface elucidated by AM-AFM and quantum chemical simulations. Nanoscale, 2014, 6, 8100-8106.	2.8	78
58	Adsorbed and near surface structure of ionic liquids at a solid interface. Physical Chemistry Chemical Physics, 2013, 15, 3320.	1.3	114
59	Adsorbed and near-surface structure of ionic liquids determines nanoscale friction. Chemical Communications, 2013, 49, 6797.	2.2	71