

Jun Kikuchi

List of Publications by Year in descending order

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164
papers

11,908
citations

66343

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29157

104
g-index

173
all docs

173
docs citations

173
times ranked

16300
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Commensal microbe-derived butyrate induces the differentiation of colonic regulatory T cells. <i>Nature</i> , 2013, 504, 446-450. | 27.8 | 3,901 |
| 2 | Bifidobacteria can protect from enteropathogenic infection through production of acetate. <i>Nature</i> , 2011, 469, 543-547. | 27.8 | 1,836 |
| 3 | 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, 151-161. | 3.4 | 255 |
| 4 | Parkin binds the Rpn10 subunit of 26S proteasomes through its ubiquitin-like domain. <i>EMBO Reports</i> , 2003, 4, 301-306. | 4.5 | 233 |
| 5 | Tuning water-use efficiency and drought tolerance in wheat using abscisic acid receptors. <i>Nature Plants</i> , 2019, 5, 153-159. | 9.3 | 203 |
| 6 | 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, 725-730. | 7.1 | 174 |
| 7 | Dissection of genotype-phenotype associations in rice grains using metabolome quantitative trait loci analysis. <i>Plant Journal</i> , 2012, 70, 624-636. | 5.7 | 173 |
| 8 | Strengthening of the intestinal epithelial tight junction by <i>Bifidobacterium bifidum</i> . <i>Physiological Reports</i> , 2015, 3, e12327. | 1.7 | 167 |
| 9 | 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, 6726-6734. | 2.5 | 155 |
| 10 | PRIME: a Web site that assembles tools for metabolomics and transcriptomics. <i>In Silico Biology</i> , 2008, 8, 339-45. | 0.9 | 149 |
| 11 | Stable Isotope Labeling of <i>Arabidopsis thaliana</i> for an NMR-Based Metabolomics Approach. <i>Plant and Cell Physiology</i> , 2004, 45, 1099-1104. | 3.1 | 145 |
| 12 | Oral Administration of <i>Porphyromonas gingivalis</i> Alters the Gut Microbiome and Serum Metabolome. <i>MSphere</i> , 2018, 3, . | 2.9 | 134 |
| 13 | Probiotic <i>Bifidobacterium longum</i> alters gut luminal metabolism through modification of the gut microbial community. <i>Scientific Reports</i> , 2015, 5, 13548. | 3.3 | 126 |
| 14 | Statistical Indices for Simultaneous Large-Scale Metabolite Detections for a Single NMR Spectrum. <i>Analytical Chemistry</i> , 2010, 82, 1653-1658. | 6.5 | 121 |
| 15 | 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, 12650-12657. | 13.7 | 120 |
| 16 | Multiple Omics Uncover Host-Gut Microbial Mutualism During Prebiotic Fructooligosaccharide Supplementation. <i>DNA Research</i> , 2014, 21, 469-480. | 3.4 | 101 |
| 17 | Application of a Deep Neural Network to Metabolomics Studies and Its Performance in Determining Important Variables. <i>Analytical Chemistry</i> , 2018, 90, 1805-1810. | 6.5 | 101 |
| 18 | Meta-Analysis of Fecal Microbiota and Metabolites in Experimental Colitic Mice during the Inflammatory and Healing Phases. <i>Nutrients</i> , 2017, 9, 1329. | 4.1 | 100 |

