

# Mark R Viant

## List of Publications by Year in descending order

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216  
papers

17,915  
citations

13068

68  
h-index

15218

126  
g-index

226  
all docs

226  
docs citations

226  
times ranked

21152  
citing authors

#	ARTICLE	IF	CITATIONS
1	Proposed minimum reporting standards for chemical analysis. <i>Metabolomics</i> , 2007, 3, 211-221.	1.4	3,589
2	Environmental metabolomics: a critical review and future perspectives. <i>Metabolomics</i> , 2009, 5, 3-21.	1.4	656
3	High-throughput tissue extraction protocol for NMR- and MS-based metabolomics. <i>Analytical Biochemistry</i> , 2008, 372, 204-212.	1.1	551
4	Mass appeal: metabolite identification in mass spectrometry-focused untargeted metabolomics. <i>Metabolomics</i> , 2013, 9, 44-66.	1.4	452
5	NMR-Based Metabolomics: A Powerful Approach for Characterizing the Effects of Environmental Stressors on Organism Health. <i>Environmental Science &amp; Technology</i> , 2003, 37, 4982-4989.	4.6	406
6	Evaluation of metabolite extraction strategies from tissue samples using NMR metabolomics. <i>Metabolomics</i> , 2007, 3, 55-67.	1.4	345
7	The role of reporting standards for metabolite annotation and identification in metabolomic studies. <i>GigaScience</i> , 2013, 2, 13.	3.3	333
8	Improved methods for the acquisition and interpretation of NMR metabolomic data. <i>Biochemical and Biophysical Research Communications</i> , 2003, 310, 943-948.	1.0	293
9	Non-targeted UHPLC-MS metabolomic data processing methods: a comparative investigation of normalisation, missing value imputation, transformation and scaling. <i>Metabolomics</i> , 2016, 12, 93.	1.4	232
10	Fumarate Is Cardioprotective via Activation of the Nrf2 Antioxidant Pathway. <i>Cell Metabolism</i> , 2012, 15, 361-371.	7.2	231
11	How close are we to complete annotation of metabolomes?. <i>Current Opinion in Chemical Biology</i> , 2017, 36, 64-69.	2.8	228
12	Two-dimensional <sup>1</sup> H- <sup>13</sup> C-resolved NMR spectroscopy: review of a key methodology in the metabolomics toolbox. <i>Phytochemical Analysis</i> , 2010, 21, 22-32.	1.2	208
13	Aggregation and dispersion of silver nanoparticles in exposure media for aquatic toxicity tests. <i>Journal of Chromatography A</i> , 2011, 1218, 4226-4233.	1.8	192
14	Improved classification accuracy in 1- and 2-dimensional NMR metabolomics data using the variance stabilising generalised logarithm transformation. <i>BMC Bioinformatics</i> , 2007, 8, 234.	1.2	188
15	Metabolomics: Methodologies and applications in the environmental sciences. <i>Journal of Pesticide Sciences</i> , 2006, 31, 245-251.	0.8	170
16	Dynamic Range and Mass Accuracy of Wide-Scan Direct Infusion Nanoelectrospray Fourier Transform Ion Cyclotron Resonance Mass Spectrometry-Based Metabolomics Increased by the Spectral Stitching Method. <i>Analytical Chemistry</i> , 2007, 79, 4595-4602.	3.2	170
17	Recent developments in environmental metabolomics. <i>Molecular BioSystems</i> , 2008, 4, 980.	2.9	169
18	Missing values in mass spectrometry based metabolomics: an undervalued step in the data processing pipeline. <i>Metabolomics</i> , 2012, 8, 161-174.	1.4	169

