James Chapman

List of Publications by Year
in descending order

110	4,626	136740	114278
papers	citations	32 h-index	63 g-index

112	112	112	6142
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of methods for the detection of pathogenic microorganisms. Analyst, The, 2019, 144, 396-411.	1.7	342
2	Mitochondrial inner membrane permeabilisation enables mt <scp>DNA</scp> release during apoptosis. EMBO Journal, 2018, 37, .	3.5	313
3	Lengthâ€independent telomere damage drives postâ€mitotic cardiomyocyte senescence. EMBO Journal, 2019, 38, .	3.5	307
4	Parkinson's Disease and the Environment. Frontiers in Neurology, 2019, 10, 218.	1.1	260
5	Carbon nanomaterials and their application to electrochemical sensors: a review. Nanotechnology Reviews, 2018, 7, 19-41.	2.6	230
6	Antibacterial Liquid Metals: Biofilm Treatment via Magnetic Activation. ACS Nano, 2020, 14, 802-817.	7.3	198
7	Antimicrobial Metal Nanomaterials: From Passive to Stimuliâ€Activated Applications. Advanced Science, 2020, 7, 1902913.	5.6	192
8	Senescent human melanocytes drive skin ageing via paracrine telomere dysfunction. EMBO Journal, 2019, 38, e101982.	3.5	136
9	Nanofunctionalized Superhydrophobic Antifouling Coatings for Environmental Sensor Applicationsâ€"Advancing Deployment with Answers from Nature. Advanced Engineering Materials, 2012, 14, B175.	1.6	120
10	Bacterial-nanostructure interactions: The role of cell elasticity and adhesion forces. Journal of Colloid and Interface Science, 2019, 546, 192-210.	5.0	120
11	Neutrophils induce paracrine telomere dysfunction and senescence in ROSâ€dependent manner. EMBO Journal, 2021, 40, e106048.	3.5	101
12	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
13	Selenium nanoparticles in poultry feed modify gut microbiota and increase abundance of Faecalibacterium prausnitzii. Applied Microbiology and Biotechnology, 2018, 102, 1455-1466.	1.7	89
14	Nanoparticles in feed: Progress and prospects in poultry research. Trends in Food Science and Technology, 2016, 58, 115-126.	7.8	75
15	3D Printable Electrically Conductive Hydrogel Scaffolds for Biomedical Applications: A Review. Polymers, 2021, 13, 474.	2.0	74
16	Interpreting and Reporting Principal Component Analysis in Food Science Analysis and Beyond. Food Analytical Methods, 2019, 12, 2469-2473.	1.3	73
17	Bioinspired synthetic macroalgae: Examples from nature for antifouling applications. International Biodeterioration and Biodegradation, 2014, 86, 6-13.	1.9	70
18	Combining Chemometrics and Sensors: Toward New Applications in Monitoring and Environmental Analysis. Chemical Reviews, 2020, 120, 6048-6069.	23.0	68

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19	The synthesis and characterisation of highly stable and reproducible selenium nanoparticles. Inorganic and Nano-Metal Chemistry, 2017, 47, 1568-1576.	0.9	64
20	Antipathogenic properties and applications of low-dimensional materials. Nature Communications, 2021, 12, 3897.	5.8	63
21	Graphene, electrospun membranes and granular activated carbon for eliminating heavy metals, pesticides and bacteria in water and wastewater treatment processes. Analyst, The, 2018, 143, 5629-5645.	1.7	62
22	The Use of Electrochemical Biosensors in Food Analysis. Current Research in Nutrition and Food Science, 2017, 5, 183-195.	0.3	61
23	Rapamycin improves healthspan but not inflammaging in nfl^gb1^{â˜'/â˜'} mice. Aging Cell, 2019, 18, e12882.	3.0	59
24	Antibacterial Properties of Graphene Oxideâ€"Copper Oxide Nanoparticle Nanocomposites. ACS Applied Bio Materials, 2019, 2, 5687-5696.	2.3	57
25	Period four metal nanoparticles on the inhibition of biofouling. Colloids and Surfaces B: Biointerfaces, 2010, 78, 208-216.	2.5	55
26	Nanoparticles of selenium as high bioavailable and non-toxic supplement alternatives for broiler chickens. Environmental Science and Pollution Research, 2020, 27, 16159-16166.	2.7	55
27	The gastrointestinal tract microbiota of the Japanese quail, Coturnix japonica. Applied Microbiology and Biotechnology, 2016, 100, 4201-4209.	1.7	49
28	Antifouling performances of macro- to micro- to nano-copper materials for the inhibition of biofouling in its early stages. Journal of Materials Chemistry B, 2013, 1, 6194.	2.9	48
29	Rapid measurement of microplastic contamination in chicken meat by mid infrared spectroscopy and chemometrics: A feasibility study. Food Control, 2020, 113, 107187.	2.8	48
30	The Maintenance of Mitochondrial DNA Integrity and Dynamics by Mitochondrial Membranes. Life, 2020, 10, 164.	1.1	46
31	Biomimetics for early stage biofouling prevention: templates from insect cuticles. Journal of Materials Chemistry B, 2016, 4, 5747-5754.	2.9	37
32	Significant Enhancement of Antimicrobial Activity in Oxygen-Deficient Zinc Oxide Nanowires. ACS Applied Bio Materials, 2020, 3, 2997-3004.	2.3	36
33	Phthalate doped PVC membranes for the inhibition of fouling. Journal of Membrane Science, 2010, 365, 180-187.	4.1	31
34	The use of nanomaterials for the mitigation of pathogenic biofilm formation. Methods in Microbiology, 2019, , 61-92.	0.4	31
35	Broad-spectrum treatment of bacterial biofilms using magneto-responsive liquid metal particles. Journal of Materials Chemistry B, 2020, 8, 10776-10787.	2.9	31
36	Chemometrics for environmental monitoring: a review. Analytical Methods, 2020, 12, 4597-4620.	1.3	31

