

Jun Kikuchi

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156
papers

9,075
citations

40
h-index

93
g-index

173
ext. papers

10,747
ext. citations

5.8
avg, IF

5.86
L-index

#	Paper	IF	Citations
156	Commensal microbe-derived butyrate induces the differentiation of colonic regulatory T cells. <i>Nature</i> , 2013 , 504, 446-50	50.4	2810
155	Bifidobacteria can protect from enteropathogenic infection through production of acetate. <i>Nature</i> , 2011 , 469, 543-7	50.4	1423
154	Comparative genome analysis of <i>Lactobacillus reuteri</i> and <i>Lactobacillus fermentum</i> reveal a genomic island for reuterin and cobalamin production. <i>DNA Research</i> , 2008 , 15, 151-61	4.5	215
153	Parkin binds the Rpn10 subunit of 26S proteasomes through its ubiquitin-like domain. <i>EMBO Reports</i> , 2003 , 4, 301-6	6.5	213
152	Dissection of genotype-phenotype associations in rice grains using metabolome quantitative trait loci analysis. <i>Plant Journal</i> , 2012 , 70, 624-36	6.9	155
151	Dual biosynthetic pathways to phytosterol via cycloartenol and lanosterol in <i>Arabidopsis</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 725-30	11.5	148
150	Spectroscopic and mutational analysis of the blue-light photoreceptor AppA: a novel photocycle involving flavin stacking with an aromatic amino acid. <i>Biochemistry</i> , 2003 , 42, 6726-34	3.2	148
149	PRIME: a Web site that assembles tools for metabolomics and transcriptomics. <i>In Silico Biology</i> , 2008 , 8, 339-45	2	141
148	Stable isotope labeling of <i>Arabidopsis thaliana</i> for an NMR-based metabolomics approach. <i>Plant and Cell Physiology</i> , 2004 , 45, 1099-104	4.9	125
147	Strengthening of the intestinal epithelial tight junction by <i>Bifidobacterium bifidum</i> . <i>Physiological Reports</i> , 2015 , 3, e12327	2.6	115
146	Recognition of guanine-guanine mismatches by the dimeric form of 2-amino-1,8-naphthyridine. <i>Journal of the American Chemical Society</i> , 2001 , 123, 12650-7	16.4	111
145	Statistical indices for simultaneous large-scale metabolite detections for a single NMR spectrum. <i>Analytical Chemistry</i> , 2010 , 82, 1653-8	7.8	108
144	Tuning water-use efficiency and drought tolerance in wheat using abscisic acid receptors. <i>Nature Plants</i> , 2019 , 5, 153-159	11.5	100
143	Probiotic <i>Bifidobacterium longum</i> alters gut luminal metabolism through modification of the gut microbial community. <i>Scientific Reports</i> , 2015 , 5, 13548	4.9	95
142	Systematic NMR analysis of stable isotope labeled metabolite mixtures in plant and animal systems: coarse grained views of metabolic pathways. <i>PLoS ONE</i> , 2008 , 3, e3805	3.7	73
141	Profiling polar and semipolar plant metabolites throughout extraction processes using a combined solution-state and high-resolution magic angle spinning NMR approach. <i>Analytical Chemistry</i> , 2010 , 82, 1643-52	7.8	69
140	Evaluation of a semipolar solvent system as a step toward heteronuclear multidimensional NMR-based metabolomics for ¹³ C-labeled bacteria, plants, and animals. <i>Analytical Chemistry</i> , 2011 , 83, 719-26	7.8	66