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19	Quantitative Lipoprotein Subclass and Low Molecular Weight Metabolite Analysis in Human Serum and Plasma by <sup>1</sup> H NMR Spectroscopy in a Multilaboratory Trial. <i>Analytical Chemistry</i> , 2018, 90, 11962-11971.	3.2	165
20	Optimized metabolite extraction from blood serum for <sup>1</sup> H nuclear magnetic resonance spectroscopy. <i>Analytical Biochemistry</i> , 2008, 377, 16-23.	1.1	164
21	Spectral relative standard deviation: a practical benchmark in metabolomics. <i>Analyst</i> , 2009, 134, 478-485.	1.7	163
22	The Role of Omics in the Application of Adverse Outcome Pathways for Chemical Risk Assessment. <i>Toxicological Sciences</i> , 2017, 158, 252-262.	1.4	161
23	Identifying Health Impacts of Exposure to Copper Using Transcriptomics and Metabolomics in a Fish Model. <i>Environmental Science &amp; Technology</i> , 2010, 44, 820-826.	4.6	152
24	Metabolomics of aquatic organisms: the new 'omics' on the block. <i>Marine Ecology - Progress Series</i> , 2007, 332, 301-306.	0.9	151
25	The Impact of Inflammation on Metabolomic Profiles in Patients With Arthritis. <i>Arthritis and Rheumatism</i> , 2013, 65, 2015-2023.	6.7	140
26	COordination of Standards in MetabOLOmicS (COSMOS): facilitating integrated metabolomics data access. <i>Metabolomics</i> , 2015, 11, 1587-1597.	1.4	140
27	International NMR-Based Environmental Metabolomics Intercomparison Exercise. <i>Environmental Science &amp; Technology</i> , 2009, 43, 219-225.	4.6	139
28	Birmingham Metabolite Library: a publicly accessible database of 1-D <sup>1</sup> H and 2-D <sup>1</sup> H J-resolved NMR spectra of authentic metabolite standards (BML-NMR). <i>Metabolomics</i> , 2012, 8, 8-18.	1.4	137
29	Direct Sampling of Organisms from the Field and Knowledge of their Phenotype: A Key Recommendations for Environmental Metabolomics. <i>Environmental Science &amp; Technology</i> , 2007, 41, 3375-3381.	4.6	134
30	Direct infusion mass spectrometry metabolomics dataset: a benchmark for data processing and quality control. <i>Scientific Data</i> , 2014, 1, 140012.	2.4	134
31	Metabolic effects of dinoseb, diazinon and esfenvalerate in eyed eggs and alevins of Chinook salmon ( <i>Oncorhynchus tshawytscha</i> ) determined by <sup>1</sup> H NMR metabolomics. <i>Aquatic Toxicology</i> , 2006, 77, 359-371.	1.9	132
32	Use cases, best practice and reporting standards for metabolomics in regulatory toxicology. <i>Nature Communications</i> , 2019, 10, 3041.	5.8	131
33	Mass spectrometry based environmental metabolomics: a primer and review. <i>Metabolomics</i> , 2013, 9, 144-158.	1.4	124
34	Characterising and correcting batch variation in an automated direct infusion mass spectrometry (DIMS) metabolomics workflow. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 5147-5157.	1.9	123
35	A complete workflow for high-resolution spectral-stitching nanoelectrospray direct-infusion mass-spectrometry-based metabolomics and lipidomics. <i>Nature Protocols</i> , 2017, 12, 310-328.	5.5	121
36	A new approach to toxicity testing in <i>Daphnia magna</i> : application of high throughput FT-ICR mass spectrometry metabolomics. <i>Metabolomics</i> , 2009, 5, 44-58.	1.4	118