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37	The Use of UV-Vis Spectroscopy in Bioprocess and Fermentation Monitoring. Fermentation, 2018, 4, 18.	1.4	30
38	From Academia to Reality Check: A Theoretical Framework on the Use of Chemometric in Food Sciences. Foods, 2019, 8, 164.	1.9	30
39	Challenges and opportunities of the fourth revolution: a brief insight into the future of food. Critical Reviews in Food Science and Nutrition, 2022, 62, 2845-2853.	5.4	30
40	Shining light into meat â€“ a review on the recent advances in in vivo and carcass applications of near infrared spectroscopy. International Journal of Food Science and Technology, 2020, 55, 935-941.	1.3	29
41	Novel pre-treatment of zeolite materials for the removal of sodium ions: potential materials for coal seam gas co-produced wastewater. SpringerPlus, 2016, 5, 571.	1.2	28
42	A Short Update on the Advantages, Applications and Limitations of Hyperspectral and Chemical Imaging in Food Authentication. Applied Sciences (Switzerland), 2018, 8, 505.	1.3	28
43	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
44	Sensomics - From conventional to functional NIR spectroscopy - Shining light over the aroma and taste of foods. Trends in Food Science and Technology, 2019, 91, 274-281.	7.8	26
45	Advances in meat spoilage detection: A short focus on rapid methods and technologies. CYTA - Journal of Food, 2018, 16, 1037-1044.	0.9	24
46	Conformationally tuned antibacterial oligomers target the peptidoglycan of Gram-positive bacteria. Journal of Colloid and Interface Science, 2020, 580, 850-862.	5.0	24
47	Broad-Spectrum Solvent-free Layered Black Phosphorus as a Rapid Action Antimicrobial. ACS Applied Materials & Interfaces, 2021, 13, 17340-17352.	4.0	24
48	Antibacterial Longevity of a Novel Gallium Liquid Metal/Hydroxyapatite Composite Coating Fabricated by Plasma Spray. ACS Applied Materials & Interfaces, 2022, 14, 18974-18988.	4.0	24
49	Origin and Regionality of Winesâ€”the Role of Molecular Spectroscopy. Food Analytical Methods, 2017, 10, 3947-3955.	1.3	23
50	A Review on the Source of Lipids and Their Interactions during Beer Fermentation that Affect Beer Quality. Fermentation, 2018, 4, 89.	1.4	23
51	Spectroscopic approaches for rapid beer and wine analysis. Current Opinion in Food Science, 2019, 28, 67-73.	4.1	23
52	Sensing the Addition of Vegetable Oils to Olive Oil: The Ability of UVâ€“VIS and MIR Spectroscopy Coupled with Chemometric Analysis. Food Analytical Methods, 2020, 13, 601-607.	1.3	21
53	From the Laboratory to The Vineyardâ€”Evolution of The Measurement of Grape Composition using NIR Spectroscopy towards High-Throughput Analysis. High-Throughput, 2019, 8, 21.	4.4	20
54	Controlling the topology of mammalian mitochondrial DNA. Open Biology, 2021, 11, 210168.	1.5	19