139	The circadian clock modulates water dynamics and aquaporin expression in Arabidopsis roots. <i>Plant and Cell Physiology</i> , 2011 , 52, 373-83	4.9	63
138	Multiple omics uncovers host-gut microbial mutualism during prebiotic fructooligosaccharide supplementation. <i>DNA Research</i> , 2014 , 21, 469-80	4.5	62
137	Towards dynamic metabolic network measurements by multi-dimensional NMR-based fluxomics. <i>Phytochemistry</i> , 2007 , 68, 2320-9	4	62
136	Application of a Deep Neural Network to Metabolomics Studies and Its Performance in Determining Important Variables. <i>Analytical Chemistry</i> , 2018 , 90, 1805-1810	7.8	61
135	Toward better annotation in plant metabolomics: isolation and structure elucidation of 36 specialized metabolites from (rice) by using MS/MS and NMR analyses. <i>Metabolomics</i> , 2014 , 10, 543-555	4.7	60
134	Meta-Analysis of Fecal Microbiota and Metabolites in Experimental Colitic Mice during the Inflammatory and Healing Phases. <i>Nutrients</i> , 2017 , 9,	6.7	59
133	Top-down phenomics of Arabidopsis thaliana: metabolic profiling by one- and two-dimensional nuclear magnetic resonance spectroscopy and transcriptome analysis of albino mutants. <i>Journal of Biological Chemistry</i> , 2007 , 282, 18532-18541	5.4	55
132	Oral Administration of Porphyromonas gingivalis Alters the Gut Microbiome and Serum Metabolome. <i>MSphere</i> , 2018 , 3,	5	55
131	Methylated Cytokinins from the Phytopathogen Rhodococcus fascians Mimic Plant Hormone Activity. <i>Plant Physiology</i> , 2015 , 169, 1118-26	6.6	52
130	Exploring the conformational space of amorphous cellulose using NMR chemical shifts. <i>Carbohydrate Polymers</i> , 2012 , 90, 1197-203	10.3	52
129	Evaluation and characterization of bacterial metabolic dynamics with a novel profiling technique, real-time metabolotyping. <i>PLoS ONE</i> , 2009 , 4, e4893	3.7	51
128	A NMR-based, non-targeted multistep metabolic profiling revealed L-rhamnitol as a metabolite that characterised apples from different geographic origins. <i>Food Chemistry</i> , 2015 , 174, 163-72	8.5	50
127	SpinCouple: Development of a Web Tool for Analyzing Metabolite Mixtures via Two-Dimensional J-Resolved NMR Database. <i>Analytical Chemistry</i> , 2016 , 88, 659-65	7.8	50
126	Redox-dependent domain rearrangement of protein disulfide isomerase coupled with exposure of its substrate-binding hydrophobic surface. <i>Journal of Molecular Biology</i> , 2010 , 396, 361-74	6.5	50
125	Correlation exploration of metabolic and genomic diversity in rice. <i>BMC Genomics</i> , 2009 , 10, 568	4.5	49
124	Comparative metabolomic and ionic approach for abundant fishes in estuarine environments of Japan. <i>Scientific Reports</i> , 2014 , 4, 7005	4.9	46
123	Metabolomic profiling of ¹³ C-labelled cellulose digestion in a lower termite: insights into gut symbiont function. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014 , 281, 20140990	4.4	46
122	Organosolv pretreatment of sorghum bagasse using a low concentration of hydrophobic solvents such as 1-butanol or 1-pentanol. <i>Biotechnology for Biofuels</i> , 2016 , 9, 27	7.8	45