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37	Metabolomics and proteomics reveal impacts of chemically mediated competition on marine plankton. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9009-9014.	3.3	112
38	Terahertz Laser Vibration-Rotation Tunneling Spectroscopy of the Water Tetramer. <i>Journal of Physical Chemistry A</i> , 1997, 101, 9022-9031.	1.1	110
39	Discrimination Models Using Variance-Stabilizing Transformation of Metabolomic NMR Data. <i>OMICS A Journal of Integrative Biology</i> , 2004, 8, 118-130.	1.0	106
40	NMR-based metabolomic analysis of cerebrospinal fluid and serum in neurological diseases – a diagnostic tool?. <i>NMR in Biomedicine</i> , 2010, 23, 123-132.	1.6	105
41	Correlation between heat-shock protein induction and reduced metabolic condition in juvenile steelhead trout ( <i>Oncorhynchus mykiss</i> ) chronically exposed to elevated temperature. <i>Fish Physiology and Biochemistry</i> , 2003, 29, 159-171.	0.9	104
42	Characterization of Isotopic Abundance Measurements in High Resolution FT-ICR and Orbitrap Mass Spectra for Improved Confidence of Metabolite Identification. <i>Analytical Chemistry</i> , 2011, 83, 3737-3743.	3.2	102
43	Toxic actions of dinoseb in medaka ( <i>Oryzias latipes</i> ) embryos as determined by in vivo <sup>31</sup> P NMR, HPLC-UV and <sup>1</sup> H NMR metabolomics. <i>Aquatic Toxicology</i> , 2006, 76, 329-342.	1.9	101
44	Metabolomic Profiling of Drug Responses in Acute Myeloid Leukaemia Cell Lines. <i>PLoS ONE</i> , 2009, 4, e4251.	1.1	101
45	Pseudorotation in Water Trimer Isotopomers Using Terahertz Laser Spectroscopy. <i>Journal of Physical Chemistry A</i> , 1997, 101, 9032-9041.	1.1	100
46	Wolbachia Modulates Lipid Metabolism in <i>Aedes albopictus</i> Mosquito Cells. <i>Applied and Environmental Microbiology</i> , 2016, 82, 3109-3120.	1.4	100
47	Data standards can boost metabolomics research, and if there is a will, there is a way. <i>Metabolomics</i> , 2016, 12, 14.	1.4	97
48	An NMR metabolomic investigation of early metabolic disturbances following traumatic brain injury in a mammalian model. <i>NMR in Biomedicine</i> , 2005, 18, 507-516.	1.6	94
49	Standard reporting requirements for biological samples in metabolomics experiments: environmental context. <i>Metabolomics</i> , 2007, 3, 203-210.	1.4	93
50	<sup>1</sup> H NMR Metabolomics Reveals Contrasting Response by Male and Female Mussels Exposed to Reduced Seawater pH, Increased Temperature, and a Pathogen. <i>Environmental Science &amp; Technology</i> , 2014, 48, 7044-7052.	4.6	91
51	NMR-derived developmental metabolic trajectories: an approach for visualizing the toxic actions of trichloroethylene during embryogenesis. <i>Metabolomics</i> , 2005, 1, 149-158.	1.4	88
52	Structure and function of BamE within the outer membrane and the $\beta$ -barrel assembly machine. <i>EMBO Reports</i> , 2011, 12, 123-128.	2.0	88
53	Anaerobic Metabolism at Thermal Extremes: A Metabolomic Test of the Oxygen Limitation Hypothesis in an Aquatic Insect. <i>Integrative and Comparative Biology</i> , 2013, 53, 609-619.	0.9	86
54	A long path length pulsed slit valve appropriate for high temperature operation: Infrared spectroscopy of jet-cooled large water clusters and nucleotide bases. <i>Review of Scientific Instruments</i> , 1996, 67, 410-416.	0.6	83