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55	A highâ€throughput and machine learning resistance monitoring system to determine the point of resistance for Escherichia coli with tetracycline: Combining UVâ€visible spectrophotometry with principal component analysis. Biotechnology and Bioengineering, 2021, 118, 1511-1519.	1.7	19
56	Interactions between Liquid Metal Droplets and Bacterial, Fungal, and Mammalian Cells. Advanced Materials Interfaces, 2022, 9, .	1.9	19
57	Impact of the Astaxanthin, Betanin, and EGCG Compounds on Small Oligomers of Amyloid AÎ²₄₀ Peptide. Journal of Chemical Information and Modeling, 2020, 60, 1399-1408.	2.5	17
58	Forensic applications: Fluorescence properties of tooth-coloured restorative materials using a fluorescence DSLR camera. Forensic Science International, 2017, 273, 20-28.	1.3	16
59	Monitoring the Bacterial Response to Antibiotic and Time Growth Using Near-infrared Spectroscopy Combined with Machine Learning. Food Analytical Methods, 2021, 14, 1394-1401.	1.3	16
60	Mid-infrared spectroscopy coupled with chemometrics to identify spectral variability in Australian barley samples from different production regions. Journal of Cereal Science, 2019, 85, 41-47.	1.8	15
61	Inorganic nanoparticles as food additives and their influence on the human gut microbiota. Environmental Science: Nano, 2021, 8, 1500-1518.	2.2	15
62	Reviewâ€"New Twists in the Plot: Recent Advances in Electrochemical Genosensors for Disease Screening. Journal of the Electrochemical Society, 2017, 164, B665-B673.	1.3	14
63	Continuous high-frequency monitoring of estuarine water quality as a decision support tool: a Dublin Port case study. Environmental Monitoring and Assessment, 2014, 186, 5561-5580.	1.3	13
64	Nanoparticle and biomaterial characterisation techniques. Materials Technology, 2015, 30, B44-B56.	1.5	13
65	Unfrazzled by Fizziness: Identification of Beers Using Attenuated Total Reflectance Mid-infrared Spectroscopy and Multivariate Analysis. Food Analytical Methods, 2018, 11, 2360-2367.	1.3	13
66	Vibrational Spectroscopy Methods for Agro-Food Product Analysis. Comprehensive Analytical Chemistry, 2018, 80, 51-68.	0.7	13
67	Current perspectives for engineering antimicrobial nanostructured materials. Current Opinion in Biomedical Engineering, 2022, 23, 100399.	1.8	13
68	Reproducible Superhydrophobic PVC Coatings; Investigating the Use of Plasticizers for Early Stage Biofouling Control. Advanced Engineering Materials, 2017, 19, 1700053.	1.6	12
69	There is gold in them hills: Predicting potential acid mine drainage events through the use of chemometrics. Science of the Total Environment, 2018, 619-620, 1464-1472.	3.9	12
70	Ultrastructure of the gastro intestinal tract of healthy Japanese quail (Coturnix japonica) using light and scanning electron microscopy. Animal Nutrition, 2018, 4, 378-387.	2.1	12
71	Illuminating the flesh of bone identification â€“ An application of near infrared spectroscopy. Vibrational Spectroscopy, 2018, 98, 64-68.	1.2	12
72	Micro- to nano-scale chemical and mechanical mapping of antimicrobial-resistant fungal biofilms. Nanoscale, 2020, 12, 19888-19904.	2.8	12