121	Dynamic omics approach identifies nutrition-mediated microbial interactions. <i>Journal of Proteome Research</i> , 2011 , 10, 824-36	5.6	43
120	Integrated analysis of seaweed components during seasonal fluctuation by data mining across heterogeneous chemical measurements with network visualization. <i>Analytical Chemistry</i> , 2014 , 86, 10987-105	7.8	41
119	Comprehensive signal assignment of ¹³ C-labeled lignocellulose using multidimensional solution NMR and ¹³ C chemical shift comparison with solid-state NMR. <i>Analytical Chemistry</i> , 2013 , 85, 8857-65	7.8	41
118	Practical aspects of uniform stable isotope labeling of higher plants for heteronuclear NMR-based metabolomics. <i>Methods in Molecular Biology</i> , 2007 , 358, 273-86	1.4	41
117	Effect of dielectric properties of solvents on the quality factor for a beyond 900 MHz cryogenic probe model. <i>Journal of Magnetic Resonance</i> , 2005 , 174, 34-42	3	41
116	Identification of Reliable Components in Multivariate Curve Resolution-Alternating Least Squares (MCR-ALS): a Data-Driven Approach across Metabolic Processes. <i>Scientific Reports</i> , 2015 , 5, 15710	4.9	40
115	Introduction of chemically labile substructures into Arabidopsis lignin through the use of LigD, the C ₆ H ₅ dehydrogenase from <i>Sphingobium</i> sp. strain SYK-6. <i>Plant Biotechnology Journal</i> , 2015 , 13, 821-32	11.6	40
114	Noninvasive analysis of metabolic changes following nutrient input into diverse fish species, as investigated by metabolic and microbial profiling approaches. <i>PeerJ</i> , 2014 , 2, e550	3.1	39
113	Chemical profiling of complex biochemical mixtures from various seaweeds. <i>Polymer Journal</i> , 2012 , 44, 888-894	2.7	37
112	New monitoring approach for metabolic dynamics in microbial ecosystems using stable-isotope-labeling technologies. <i>Journal of Bioscience and Bioengineering</i> , 2010 , 110, 87-93	3.3	37
111	Solution structure of the DFF-C domain of DFF45/ICAD. A structural basis for the regulation of apoptotic DNA fragmentation. <i>Journal of Molecular Biology</i> , 2002 , 321, 317-27	6.5	37
110	Characterization of lignocellulose of <i>Erianthus arundinaceus</i> in relation to enzymatic saccharification efficiency. <i>Plant Biotechnology</i> , 2013 , 30, 25-35	1.3	35
109	Multidimensional High-Resolution Magic Angle Spinning and Solution-State NMR Characterization of (¹³ C)-labeled Plant Metabolites and Lignocellulose. <i>Scientific Reports</i> , 2015 , 5, 11848	4.9	33
108	Pretreatment and integrated analysis of spectral data reveal seaweed similarities based on chemical diversity. <i>Analytical Chemistry</i> , 2015 , 87, 2819-26	7.8	33
107	Metabolic sequences of anaerobic fermentation on glucose-based feeding substrates based on correlation analyses of microbial and metabolite profiling. <i>Journal of Proteome Research</i> , 2012 , 11, 5602-10	5.6	33
106	Statistical approach for solid-state NMR spectra of cellulose derived from a series of variable parameters. <i>Polymer Journal</i> , 2012 , 44, 895-900	2.7	33
105	Environmental metabolomics with data science for investigating ecosystem homeostasis. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2018 , 104, 56-88	10.4	33
104	Solid-, solution-, and gas-state NMR monitoring of ¹³ C-cellulose degradation in an anaerobic microbial ecosystem. <i>Molecules</i> , 2013 , 18, 9021-33	4.8	32

103	Profiling contents of water-soluble metabolites and mineral nutrients to evaluate the effects of pesticides and organic and chemical fertilizers on tomato fruit quality. <i>Food Chemistry</i> , 2015 , 169, 387-95	8.5	31
102	Solubilization mechanism and characterization of the structural change of bacterial cellulose in regenerated states through ionic liquid treatment. <i>Biomacromolecules</i> , 2012 , 13, 1323-30	6.9	31
101	ECOMICS: a web-based toolkit for investigating the biomolecular web in ecosystems using a trans-omics approach. <i>PLoS ONE</i> , 2012 , 7, e30263	3.7	31
100	Selective Signal Detection in Solid-State NMR Using Rotor-Synchronized Dipolar Dephasing for the Analysis of Hemicellulose in Lignocellulosic Biomass. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 2279-2283	6.4	31
99	Application of ensemble deep neural network to metabolomics studies. <i>Analytica Chimica Acta</i> , 2018 , 1037, 230-236	6.6	29
98	In vitro evaluation method for screening of candidate prebiotic foods. <i>Food Chemistry</i> , 2014 , 152, 251-608	5	29
97	Improvement of physical, chemical, and biological properties of aridisol from Botswana by the incorporation of torrefied biomass. <i>Scientific Reports</i> , 2016 , 6, 28011	4.9	29
96	Multi-omics analysis on an agroecosystem reveals the significant role of organic nitrogen to increase agricultural crop yield. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 14552-14560	11.5	28
95	Application of 1H NMR chemical shifts to measure the quality of protein structures. <i>Journal of Molecular Biology</i> , 1995 , 247, 541-546	6.5	28
94	Differences in Cellulosic Supramolecular Structure of Compositionally Similar Rice Straw Affect Biomass Metabolism by Paddy Soil Microbiota. <i>PLoS ONE</i> , 2013 , 8, e66919	3.7	28
93	Comparative analysis of chemical and microbial profiles in estuarine sediments sampled from Kanto and Tohoku regions in Japan. <i>Analytical Chemistry</i> , 2014 , 86, 5425-32	7.8	27
92	Cholesterol Doping Induced Enhanced Stability of Bicelles. <i>Langmuir</i> , 2003 , 19, 9841-9844	4	27
91	Human metabolic, mineral, and microbiota fluctuations across daily nutritional intake visualized by a data-driven approach. <i>Journal of Proteome Research</i> , 2015 , 14, 1526-34	5.6	26
90	Rapid discrimination of strain-dependent fermentation characteristics among <i>Lactobacillus</i> strains by NMR-based metabolomics of fermented vegetable juice. <i>PLoS ONE</i> , 2017 , 12, e0182229	3.7	24
89	Application of kernel principal component analysis and computational machine learning to exploration of metabolites strongly associated with diet. <i>Scientific Reports</i> , 2018 , 8, 3426	4.9	23
88	Intestinal microbiota composition is altered according to nutritional biorhythms in the leopard coral grouper (<i>Plectropomus leopardus</i>). <i>PLoS ONE</i> , 2018 , 13, e0197256	3.7	23
87	Chemical profiling of <i>Jatropha</i> tissues under different torrefaction conditions: application to biomass waste recovery. <i>PLoS ONE</i> , 2014 , 9, e106893	3.7	23
86	Application of Two-Dimensional Nuclear Magnetic Resonance for Signal Enhancement by Spectral Integration Using a Large Data Set of Metabolic Mixtures. <i>Analytical Chemistry</i> , 2016 , 88, 6130-4	7.8	22