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55	Fast targeted multidimensional NMR metabolomics of colorectal cancer. <i>Magnetic Resonance in Chemistry</i> , 2009, 47, S68-73.	1.1	83
56	Metabolomics of Microliter Hemolymph Samples Enables an Improved Understanding of the Combined Metabolic and Transcriptional Responses of <i>Daphnia magna</i> to Cadmium. <i>Environmental Science &amp; Technology</i> , 2011, 45, 3710-3717.	4.6	83
57	Towards a System Level Understanding of Non-Model Organisms Sampled from the Environment: A Network Biology Approach. <i>PLoS Computational Biology</i> , 2011, 7, e1002126.	1.5	83
58	Liver Tumors in Wild Flatfish: A Histopathological, Proteomic, and Metabolomic Study. <i>OMICS A Journal of Integrative Biology</i> , 2005, 9, 281-299.	1.0	82
59	Biodiversity in marine invertebrate responses to acute warming revealed by a comparative multi-omics approach. <i>Global Change Biology</i> , 2017, 23, 318-330.	4.2	80
60	MI-Pack: Increased confidence of metabolite identification in mass spectra by integrating accurate masses and metabolic pathways. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2010, 104, 75-82.	1.8	78
61	Galaxy-M: a Galaxy workflow for processing and analyzing direct infusion and liquid chromatography mass spectrometry-based metabolomics data. <i>GigaScience</i> , 2016, 5, 10.	3.3	78
62	Regional adaptation defines sensitivity to future ocean acidification. <i>Nature Communications</i> , 2017, 8, 13994.	5.8	78
63	Comparison of modified Matyash method to conventional solvent systems for polar metabolite and lipid extractions. <i>Analytica Chimica Acta</i> , 2018, 1037, 301-315.	2.6	75
64	Discovery of Metabolic Signatures for Predicting Whole Organism Toxicology. <i>Toxicological Sciences</i> , 2010, 115, 369-378.	1.4	74
65	Characterizing the metabolic actions of natural stresses in the California red abalone, <i>Haliotis rufescens</i> using <sup>1</sup> H NMR metabolomics. <i>Metabolomics</i> , 2005, 1, 199-209.	1.4	73
66	Revealing the Metabolome of Animal Tissues Using <sup>1</sup> H Nuclear Magnetic Resonance Spectroscopy. <i>Methods in Molecular Biology</i> , 2007, 358, 229-246.	0.4	73
67	Hepatic Transcriptomic and Metabolomic Responses in the Stickleback ( <i>Gasterosteus aculeatus</i> ) Exposed to Environmentally Relevant Concentrations of Dibenzanthracene. <i>Environmental Science &amp; Technology</i> , 2009, 43, 6341-6348.	4.6	71
68	Hepatic transcriptomic and metabolomic responses in the Stickleback ( <i>Gasterosteus aculeatus</i> ) exposed to ethinyl-estradiol. <i>Aquatic Toxicology</i> , 2010, 97, 174-187.	1.9	71
69	Molecular toxicity of cerium oxide nanoparticles to the freshwater alga <i>Chlamydomonas reinhardtii</i> is associated with supra-environmental exposure concentrations. <i>Nanotoxicology</i> , 2016, 10, 1-10.	1.6	70
70	Microwave spectroscopy and interaction potential of the long-range He...Ar <sup>+</sup> ion. <i>Journal of Chemical Physics</i> , 1995, 102, 2379-2403.	1.2	69
71	Computational tools and workflows in metabolomics: An international survey highlights the opportunity for harmonisation through Galaxy. <i>Metabolomics</i> , 2017, 13, 12.	1.4	69
72	Metabolomics Reveals Target and Off-Target Toxicities of a Model Organophosphate Pesticide to Roach ( <i>Rutilus rutilus</i> ): Implications for Biomonitoring. <i>Environmental Science &amp; Technology</i> , 2011, 45, 3759-3767.	4.6	68

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73	Discriminating between Different Acute Chemical Toxicities via Changes in the Daphnid Metabolome. <i>Toxicological Sciences</i> , 2010, 118, 307-317.	1.4	67
74	International Ring Trial of a High Resolution Targeted Metabolomics and Lipidomics Platform for Serum and Plasma Analysis. <i>Analytical Chemistry</i> , 2019, 91, 14407-14416.	3.2	66
75	Comparison of histological, genetic, metabolomics, and lipid-based methods for sex determination in marine mussels. <i>Analytical Biochemistry</i> , 2007, 369, 175-186.	1.1	65
76	A signal filtering method for improved quantification and noise discrimination in fourier transform ion cyclotron resonance mass spectrometry-based metabolomics data. <i>Journal of the American Society for Mass Spectrometry</i> , 2009, 20, 1087-1095.	1.2	65
77	Improved identification of metabolites in complex mixtures using HSQC NMR spectroscopy. <i>Analytica Chimica Acta</i> , 2008, 614, 127-133.	2.6	64
78	Combined Bezafibrate and Medroxyprogesterone Acetate: Potential Novel Therapy for Acute Myeloid Leukaemia. <i>PLoS ONE</i> , 2009, 4, e8147.	1.1	63
79	The Time Is Right to Focus on Model Organism Metabolomes. <i>Metabolites</i> , 2016, 6, 8.	1.3	63
80	Metabolic Changes in Flatfish Hepatic Tumours Revealed by NMR-Based Metabolomics and Metabolic Correlation Networks. <i>Journal of Proteome Research</i> , 2008, 7, 5277-5285.	1.8	60
81	PhenoMeNal: processing and analysis of metabolomics data in the cloud. <i>GigaScience</i> , 2019, 8, .	3.3	60
82	Exo-Metabolome of <i>Pseudovibrio</i> sp. FO-BEG1 Analyzed by Ultra-High Resolution Mass Spectrometry and the Effect of Phosphate Limitation. <i>PLoS ONE</i> , 2014, 9, e96038.	1.1	57
83	Proton NMR-Based Metabolite Analyses of Archived Serial Paired Serum and Urine Samples from Myeloma Patients at Different Stages of Disease Activity Identifies Acetylcarnitine as a Novel Marker of Active Disease. <i>PLoS ONE</i> , 2013, 8, e56422.	1.1	56
84	Quantitative characterization of the (D <sub>2</sub> O) <sub>3</sub> torsional manifold by terahertz laser spectroscopy and theoretical analysis. <i>Journal of Chemical Physics</i> , 1999, 110, 4369-4381.	1.2	53
85	Sublethal actions of copper in abalone ( <i>Haliotis rufescens</i> ) as characterized by in vivo <sup>31</sup> P NMR. <i>Aquatic Toxicology</i> , 2002, 57, 139-151.	1.9	53
86	Quality assurance and quality control processes: summary of a metabolomics community questionnaire. <i>Metabolomics</i> , 2017, 13, 1.	1.4	53
87	Metabolomics standards initiative: ontology working group work in progress. <i>Metabolomics</i> , 2007, 3, 249-256.	1.4	52
88	Investigation of Terahertz Vibrationâ€“Rotation Tunneling Spectra for the Water Octamer. <i>Journal of Physical Chemistry A</i> , 2013, 117, 6960-6966.	1.1	52
89	The metabolic response of marine copepods to environmental warming and ocean acidification in the absence of food. <i>Scientific Reports</i> , 2015, 5, 13690.	1.6	50
90	nmrML: A Community Supported Open Data Standard for the Description, Storage, and Exchange of NMR Data. <i>Analytical Chemistry</i> , 2018, 90, 649-656.	3.2	50

