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	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
2	Probing Nanoscale Interactions of Antimicrobial Zinc Oxide Quantum Dots on Bacterial and Fungal Cell Surfaces. Advanced Materials Interfaces, 2022, 9, .	1.9	11
3	Interactions between Liquid Metal Droplets and Bacterial, Fungal, and Mammalian Cells. Advanced Materials Interfaces, 2022, 9, .	1.9	19
4	Artificial intelligence applied to healthcare and biotechnology. , 2022, , 249-257.		0
5	Analytical Characterisation of Material Corrosion by Biofilms. Journal of Bio- and Tribo-Corrosion, 2022, 8, 1.	1.2	3
6	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
7	New nanomaterials for wastewater depollution: Methods using chemometric approaches. Separation Science and Technology, 2022, , 287-298.	0.0	1
8	Current perspectives for engineering antimicrobial nanostructured materials. Current Opinion in Biomedical Engineering, 2022, 23, 100399.	1.8	13
9	Application of Fluconazole-Loaded pH-Sensitive Lipid Nanoparticles for Enhanced Antifungal Therapy. ACS Applied Materials & Interfaces, 2022, 14, 32845-32854.	4.0	4
10	Inorganic nanoparticles as food additives and their influence on the human gut microbiota. Environmental Science: Nano, 2021, 8, 1500-1518.	2.2	15
11	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
12	3D Printable Electrically Conductive Hydrogel Scaffolds for Biomedical Applications: A Review. Polymers, 2021, 13, 474.	2.0	74
13	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
14	Neutrophils induce paracrine telomere dysfunction and senescence in ROSâ€dependent manner. EMBO Journal, 2021, 40, e106048.	3.5	101
15	Broad-Spectrum Solvent-free Layered Black Phosphorus as a Rapid Action Antimicrobial. ACS Applied Materials & Interfaces, 2021, 13, 17340-17352.	4.0	24
16	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
17	Antipathogenic properties and applications of low-dimensional materials. Nature Communications, 2021, 12, 3897.	5.8	63
18	Durable Antibacterial and Antifungal Hierarchical Silver-Embedded Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (fluoride- Materials, 2021, 3, 4256-4263.	2.0	10

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19	Insights on the role of chemometrics and vibrational spectroscopy in fruit metabolite analysis. Food Chemistry Molecular Sciences, 2021, 3, 100033.	0.9	1
20	Controlling the topology of mammalian mitochondrial DNA. Open Biology, 2021, 11, 210168.	1.5	19
21	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
22	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
23	Biosensors in Food Traceability and Quality. , 2021, , 308-321.		3
24	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
25	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
26	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
27	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
28	Antibacterial Liquid Metals: Biofilm Treatment via Magnetic Activation. ACS Nano, 2020, 14, 802-817.	7.3	198
29	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
30	Broad-spectrum treatment of bacterial biofilms using magneto-responsive liquid metal particles. Journal of Materials Chemistry B, 2020, 8, 10776-10787.	2.9	31
31	Conformationally tuned antibacterial oligomers target the peptidoglycan of Gram-positive bacteria. Journal of Colloid and Interface Science, 2020, 580, 850-862.	5.0	24
32	Light at the museum â€“ A near impossible result. NIR News, 2020, 31, 15-18.	1.6	0
33	The Maintenance of Mitochondrial DNA Integrity and Dynamics by Mitochondrial Membranes. Life, 2020, 10, 164.	1.1	46
34	Micro- to nano-scale chemical and mechanical mapping of antimicrobial-resistant fungal biofilms. Nanoscale, 2020, 12, 19888-19904.	2.8	12
35	Chemometrics for environmental monitoring: a review. Analytical Methods, 2020, 12, 4597-4620.	1.3	31
36	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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37	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
38	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
39	Significant Enhancement of Antimicrobial Activity in Oxygen-Deficient Zinc Oxide Nanowires. ACS Applied Bio Materials, 2020, 3, 2997-3004.	2.3	36
40	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
41	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
42	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
43	Role of sensors in fruit nutrition. , 2020, , 111-119.		1
44	Antimicrobial Metal Nanomaterials: From Passive to Stimuliâ€Activated Applications. Advanced Science, 2020, 7, 1902913.	5.6	192
45	Application of Cluster Analysis in Food Science and Technology. , 2020, , 68-73.		1
46	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
47	Interpreting and Reporting Principal Component Analysis in Food Science Analysis and Beyond. Food Analytical Methods, 2019, 12, 2469-2473.	1.3	73
48	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
49	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
50	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
51	Senescent human melanocytes drive skin ageing via paracrine telomere dysfunction. EMBO Journal, 2019, 38, e101982.	3.5	136
52	Spectroscopic approaches for rapid beer and wine analysis. Current Opinion in Food Science, 2019, 28, 67-73.	4.1	23
53	The use of nanomaterials for the mitigation of pathogenic biofilm formation. Methods in Microbiology, 2019, , 61-92.	0.4	31
54	From Academia to Reality Check: A Theoretical Framework on the Use of Chemometric in Food Sciences. Foods, 2019, 8, 164.	1.9	30