85	Structure and Metabolic-Flow Analysis of Molecular Complexity in a (13) C-Labeled Tree by 2D and 3D NMR. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 6000-3	16.4	22
84	SENSI: signal enhancement by spectral integration for the analysis of metabolic mixtures. <i>Chemical Communications</i> , 2016 , 52, 2964-7	5.8	21
83	Biogeochemical typing of paddy field by a data-driven approach revealing sub-systems within a complex environment--a pipeline to filtrate, organize and frame massive dataset from multi-omics analyses. <i>PLoS ONE</i> , 2014 , 9, e110723	3.7	21
82	Changes in Lignin and Polysaccharide Components in 13 Cultivars of Rice Straw following Dilute Acid Pretreatment as Studied by Solution-State 2D 1H-13C NMR. <i>PLoS ONE</i> , 2015 , 10, e0128417	3.7	21
81	Precipitate obtained following membrane separation of hydrothermally pretreated rice straw liquid revealed by 2D NMR to have high lignin content. <i>Biotechnology for Biofuels</i> , 2015 , 8, 88	7.8	20
80	Profiling planktonic biomass using element-specific, multicomponent nuclear magnetic resonance spectroscopy. <i>Environmental Science & Technology</i> , 2015 , 49, 7056-62	10.3	20
79	Toward the complete utilization of rice straw: Methane fermentation and lignin recovery by a combinational process involving mechanical milling, supporting material and nanofiltration. <i>Bioresource Technology</i> , 2016 , 216, 830-7	11	20
78	Application of Market Basket Analysis for the Visualization of Transaction Data Based on Human Lifestyle and Spectroscopic Measurements. <i>Analytical Chemistry</i> , 2016 , 88, 2714-9	7.8	20
77	TBL10 is required for O-acetylation of pectic rhamnogalacturonan-I in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2018 , 96, 772-785	6.9	20
76	Fragment Assembly Approach Based on Graph/Network Theory with Quantum Chemistry Verifications for Assigning Multidimensional NMR Signals in Metabolite Mixtures. <i>ACS Chemical Biology</i> , 2016 , 11, 1030-8	4.9	19
75	Cellulose digestion and metabolism induced biocatalytic transitions in anaerobic microbial ecosystems. <i>Metabolites</i> , 2013 , 4, 36-52	5.6	19
74	Protonema of the moss <i>Funaria hygrometrica</i> can function as a lead (Pb) adsorbent. <i>PLoS ONE</i> , 2017 , 12, e0189726	3.7	18
73	Systemic Homeostasis in Metabolome, Ionome, and Microbiome of Wild Yellowfin Goby in Estuarine Ecosystem. <i>Scientific Reports</i> , 2018 , 8, 3478	4.9	17
72	Trans-omics approaches used to characterise fish nutritional biorhythms in leopard coral grouper (<i>Plectropomus leopardus</i>). <i>Scientific Reports</i> , 2017 , 7, 9372	4.9	17
71	A survey of metabolic changes in potato leaves by NMR-based metabolic profiling in relation to resistance to late blight disease under field conditions. <i>Magnetic Resonance in Chemistry</i> , 2017 , 55, 120-127	12.7	17
70	A unique unnatural base pair between a C analogue, pseudoisocytosine, and an A analogue, 6-methoxypurine, in replication. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2002 , 12, 1391-3	2.9	17
69	A light-harvesting antenna protein retains its folded conformation in the absence of protein-lipid and protein-pigment interactions. <i>Biopolymers</i> , 1999 , 49, 361-72	2.2	17
68	NMR-Based Metabolic Profiling of Field-Grown Leaves from Sugar Beet Plants Harboring Different Levels of Resistance to <i>Cercospora</i> Leaf Spot Disease. <i>Metabolites</i> , 2017 , 7,	5.6	16