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91	Infrared laser spectroscopy of uracil in a pulsed slit jet. <i>Journal of Chemical Physics</i> , 1995, 103, 9502-9505.	1.2	49
92	Quantitative characterization of the water trimer torsional manifold by terahertz laser spectroscopy and theoretical analysis. II. (H <sub>2</sub> O) <sub>3</sub> . <i>Journal of Chemical Physics</i> , 1999, 111, 7789-7800.	1.2	49
93	Proposed reporting requirements for the description of NMR-based metabolomics experiments. <i>Metabolomics</i> , 2007, 3, 223-229.	1.4	49
94	Automated screening for metabolites in complex mixtures using 2D COSY NMR spectroscopy. <i>Metabolomics</i> , 2006, 2, 221-233.	1.4	48
95	Toxicological effect of single contaminants and contaminant mixtures associated with plant ingredients in novel salmon feeds. <i>Food and Chemical Toxicology</i> , 2014, 73, 157-174.	1.8	48
96	Drug Redeployment to Kill Leukemia and Lymphoma Cells by Disrupting SCD1-Mediated Synthesis of Monounsaturated Fatty Acids. <i>Cancer Research</i> , 2015, 75, 2530-2540.	0.4	48
97	Protein Corona Modulates Uptake and Toxicity of Nanoceria <i>via</i> Clathrin-Mediated Endocytosis. <i>Biological Bulletin</i> , 2016, 231, 40-60.	0.7	48
98	Biomarkers of Whale Shark Health: A Metabolomic Approach. <i>PLoS ONE</i> , 2012, 7, e49379.	1.1	47
99	Progress towards an OECD reporting framework for transcriptomics and metabolomics in regulatory toxicology. <i>Regulatory Toxicology and Pharmacology</i> , 2021, 125, 105020.	1.3	46
100	Applications of metabolomics to the environmental sciences. <i>Metabolomics</i> , 2009, 5, 1-2.	1.4	44
101	Characterization of the metabolic actions of crude versus dispersed oil in salmon smolts via NMR-based metabolomics. <i>Aquatic Toxicology</i> , 2009, 95, 230-238.	1.9	44
102	Hydrogen Bond Breaking Dynamics of the Water Trimer in the Translational and Librational Band Region of Liquid Water. <i>Journal of the American Chemical Society</i> , 2001, 123, 5938-5941.	6.6	42
103	Validation of a urine metabolome fingerprint in dog for phenotypic classification. <i>Metabolomics</i> , 2007, 3, 453-463.	1.4	40
104	The critical importance of defined media conditions in <i>Daphnia magna</i> nanotoxicity studies. <i>Toxicology Letters</i> , 2013, 223, 103-108.	0.4	40
105	msPurity: Automated Evaluation of Precursor Ion Purity for Mass Spectrometry-Based Fragmentation in Metabolomics. <i>Analytical Chemistry</i> , 2017, 89, 2432-2439.	3.2	40
106	Application of Metabolomics to Investigate the Process of Human Orthotopic Liver Transplantation: A Proof-of-Principle Study. <i>OMICS A Journal of Integrative Biology</i> , 2010, 14, 143-150.	1.0	39
107	Optimized method for the determination of phosphoarginine in abalone tissue by high-performance liquid chromatography. <i>Biomedical Applications</i> , 2001, 765, 107-111.	1.7	38
108	Comparative Sublethal Actions of 3-Trifluoromethyl-4-nitrophenol in Marine Molluscs as Measured by in Vivo <sup>31</sup> P NMR. <i>Pesticide Biochemistry and Physiology</i> , 2001, 71, 40-47.	1.6	37