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|----|---|------|-----------|
| 19 | 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. | 2.5 | 78 |
| 20 | 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. | 7.1 | 77 |
| 21 | Toward better annotation in plant metabolomics: isolation and structure elucidation of 36 specialized metabolites from <i>Oryza sativa</i> (rice) by using MS/MS and NMR analyses. <i>Metabolomics</i> , 2014, 10, 543-555. | 3.0 | 76 |
| 22 | Methylated Cytokinins from the Phytopathogen <i>Rhodococcus fascians</i> Mimic Plant Hormone Activity. <i>Plant Physiology</i> , 2015, 169, 1118-1126. | 4.8 | 75 |
| 23 | 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, 1643-1652. | 6.5 | 72 |
| 24 | 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, 719-726. | 6.5 | 72 |
| 25 | The Circadian Clock Modulates Water Dynamics and Aquaporin Expression in <i>Arabidopsis</i> Roots. <i>Plant and Cell Physiology</i> , 2011, 52, 373-383. | 3.1 | 70 |
| 26 | 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. | 6.2 | 68 |
| 27 | Towards dynamic metabolic network measurements by multi-dimensional NMR-based fluxomics. <i>Phytochemistry</i> , 2007, 68, 2320-2329. | 2.9 | 64 |
| 28 | Exploring the conformational space of amorphous cellulose using NMR chemical shifts. <i>Carbohydrate Polymers</i> , 2012, 90, 1197-1203. | 10.2 | 61 |
| 29 | SpinCouple: Development of a Web Tool for Analyzing Metabolite Mixtures via Two-Dimensional <i>i</i> -Resolved NMR Database. <i>Analytical Chemistry</i> , 2016, 88, 659-665. | 6.5 | 61 |
| 30 | Top-down Phenomics of <i>Arabidopsis thaliana</i> . <i>Journal of Biological Chemistry</i> , 2007, 282, 18532-18541. | 3.4 | 58 |
| 31 | 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, 361-374. | 4.2 | 58 |
| 32 | 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. | 2.6 | 58 |
| 33 | Evaluation and Characterization of Bacterial Metabolic Dynamics with a Novel Profiling Technique, Real-Time Metabolotyping. <i>PLoS ONE</i> , 2009, 4, e4893. | 2.5 | 56 |
| 34 | 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, 163-172. | 8.2 | 54 |
| 35 | Comparative metabolomic and ionic approach for abundant fishes in estuarine environments of Japan. <i>Scientific Reports</i> , 2014, 4, 7005. | 3.3 | 53 |
| 36 | Correlation exploration of metabolic and genomic diversity in rice. <i>BMC Genomics</i> , 2009, 10, 568. | 2.8 | 50 |

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|----|---|-----|-----------|
| 37 | 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, 8857-8865. | 6.5 | 48 |
| 38 | Integrated Analysis of Seaweed Components during Seasonal Fluctuation by Data Mining Across Heterogeneous Chemical Measurements with Network Visualization. <i>Analytical Chemistry</i> , 2014, 86, 1098-1105. | 6.5 | 48 |
| 39 | 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. | 3.3 | 48 |
| 40 | 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, 387-395. | 8.2 | 46 |
| 41 | Effect of dielectric properties of solvents on the quality factor for a beyond 900MHz cryogenic probe model. <i>Journal of Magnetic Resonance</i> , 2005, 174, 34-42. | 2.1 | 45 |
| 42 | Practical Aspects of Uniform Stable Isotope Labeling of Higher Plants for Heteronuclear NMR-Based Metabolomics. <i>Methods in Molecular Biology</i> , 2007, 358, 273-286. | 0.9 | 45 |
| 43 | Dynamic Omics Approach Identifies Nutrition-Mediated Microbial Interactions. <i>Journal of Proteome Research</i> , 2011, 10, 824-836. | 3.7 | 45 |
| 44 | Introduction of chemically labile substructures into <i>Arabidopsis</i> lignin through the use of LigD, the Cl ⁻ â€hydrogenase from <i>Sphingobium</i> sp. strain <i>SYK</i> . <i>Plant Biotechnology Journal</i> , 2015, 13, 821-832. | 8.3 | 45 |
| 45 | Improvement of physical, chemical and biological properties of aridisol from Botswana by the incorporation of torrefied biomass. <i>Scientific Reports</i> , 2016, 6, 28011. | 3.3 | 44 |
| 46 | Application of ensemble deep neural network to metabolomics studies. <i>Analytica Chimica Acta</i> , 2018, 1037, 230-236. | 5.4 | 44 |
| 47 | 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. | 2.5 | 44 |
| 48 | Environmental metabolomics with data science for investigating ecosystem homeostasis. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2018, 104, 56-88. | 7.5 | 43 |
| 49 | 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. | 3.3 | 42 |
| 50 | 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. | 2.0 | 42 |
| 51 | 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. | 2.5 | 41 |
| 52 | 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, 317-327. | 4.2 | 40 |
| 53 | Characterization of lignocellulose of <i>Erianthus arundinaceus</i> in relation to enzymatic saccharification efficiency. <i>Plant Biotechnology</i> , 2013, 30, 25-35. | 1.0 | 40 |
| 54 | Chemical profiling of complex biochemical mixtures from various seaweeds. <i>Polymer Journal</i> , 2012, 44, 888-894. | 2.7 | 39 |