67	Hydrophilic Double-Network Polymers that Sustain High Mechanical Modulus under 80% Humidity.. <i>ACS Macro Letters</i> , 2012 , 1, 432-436	6.6	16
66	Present status of 920 MHz high-resolution NMR spectrometers. <i>IEEE Transactions on Applied Superconductivity</i> , 2004 , 14, 1608-1612	1.8	16
65	Artificial Autopolyploidization Modifies the Tricarboxylic Acid Cycle and GABA Shunt in Arabidopsis thaliana Col-0. <i>Scientific Reports</i> , 2016 , 6, 26515	4.9	16
64	NMR window of molecular complexity showing homeostasis in superorganisms. <i>Analyst, The</i> , 2017 , 142, 4161-4172	5	15
63	Multi-Spectroscopic Analysis of Seed Quality and ¹³ C-Stable-Isotope Monitoring in Initial Growth Metabolism of <i>Jatropha curcas</i> L. <i>Metabolites</i> , 2014 , 4, 1018-33	5.6	15
62	Spectroscopic investigation of tissue-specific biomass profiling for <i>Jatropha curcas</i> L.. <i>Plant Biotechnology</i> , 2012 , 29, 163-170	1.3	15
61	Metabolic movement upon abscisic acid and salicylic acid combined treatments. <i>Plant Biotechnology</i> , 2009 , 26, 551-560	1.3	15
60	Exploratory machine-learned theoretical chemical shifts can closely predict metabolic mixture signals. <i>Chemical Science</i> , 2018 , 9, 8213-8220	9.4	15
59	InterSpin: Integrated Supportive Webtools for Low- and High-Field NMR Analyses Toward Molecular Complexity. <i>ACS Omega</i> , 2019 , 4, 3361-3369	3.9	14
58	Metabolic dynamics analysis by massive data integration: application to tsunami-affected field soils in Japan. <i>ACS Chemical Biology</i> , 2015 , 10, 1908-15	4.9	14
57	Solution structure determination of the two DNA-binding domains in the <i>Schizosaccharomyces pombe</i> Abp1 protein by a combination of dipolar coupling and diffusion anisotropy restraints. <i>Journal of Biomolecular NMR</i> , 2002 , 22, 333-47	3	14
56	Transcriptome Analysis Uncovers a Growth-Promoting Activity of Orosomucoid-1 on Hepatocytes. <i>EBioMedicine</i> , 2017 , 24, 257-266	8.8	13
55	Modification of plant cell wall structure accompanied by enhancement of saccharification efficiency using a chemical, lasalocid sodium. <i>Scientific Reports</i> , 2016 , 6, 34602	4.9	13
54	Spectroscopic investigation of tertiary fold of staphylococcal protein A to explore its engineering application. <i>Biomaterials</i> , 1999 , 20, 647-54	15.6	13
53	Visualization of Microfloral Metabolism for Marine Waste Recycling. <i>Metabolites</i> , 2016 , 6,	5.6	13
52	Structure and dynamics of photosynthetic membrane-bound proteins in <i>Rhodobacter Sphaeroides</i> , studied with solid-state NMR spectroscopy. <i>Photosynthesis Research</i> , 2000 , 63, 259-67	3.7	12
51	Use of ¹³ C conformation-dependent chemical shifts to elucidate the local structure of a large protein with homologous domains in solution and solid state. <i>Journal of Proteomics</i> , 1999 , 38, 203-8		12
50	NMR-TS: de novo molecule identification from NMR spectra. <i>Science and Technology of Advanced Materials</i> , 2020 , 21, 552-561	7.1	12