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109	Water Pentamer: Characterization of the Torsional-Puckering Manifold by Terahertz VRT Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2005, 109, 6483-6497.	1.1	37
110	Effects of Temperature on Host-Pathogen-Drug Interactions in Red Abalone, <i>Haliotis rufescens</i> , Determined by <sup>1</sup> H NMR Metabolomics. <i>Environmental Science &amp; Technology</i> , 2006, 40, 7077-7084.	4.6	37
111	Metabolomics Discovers Early-Response Metabolic Biomarkers that Can Predict Chronic Reproductive Fitness in Individual <i>Daphnia magna</i> . <i>Metabolites</i> , 2018, 8, 42.	1.3	37
112	HAMMER: automated operation of mass frontier to construct <i>in silico</i> mass spectral fragmentation libraries. <i>Bioinformatics</i> , 2014, 30, 581-583.	1.8	36
113	Metabolomics reveals an involvement of pantothenate for male production responding to the short-day stimulus in the water flea, <i>Daphnia pulex</i> . <i>Scientific Reports</i> , 2016, 6, 25125.	1.6	36
114	Metabolic responses produced by crude versus dispersed oil in Chinook salmon pre-smolts via NMR-based metabolomics. <i>Ecotoxicology and Environmental Safety</i> , 2010, 73, 710-717.	2.9	35
115	Far-infrared laser vibration-rotation-tunneling spectroscopy of water clusters in the librational band region of liquid water. <i>Journal of Chemical Physics</i> , 2001, 114, 4005-4015.	1.2	34
116	MaConDa: a publicly accessible mass spectrometry contaminants database. <i>Bioinformatics</i> , 2012, 28, 2856-2857.	1.8	34
117	Analysis of time course <sup>1</sup> H NMR metabolomics data by multivariate curve resolution. <i>Magnetic Resonance in Chemistry</i> , 2009, 47, S105-17.	1.1	33
118	Vision of a near future: Bridging the human health-environment divide. Toward an integrated strategy to understand mechanisms across species for chemical safety assessment. <i>Toxicology in Vitro</i> , 2020, 62, 104692.	1.1	33
119	New ideas for non-animal approaches to predict repeated-dose systemic toxicity: Report from an EPA Blue Sky Workshop. <i>Regulatory Toxicology and Pharmacology</i> , 2020, 114, 104668.	1.3	33
120	Microwave electronic spectroscopy, electric field dissociation and photofragmentation of the H + 2 ion. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 603.	1.7	32
121	Robust twin boosting for feature selection from high-dimensional omics data with label noise. <i>Information Sciences</i> , 2015, 291, 1-18.	4.0	32
122	Metabolic changes in Japanese medaka ( <i>Oryzias latipes</i> ) during embryogenesis and hypoxia as determined by <i>in vivo</i> <sup>31</sup> P NMR. <i>Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology</i> , 2005, 140, 103-113.	1.3	31
123	Hypoxia Triggers Major Metabolic Changes in AML Cells without Altering Indomethacin-Induced TCA Cycle Deregulation. <i>ACS Chemical Biology</i> , 2011, 6, 169-175.	1.6	31
124	Line-shape analysis of <i>J</i> -resolved NMR spectra: application to metabolomics and quantification of intensity errors from signal processing and high signal congestion. <i>Magnetic Resonance in Chemistry</i> , 2009, 47, S86-95.	1.1	30
125	Effects of the application of different window functions and projection methods on processing of <sup>1</sup> H <i>J</i> -resolved nuclear magnetic resonance spectra for metabolomics. <i>Analytica Chimica Acta</i> , 2008, 610, 80-88.	2.6	29
126	Distinguishing between the metabolome and xenobiotic exposome in environmental field samples analysed by direct-infusion mass spectrometry based metabolomics and lipidomics. <i>Metabolomics</i> , 2014, 10, 1050-1058.	1.4	29