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|----|---|-----|-----------|
| 55 | Comparative Analysis of Chemical and Microbial Profiles in Estuarine Sediments Sampled from Kanto and Tohoku Regions in Japan. <i>Analytical Chemistry</i> , 2014, 86, 5425-5432. | 6.5 | 39 |
| 56 | Pretreatment and Integrated Analysis of Spectral Data Reveal Seaweed Similarities Based on Chemical Diversity. <i>Analytical Chemistry</i> , 2015, 87, 2819-2826. | 6.5 | 39 |
| 57 | 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. | 2.2 | 38 |
| 58 | U6acetylation of pectic rhamnogalacturonan in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2018, 96, 772-785. | 5.7 | 37 |
| 59 | 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, 5602-5610. | 3.7 | 36 |
| 60 | 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 | 35 |
| 61 | Solubilization Mechanism and Characterization of the Structural Change of Bacterial Cellulose in Regenerated States through Ionic Liquid Treatment. <i>Biomacromolecules</i> , 2012, 13, 1323-1330. | 5.4 | 34 |
| 62 | Solid-, Solution-, and Gas-state NMR Monitoring of 13C-Cellulose Degradation in an Anaerobic Microbial Ecosystem. <i>Molecules</i> , 2013, 18, 9021-9033. | 3.8 | 34 |
| 63 | In vitro evaluation method for screening of candidate prebiotic foods. <i>Food Chemistry</i> , 2014, 152, 251-260. | 8.2 | 34 |
| 64 | 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. | 3.3 | 33 |
| 65 | Cholesterol Doping Induced Enhanced Stability of Bicelles. <i>Langmuir</i> , 2003, 19, 9841-9844. | 3.5 | 32 |
| 66 | 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. | 4.8 | 32 |
| 67 | ECOMICS: A Web-Based Toolkit for Investigating the Biomolecular Web in Ecosystems Using a Trans-omics Approach. <i>PLoS ONE</i> , 2012, 7, e30263. | 2.5 | 31 |
| 68 | 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. | 4.6 | 31 |
| 69 | Application of 1H NMR chemical shifts to measure the quality of protein structures. <i>Journal of Molecular Biology</i> , 1995, 247, 541-546. | 4.2 | 30 |
| 70 | Differences in Cellulosic Supramolecular Structure of Compositionally Similar Rice Straw Affect Biomass Metabolism by Paddy Soil Microbiota. <i>PLoS ONE</i> , 2013, 8, e66919. | 2.5 | 30 |
| 71 | Human Metabolic, Mineral, and Microbiota Fluctuations Across Daily Nutritional Intake Visualized by a Data-Driven Approach. <i>Journal of Proteome Research</i> , 2015, 14, 1526-1534. | 3.7 | 28 |
| 72 | Application of Market Basket Analysis for the Visualization of Transaction Data Based on Human Lifestyle and Spectroscopic Measurements. <i>Analytical Chemistry</i> , 2016, 88, 2714-2719. | 6.5 | 28 |