49	Dietary intervention of mice using an improved Multiple Artificial-gravity Research System (MARS) under artificial 1 . <i>Npj Microgravity</i> , 2019 , 5, 16	5.3	11
48	Regional feature extraction of various fishes based on chemical and microbial variable selection using machine learning. <i>Analytical Methods</i> , 2018 , 10, 2160-2168	3.2	11
47	The Effect of Molecular Conformation on the Accuracy of Theoretical (1)H and (13)C Chemical Shifts Calculated by Ab Initio Methods for Metabolic Mixture Analysis. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 3479-87	3.4	11
46	Exploring the Impact of Food on the Gut Ecosystem Based on the Combination of Machine Learning and Network Visualization. <i>Nutrients</i> , 2017 , 9,	6.7	11
45	An advantage for use of isotope labeling and NMR chemical shifts to analyze the structure of four homologous IgG-binding domains of staphylococcal protein A. <i>Journal of Proteomics</i> , 2000 , 42, 35-47		11
44	Mobile edge computing based VM migration for QoS improvement 2017 ,		10
43	Screening of fungi for decomposition of lignin-derived products from Japanese cedar. <i>Journal of Bioscience and Bioengineering</i> , 2018 , 126, 573-579	3.3	10
42	Development of KaPPA-View4 for omics studies on <i>Jatropha</i> and a database system KaPPA-Loader for construction of local omics databases. <i>Plant Biotechnology</i> , 2012 , 29, 131-135	1.3	9
41	Concentration of metabolites from low-density planktonic communities for environmental metabolomics using nuclear magnetic resonance spectroscopy. <i>Journal of Visualized Experiments</i> , 2012 , e3163	1.6	9
40	Impact of abiotic stress on the regulation of cell wall biosynthesis in. <i>Plant Biotechnology</i> , 2020 , 37, 273-283		9
39	Molecular diet analysis of Anguilliformes leptocephalus larvae collected in the western North Pacific. <i>PLoS ONE</i> , 2019 , 14, e0225610	3.7	9
38	Cannibalism Affects Core Metabolic Processes in <i>Helicoverpa armigera</i> Larvae-A 2D NMR Metabolomics Study. <i>International Journal of Molecular Sciences</i> , 2016 , 17,	6.3	8
37	FoodPro: A Web-Based Tool for Evaluating Covariance and Correlation NMR Spectra Associated with Food Processes. <i>Metabolites</i> , 2016 , 6,	5.6	8
36	Visualizing microbial dechlorination processes in underground ecosystem by statistical correlation and network analysis approach. <i>Journal of Bioscience and Bioengineering</i> , 2014 , 117, 305-9	3.3	7
35	Deep phenotyping of myalgic encephalomyelitis/chronic fatigue syndrome in Japanese population. <i>Scientific Reports</i> , 2020 , 10, 19933	4.9	7
34	Large-Scale Evaluation of Major Soluble Macromolecular Components of Fish Muscle from a Conventional H-NMR Spectral Database. <i>Molecules</i> , 2020 , 25,	4.8	5
33	Signal Deconvolution and Noise Factor Analysis Based on a Combination of Time-Frequency Analysis and Probabilistic Sparse Matrix Factorization. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	5
32	Bacterial Substrate Transformation Tracked by Stable-Isotope-Guided NMR Metabolomics: Application in a Natural Aquatic Microbial Community. <i>Metabolites</i> , 2017 , 7,	5.6	5