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55	Ultraviolet-visible spectroscopy for food quality analysis. , 2019, , 91-104.		8
56	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
57	Bacterial-nanostructure interactions: The role of cell elasticity and adhesion forces. Journal of Colloid and Interface Science, 2019, 546, 192-210.	5.0	120
58	Parkinson's Disease and the Environment. Frontiers in Neurology, 2019, 10, 218.	1.1	260
59	Lengthâ€independent telomere damage drives postâ€mitotic cardiomyocyte senescence. EMBO Journal, 2019, 38, .	3.5	307
60	Antibacterial Properties of Graphene Oxideâ€“Copper Oxide Nanoparticle Nanocomposites. ACS Applied Bio Materials, 2019, 2, 5687-5696.	2.3	57
61	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
62	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
63	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
64	Rapamycin improves healthspan but not inflammaging in nfl<sup>ºb1^{â^'/â^'} mice. Aging Cell, 2019, 18, e12882.	3.0	59
65	Meat Consumption and Green Gas Emissions: a Chemometrics Analysis. Food Analytical Methods, 2019, 12, 469-474.	1.3	4
66	A review of methods for the detection of pathogenic microorganisms. Analyst, The, 2019, 144, 396-411.	1.7	342
67	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
68	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
69	Carbon nanomaterials and their application to electrochemical sensors: a review. Nanotechnology Reviews, 2018, 7, 19-41.	2.6	230
70	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
71	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
72	Advances in meat spoilage detection: A short focus on rapid methods and technologies. CYTA - Journal of Food, 2018, 16, 1037-1044.	0.9	24

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73	A Review on the Source of Lipids and Their Interactions during Beer Fermentation that Affect Beer Quality. Fermentation, 2018, 4, 89.	1.4	23
74	Countering the â€˜Fake Newsâ€™ of Food: The Role of Chemometrics With Vibrational Spectroscopy Techniques. , 2018, , .		2
75	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
76	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
77	Illuminating the flesh of bone identification â€“ An application of near infrared spectroscopy. Vibrational Spectroscopy, 2018, 98, 64-68.	1.2	12
78	Mitochondrial inner membrane permeabilisation enables mt <scp>DNA</scp> release during apoptosis. EMBO Journal, 2018, 37, .	3.5	313
79	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
80	The Use of UV-Vis Spectroscopy in Bioprocess and Fermentation Monitoring. Fermentation, 2018, 4, 18.	1.4	30
81	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
82	Vibrational Spectroscopy Methods for Agro-Food Product Analysis. Comprehensive Analytical Chemistry, 2018, 80, 51-68.	0.7	13
83	Forensic applications: Fluorescence properties of tooth-coloured restorative materials using a fluorescence DSLR camera. Forensic Science International, 2017, 273, 20-28.	1.3	16
84	Origin and Regionality of Winesâ€”the Role of Molecular Spectroscopy. Food Analytical Methods, 2017, 10, 3947-3955.	1.3	23
85	Reproducible Superhydrophobic PVC Coatings; Investigating the Use of Plasticizers for Early Stage Biofouling Control. Advanced Engineering Materials, 2017, 19, 1700053.	1.6	12
86	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
87	The synthesis and characterisation of highly stable and reproducible selenium nanoparticles. Inorganic and Nano-Metal Chemistry, 2017, 47, 1568-1576.	0.9	64
88	The role of biomaterials in the treatment of meniscal tears. PeerJ, 2017, 5, e4076.	0.9	11
89	Analysis of Australian Beers Using Fluorescence Spectroscopy. Beverages, 2017, 3, 57.	1.3	11
90	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

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91	The Use of Electrochemical Biosensors in Food Analysis. Current Research in Nutrition and Food Science, 2017, 5, 183-195.	0.3	61
92	Biomimetics for early stage biofouling prevention: templates from insect cuticles. Journal of Materials Chemistry B, 2016, 4, 5747-5754.	2.9	37
93	Nanoparticles in feed: Progress and prospects in poultry research. Trends in Food Science and Technology, 2016, 58, 115-126.	7.8	75
94	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
95	The gastrointestinal tract microbiota of the Japanese quail, Coturnix japonica. Applied Microbiology and Biotechnology, 2016, 100, 4201-4209.	1.7	49
96	DETECTION METHODS FOR FAECAL CONTAMINATION EVENTS: THE GAP FOR AUSTRALIA. Water E-Journal, 2016, 1, 1-6.	0.2	4
97	Microstructures of Biofilm. , 2015, , 35-43.		1
98	Detachment of Bacteria. , 2015, , 45-52.		0
99	Biointerfaces and biofouling. Materials Technology, 2015, 30, B1-B2.	1.5	0
100	Nanoparticle and biomaterial characterisation techniques. Materials Technology, 2015, 30, B44-B56.	1.5	13
101	Emerging biomaterials and strategies for medical applications: a review. Materials Technology, 2015, 30, B3-B7.	1.5	11
102	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
103	Bioinspired synthetic macroalgae: Examples from nature for antifouling applications. International Biodeterioration and Biodegradation, 2014, 86, 6-13.	1.9	70
104	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
105	Nanofunctionalized Superhydrophobic Antifouling Coatings for Environmental Sensor Applicationsâ€"Advancing Deployment with Answers from Nature. Advanced Engineering Materials, 2012, 14, B175.	1.6	120
106	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
107	Phthalate doped PVC membranes for the inhibition of fouling. Journal of Membrane Science, 2010, 365, 180-187.	4.1	31
108	Period four metal nanoparticles on the inhibition of biofouling. Colloids and Surfaces B: Biointerfaces, 2010, 78, 208-216.	2.5	55

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109	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
110	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