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|----|---|------|-----------|
| 73 | 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, 4. | 2.9 | 28 |
| 74 | Impact of abiotic stress on the regulation of cell wall biosynthesis in <i>Populus trichocarpa</i> . <i>Plant Biotechnology</i> , 2020, 37, 273-283. | 1.0 | 27 |
| 75 | Changes in Lignin and Polysaccharide Components in 13 Cultivars of Rice Straw following Dilute Acid Pretreatment as Studied by Solution-State 2D ¹ H- ¹³ C NMR. <i>PLoS ONE</i> , 2015, 10, e0128417. | 2.5 | 26 |
| 76 | Protonema of the moss <i>Funaria hygrometrica</i> can function as a lead (Pb) adsorbent. <i>PLoS ONE</i> , 2017, 12, e0189726. | 2.5 | 25 |
| 77 | 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, 6000-6003. | 13.8 | 24 |
| 78 | Artificial Autopolyploidization Modifies the Tricarboxylic Acid Cycle and GABA Shunt in <i>Arabidopsis thaliana</i> Col-0. <i>Scientific Reports</i> , 2016, 6, 26515. | 3.3 | 24 |
| 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, 830-837. | 9.6 | 24 |
| 80 | Transcriptome Analysis Uncovers a Growth-Promoting Activity of Orosomucoid-1 on Hepatocytes. <i>EBioMedicine</i> , 2017, 24, 257-266. | 6.1 | 24 |
| 81 | Trans-omics approaches used to characterise fish nutritional biorhythms in leopard coral grouper (<i>Plectropomus leopardus</i>). <i>Scientific Reports</i> , 2017, 7, 9372. | 3.3 | 24 |
| 82 | 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, 6130-6134. | 6.5 | 23 |
| 83 | Systemic Homeostasis in Metabolome, Ionome, and Microbiome of Wild Yellowfin Goby in Estuarine Ecosystem. <i>Scientific Reports</i> , 2018, 8, 3478. | 3.3 | 23 |
| 84 | NMR-TS: de novo molecule identification from NMR spectra. <i>Science and Technology of Advanced Materials</i> , 2020, 21, 552-561. | 6.1 | 23 |
| 85 | Chemical Profiling of <i>Jatropha</i> Tissues under Different Torrefaction Conditions: Application to Biomass Waste Recovery. <i>PLoS ONE</i> , 2014, 9, e106893. | 2.5 | 23 |
| 86 | 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. | 2.5 | 22 |
| 87 | 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. | 1.9 | 22 |
| 88 | Cellulose Digestion and Metabolism Induced Biocatalytic Transitions in Anaerobic Microbial Ecosystems. <i>Metabolites</i> , 2014, 4, 36-52. | 2.9 | 21 |
| 89 | Profiling Planktonic Biomass Using Element-Specific, Multicomponent Nuclear Magnetic Resonance Spectroscopy. <i>Environmental Science & Technology</i> , 2015, 49, 7056-7062. | 10.0 | 21 |
| 90 | 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, 1030-1038. | 3.4 | 21 |

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| 91 | SENSI: signal enhancement by spectral integration for the analysis of metabolic mixtures. <i>Chemical Communications</i> , 2016, 52, 2964-2967. | 4.1 | 21 |
| 92 | Hydrophilic Double-Network Polymers that Sustain High Mechanical Modulus under 80% Humidity. <i>ACS Macro Letters</i> , 2012, 1, 432-436. | 4.8 | 20 |
| 93 | 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, 1018-1033. | 2.9 | 20 |
| 94 | 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. | 6.2 | 20 |
| 95 | NMR window of molecular complexity showing homeostasis in superorganisms. <i>Analyst</i> , 2017, 142, 4161-4172. | 3.5 | 20 |
| 96 | Exploratory machine-learned theoretical chemical shifts can closely predict metabolic mixture signals. <i>Chemical Science</i> , 2018, 9, 8213-8220. | 7.4 | 20 |
| 97 | Deep phenotyping of myalgic encephalomyelitis/chronic fatigue syndrome in Japanese population. <i>Scientific Reports</i> , 2020, 10, 19933. | 3.3 | 20 |
| 98 | 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. | 3.5 | 20 |
| 99 | InterSpin: Integrated Supportive Webtools for Low- and High-Field NMR Analyses Toward Molecular Complexity. <i>ACS Omega</i> , 2019, 4, 3361-3369. | 3.5 | 19 |
| 100 | Molecular diet analysis of <i>Anguilliformes leptocephalus</i> larvae collected in the western North Pacific. <i>PLoS ONE</i> , 2019, 14, e0225610. | 2.5 | 19 |
| 101 | A light-harvesting antenna protein retains its folded conformation in the absence of protein-lipid and protein-pigment interactions. , 1999, 49, 361-372. | | 18 |
| 102 | Present Status of 920 MHz High-Resolution NMR Spectrometers. <i>IEEE Transactions on Applied Superconductivity</i> , 2004, 14, 1608-1612. | 1.7 | 18 |
| 103 | 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, 1391-1393. | 2.2 | 17 |
| 104 | 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, 333-347. | 2.8 | 17 |
| 105 | Dietary intervention of mice using an improved Multiple Artificial-gravity Research System (MARS) under artificial 1g. <i>Npj Microgravity</i> , 2019, 5, 16. | 3.7 | 16 |
| 106 | Metabolic movement upon abscisic acid and salicylic acid combined treatments. <i>Plant Biotechnology</i> , 2009, 26, 551-560. | 1.0 | 16 |
| 107 | Spectroscopic investigation of tissue-specific biomass profiling for <i>Jatropha curcas</i> L.. <i>Plant Biotechnology</i> , 2012, 29, 163-170. | 1.0 | 15 |
| 108 | Modification of plant cell wall structure accompanied by enhancement of saccharification efficiency using a chemical, lasalocid sodium. <i>Scientific Reports</i> , 2016, 6, 34602. | 3.3 | 15 |