31	Thermal Analyses of Phospholipid Mixtures by Differential Scanning Calorimetry and Effect of Doping with a Bolaform Amphiphile. <i>Bulletin of the Chemical Society of Japan</i> , 2007 , 80, 1208-1216	5.1	5
30	Oral Pathobiont-Induced Changes in Gut Microbiota Aggravate the Pathology of Nonalcoholic Fatty Liver Disease in Mice. <i>Frontiers in Immunology</i> , 2021 , 12, 766170	8.4	5
29	Decomposition Factor Analysis Based on Virtual Experiments throughout Bayesian Optimization for Compost-Degradable Polymers. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 2820	2.6	5
28	Profiling physicochemical and planktonic features from discretely/continuously sampled surface water. <i>Science of the Total Environment</i> , 2018 , 636, 12-19	10.2	4
27	4.5 K Cooling System for a Cryogenically Cooled Probe for a 920 MHz NMR. <i>AIP Conference Proceedings</i> , 2004 ,	0	4
26	Improved Prediction of Carbonless NMR Spectra by the Machine Learning of Theoretical and Fragment Descriptors for Environmental Mixture Analysis. <i>Analytical Chemistry</i> , 2021 , 93, 6901-6906	7.8	4
25	Functional Analysis of Poplar SOMBRERO-type NAC Transcription Factors Yields a Strategy to Modify Woody Cell Wall Properties. <i>Plant and Cell Physiology</i> , 2021 ,	4.9	4
24	Signal Deconvolution and Generative Topographic Mapping Regression for Solid-State NMR of Multi-Component Materials. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	4
23	Fish ecotyping based on machine learning and inferred network analysis of chemical and physical properties. <i>Scientific Reports</i> , 2021 , 11, 3766	4.9	4
22	Hetero-nuclear NMR-based Metabolomics 2006 , 93-101		4
21	Solubility Prediction from Molecular Properties and Analytical Data Using an In-phase Deep Neural Network (Ip-DNN). <i>ACS Omega</i> , 2021 , 6, 14278-14287	3.9	3
20	The exposome paradigm to predict environmental health in terms of systemic homeostasis and resource balance based on NMR data science.. <i>RSC Advances</i> , 2021 , 11, 30426-30447	3.7	3
19	Dynamics induced by environmental stochasticity in a phytoplankton-zooplankton system with toxic phytoplankton. <i>Mathematical Biosciences and Engineering</i> , 2021 , 18, 4101-4126	2.1	3
18	Differences in glucose yield of residues from among varieties of rice, wheat, and sorghum after dilute acid pretreatment. <i>Bioscience, Biotechnology and Biochemistry</i> , 2017 , 81, 1650-1656	2.1	2
17	Spatial molecular-dynamically ordered NMR spectroscopy of intact bodies and heterogeneous systems. <i>Communications Chemistry</i> , 2020 , 3,	6.3	2
16	Structure and Metabolic-Flow Analysis of Molecular Complexity in a ¹³ C-Labeled Tree by 2D and 3D NMR. <i>Angewandte Chemie</i> , 2016 , 128, 6104-6107	3.6	2
15	Structure Analysis of Proteins by a Combination of Distance Geometry Calculation and ¹ H NMR Chemical Shift Calculation.. <i>Kobunshi Ronbunshu</i> , 1994 , 51, 409-413	0	2
14	Conformations of Synthetic Model Peptides for Plasmodium falciparum Circumsporozoite Protein in Me ₂ SO by ¹ H NMR and Distance Geometry Calculations. <i>Polymer Journal</i> , 1995 , 27, 347-360	2.7	2

13	CHAPTER 17: Polysaccharides as Major Carbon Sources in Environmental Biodiversity. <i>New Developments in NMR</i> , 369-395	0.9	2
12	18S rRNA gene sequences of leptocephalus gut contents, particulate organic matter, and biological oceanographic conditions in the western North Pacific. <i>Scientific Reports</i> , 2021 , 11, 5488	4.9	2
11	Relaxometric learning: a pattern recognition method for T relaxation curves based on machine learning supported by an analytical framework. <i>BMC Chemistry</i> , 2021 , 15, 13	3.7	2
10	Enhancement of Secondary Cell Wall Formation in Poplar Xylem Using a Self-Reinforced System of Secondary Cell Wall-Related Transcription Factors.. <i>Frontiers in Plant Science</i> , 2022 , 13, 819360	6.2	2
9	[Dedicated to Prof. T. Okada and Prof. T. Nishioka: data science in chemistry] Visualizing Individual and Region-specific Microbial Metabolite Relations by Important Variable Selection Using Machine Learning Approaches. <i>Journal of Computer Aided Chemistry</i> , 2017 , 18, 31-41	0.2	1
8	Structural and functional characterization of a mutant of <i>Pseudocerasastes persicus</i> natriuretic peptide. <i>Protein and Peptide Letters</i> , 2006 , 13, 295-300	1.9	1
7	NMR Analysis of Molecular Complexity 2018 , 461-489		1
6	A potential network structure of symbiotic bacteria involved in carbon and nitrogen metabolism of wood-utilizing insect larvae.. <i>Science of the Total Environment</i> , 2022 , 155520	10.2	1
5	Chemometric Analysis of NMR Spectra and Machine Learning to Investigate Membrane Fouling.. <i>ACS Omega</i> , 2022 , 7, 12654-12660	3.9	0
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