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127	Predicting chronic copper and nickel reproductive toxicity to <i>Daphnia pulex-pulicaria</i> from whole-animal metabolic profiles. <i>Environmental Pollution</i> , 2016, 212, 325-329.	3.7	29
128	Molecular responses of European flounder ( <i>Platichthys flesus</i> ) chronically exposed to contaminated estuarine sediments. <i>Chemosphere</i> , 2014, 108, 152-158.	4.2	28
129	Far-infrared VRT spectroscopy of the water dimer: Characterization of the 20 $\hat{1}$ / <sub>4</sub> m out-of-plane librational vibration. <i>Journal of Chemical Physics</i> , 2015, 143, 154306.	1.2	28
130	Systems Biology Approach Reveals a Calcium-Dependent Mechanism for Basal Toxicity in <i>Daphnia magna</i> . <i>Environmental Science &amp; Technology</i> , 2015, 49, 11132-11140.	4.6	28
131	Using community metabolomics as a new approach to discriminate marine microbial particulate organic matter in the western English Channel. <i>Progress in Oceanography</i> , 2015, 137, 421-433.	1.5	27
132	High-resolution mass spectrometry provides novel insights into products of human metabolism of organophosphate and brominated flame retardants. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 1871-1883.	1.9	27
133	Multi-omics approaches confirm metal ions mediate the main toxicological pathways of metal-bearing nanoparticles in lung epithelial A549 cells. <i>Environmental Science: Nano</i> , 2018, 5, 1506-1517.	2.2	27
134	Pulmonary toxicity of inhaled nano-sized cerium oxide aerosols in Spragueâ€Dawley rats. <i>Nanotoxicology</i> , 2019, 13, 733-750.	1.6	27
135	Optimisation of DNA extraction from the crustacean <i>Daphnia</i> . <i>PeerJ</i> , 2016, 4, e2004.	0.9	26
136	Use of 5-azacytidine in a proof-of-concept study to evaluate the impact of pre-natal and post-natal exposures, as well as within generation persistent DNA methylation changes in <i>Daphnia</i> . <i>Ecotoxicology</i> , 2018, 27, 556-568.	1.1	26
137	Oral Estrogen Masculinizes Female Zebra Finch Song System. <i>Hormones and Behavior</i> , 2002, 41, 236-241.	1.0	25
138	Disruption of DNA Methylation via <i>S</i> -Adenosylhomocysteine Is a Key Process in High Incidence Liver Carcinogenesis in Fish. <i>Journal of Proteome Research</i> , 2013, 12, 2895-2904.	1.8	25
139	Statistical Correlations between NMR Spectroscopy and Direct Infusion FT-ICR Mass Spectrometry Aid Annotation of Unknowns in Metabolomics. <i>Analytical Chemistry</i> , 2016, 88, 2583-2589.	3.2	25
140	Metabolomic method to detect a metabolite corona on amino-functionalized polystyrene nanoparticles. <i>Nanotoxicology</i> , 2019, 13, 783-794.	1.6	24
141	Utilizing in vivo nuclear magnetic resonance spectroscopy to study sublethal stress in aquatic organisms. <i>Marine Environmental Research</i> , 2002, 54, 553-557.	1.1	23
142	Far infrared VRT spectroscopy of two water trimer isotopomers vibrationally averaged structures and rearrangement dynamics. <i>Molecular Physics</i> , 1996, 89, 1373-1396.	0.8	21
143	Cellular responses to temperature stress in steelhead trout ( <i>Onchorynchus mykiss</i> ) parr with different rearing histories. <i>Fish Physiology and Biochemistry</i> , 2006, 32, 261-273.	0.9	21
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