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73	Emerging biomaterials and strategies for medical applications: a review. Materials Technology, 2015, 30, B3-B7.	1.5	11
74	The role of biomaterials in the treatment of meniscal tears. PeerJ, 2017, 5, e4076.	0.9	11
75	Analysis of Australian Beers Using Fluorescence Spectroscopy. Beverages, 2017, 3, 57.	1.3	11
76	Detection of Toothâ€Colored Restorative Materials for Forensic Purposes Based on Their Optical Properties: An In Vitro Comparative Study. Journal of Forensic Sciences, 2019, 64, 254-259.	0.9	11
77	Probing Nanoscale Interactions of Antimicrobial Zinc Oxide Quantum Dots on Bacterial and Fungal Cell Surfaces. Advanced Materials Interfaces, 2022, 9, .	1.9	11
78	The Application of State-of-the-Art Analytic Tools (Biosensors and Spectroscopy) in Beverage and Food Fermentation Process Monitoring. Fermentation, 2017, 3, 50.	1.4	10
79	Fluorescenceâ€aided selective removal of resinâ€based composite restorative materials: An in vitro comparative study. Journal of Esthetic and Restorative Dentistry, 2020, 32, 310-316.	1.8	10
80	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
81	Durable Antibacterial and Antifungal Hierarchical Silver-Embedded Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td Materials, 2021, 3, 4256-4263.	2.0	10
82	The use of two-dimensional spectroscopy to interpret the effect of temperature on the near infrared spectra of whisky. Journal of Near Infrared Spectroscopy, 2020, 28, 148-152.	0.8	9
83	Ultraviolet-visible spectroscopy for food quality analysis. , 2019, , 91-104.		8
84	The use of derivatives and chemometrics to interrogate the UVâ€“Visible spectra of gin samples to monitor changes related to storage. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 227, 117548.	2.0	8
85	Microplastic adulteration in homogenized fish and seafood - a mid-infrared and machine learning proof of concept. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 260, 119985.	2.0	8
86	Influence of the Scanning Temperature on the Classification of Whisky Samples Analysed by UV-VIS Spectroscopy. Applied Sciences (Switzerland), 2019, 9, 3254.	1.3	7
87	Sebacic and succinic acid derived plasticised PVC for the inhibition of biofouling in its initial stages. Journal of Applied Biomaterials and Biomechanics, 2011, 9, 176-184.	0.4	6
88	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
89	Coal mine-affected water releases, turbidity and metal concentrations in the Fitzroy River Basin, Queensland, Australia. Environmental Earth Sciences, 2019, 78, 1.	1.3	4
90	Meat Consumption and Green Gas Emissions: a Chemometrics Analysis. Food Analytical Methods, 2019, 12, 469-474.	1.3	4

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91	DETECTION METHODS FOR FAECAL CONTAMINATION EVENTS: THE GAP FOR AUSTRALIA. Water E-Journal, 2016, 1, 1-6.	0.2	4
92	Application of Fluconazole-Loaded pH-Sensitive Lipid Nanoparticles for Enhanced Antifungal Therapy. ACS Applied Materials & Interfaces, 2022, 14, 32845-32854.	4.0	4
93	Biosensors in Food Traceability and Quality. , 2021, , 308-321.		3
94	Analytical Characterisation of Material Corrosion by Biofilms. Journal of Bio- and Tribo-Corrosion, 2022, 8, 1.	1.2	3
95	Wastewater depollution of textile dyes and antibiotics using unmodified and copper oxide/zinc oxide nanofunctionalised graphene oxide materials. Environmental Science Advances, 0, , .	1.0	3
96	Countering the â€˜Fake Newsâ€™ of Food: The Role of Chemometrics With Vibrational Spectroscopy Techniques. , 2018, , .		2
97	Comparison of Ultrasound-Assisted Extraction with Static Extraction as Pre-Processing Method Before Gas Chromatography Analysis of Cereal Lipids. Food Analytical Methods, 2018, 11, 3276-3281.	1.3	2
98	Lighting the Ivory Track: Are Near-Infrared and Chemometrics Up to the Job? A Proof of Concept. Applied Spectroscopy, 2019, 73, 816-822.	1.2	2
99	Microstructures of Biofilm. , 2015, , 35-43.		1
100	Handling Complexity in Animal and Plant Science Researchâ€”From Single to Functional Traits: Are We There Yet?. High-Throughput, 2018, 7, 16.	4.4	1
101	Effect of Heat on the Fluorescence Properties of Toothâ€Colored Restorative Materials and Their Forensic Implications. Journal of Forensic Sciences, 2019, 64, 1698-1706.	0.9	1
102	Role of sensors in fruit nutrition. , 2020, , 111-119.		1
103	Insights on the role of chemometrics and vibrational spectroscopy in fruit metabolite analysis. Food Chemistry Molecular Sciences, 2021, 3, 100033.	0.9	1
104	Application of Cluster Analysis in Food Science and Technology. , 2020, , 68-73.		1
105	New nanomaterials for wastewater depollution: Methods using chemometric approaches. Separation Science and Technology, 2022, , 287-298.	0.0	1
106	Detachment of Bacteria. , 2015, , 45-52.		0
107	Biointerfaces and biofouling. Materials Technology, 2015, 30, B1-B2.	1.5	0
108	Light at the museum â€“ A near impossible result. NIR News, 2020, 31, 15-18.	1.6	0

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109	Artificial intelligence applied to healthcare and biotechnology. , 2022, , 249-257.		0
110	Partial least squares regression models to predict contaminant concentrations during high or low flow of coal mineâ€affected rivers. River Research and Applications, 0, , .	0.7	0