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|-----|---|------|-----------|
| 109 | Exploring the Impact of Food on the Gut Ecosystem Based on the Combination of Machine Learning and Network Visualization. <i>Nutrients</i> , 2017, 9, 1307. | 4.1 | 15 |
| 110 | Screening of fungi for decomposition of lignin-derived products from Japanese cedar. <i>Journal of Bioscience and Bioengineering</i> , 2018, 126, 573-579. | 2.2 | 15 |
| 111 | Spectroscopic investigation of tertiary fold of staphylococcal protein A to explore its engineering application. <i>Biomaterials</i> , 1999, 20, 647-654. | 11.4 | 14 |
| 112 | Metabolic dynamics analysis by massive data integration: application to tsunami-affected field soils in Japan. <i>ACS Chemical Biology</i> , 2015, 10, 1908-1915. | 3.4 | 14 |
| 113 | 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, 836, 155520. | 8.0 | 14 |
| 114 | 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, 259-267. | 2.9 | 13 |
| 115 | Visualization of Microfloral Metabolism for Marine Waste Recycling. <i>Metabolites</i> , 2016, 6, 7. | 2.9 | 13 |
| 116 | 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, 203-208. | 2.4 | 12 |
| 117 | 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, 2978. | 4.1 | 12 |
| 118 | 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. | 2.4 | 11 |
| 119 | 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, 3479-3487. | 2.6 | 11 |
| 120 | Mobile edge computing based VM migration for QoS improvement. , 2017, , . | | 11 |
| 121 | Bacterial Substrate Transformation Tracked by Stable-Isotope-Guided NMR Metabolomics: Application in a Natural Aquatic Microbial Community. <i>Metabolites</i> , 2017, 7, 52. | 2.9 | 11 |
| 122 | Regional feature extraction of various fishes based on chemical and microbial variable selection using machine learning. <i>Analytical Methods</i> , 2018, 10, 2160-2168. | 2.7 | 11 |
| 123 | Decomposition Factor Analysis Based on Virtual Experiments throughout Bayesian Optimization for Compost-Degradable Polymers. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2820. | 2.5 | 11 |
| 124 | Concentration of Metabolites from Low-density Planktonic Communities for Environmental Metabolomics using Nuclear Magnetic Resonance Spectroscopy. <i>Journal of Visualized Experiments</i> , 2012, , e3163. | 0.3 | 10 |
| 125 | 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, 1470. | 4.1 | 10 |
| 126 | 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. | 3.6 | 10 |

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|-----|--|-----|-----------|
| 127 | Fish ecotyping based on machine learning and inferred network analysis of chemical and physical properties. <i>Scientific Reports</i> , 2021, 11, 3766. | 3.3 | 10 |
| 128 | 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. | 6.5 | 10 |
| 129 | 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. | 1.0 | 9 |
| 130 | FoodPro: A Web-Based Tool for Evaluating Covariance and Correlation NMR Spectra Associated with Food Processes. <i>Metabolites</i> , 2016, 6, 36. | 2.9 | 9 |
| 131 | Profiling physicochemical and planktonic features from discretely/continuously sampled surface water. <i>Science of the Total Environment</i> , 2018, 636, 12-19. | 8.0 | 9 |
| 132 | Large-Scale Evaluation of Major Soluble Macromolecular Components of Fish Muscle from a Conventional ¹ H-NMR Spectral Database. <i>Molecules</i> , 2020, 25, 1966. | 3.8 | 9 |
| 133 | Signal Deconvolution and Generative Topographic Mapping Regression for Solid-State NMR of Multi-Component Materials. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1086. | 4.1 | 8 |
| 134 | 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, 62, 1963-1974. | 3.1 | 8 |
| 135 | Visualizing microbial dechlorination processes in underground ecosystem by statistical correlation and network analysis approach. <i>Journal of Bioscience and Bioengineering</i> , 2014, 117, 305-309. | 2.2 | 7 |
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