

David Ropartz

List of Publications by Year in descending order

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Version: 2024-02-01

58
papers

2,152
citations

257450

24
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233421

45
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docs citations

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times ranked

2816
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Lytic xylan oxidases from wood-decay fungi unlock biomass degradation. <i>Nature Chemical Biology</i> , 2018, 14, 306-310. | 8.0 | 269 |
| 2 | Substrate specificity and regioselectivity of fungal AA9 lytic polysaccharide monoxygenases secreted by <i>Podospira anserina</i> . <i>Biotechnology for Biofuels</i> , 2015, 8, 90. | 6.2 | 200 |
| 3 | Carrageenan catabolism is encoded by a complex regulon in marine heterotrophic bacteria. <i>Nature Communications</i> , 2017, 8, 1685. | 12.8 | 131 |
| 4 | PECTIN METHYLESTERASE INHIBITOR6 Promotes <i>Arabidopsis</i> Mucilage Release by Limiting Methylesterification of Homogalacturonan in Seed Coat Epidermal Cells. <i>Plant Cell</i> , 2013, 25, 308-323. | 6.6 | 118 |
| 5 | Ion Mobility Spectrometry in Food Analysis: Principles, Current Applications and Future Trends. <i>Molecules</i> , 2019, 24, 2706. | 3.8 | 113 |
| 6 | Single-domain flavoenzymes trigger lytic polysaccharide monoxygenases for oxidative degradation of cellulose. <i>Scientific Reports</i> , 2016, 6, 28276. | 3.3 | 102 |
| 7 | Cyclic Ion Mobility Mass Spectrometry Distinguishes Anomers and Open-Ring Forms of Pentasaccharides. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 1028-1037. | 2.8 | 92 |
| 8 | New insights into the structural and spatial variability of cell-wall polysaccharides during wheat grain development, as revealed through MALDI mass spectrometry imaging. <i>Journal of Experimental Botany</i> , 2014, 65, 2079-2091. | 4.8 | 66 |
| 9 | Semi-rational approach for converting a GH1 α -glycosidase into a β -transglycosidase. <i>Protein Engineering, Design and Selection</i> , 2014, 27, 13-19. | 2.1 | 65 |
| 10 | A fungal family of lytic polysaccharide monoxygenase-like copper proteins. <i>Nature Chemical Biology</i> , 2020, 16, 345-350. | 8.0 | 63 |
| 11 | Interlaboratory and Interplatform Study of Steroids Collision Cross Section by Traveling Wave Ion Mobility Spectrometry. <i>Analytical Chemistry</i> , 2020, 92, 5013-5022. | 6.5 | 56 |
| 12 | Performance evaluation on a wide set of matrix-assisted laser desorption ionization matrices for the detection of oligosaccharides in a high-throughput mass spectrometric screening of carbohydrate depolymerizing enzymes. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 2059-2070. | 1.5 | 52 |
| 13 | Innovative Enzymatic Approach to Resolve Homogalacturonans Based on their Methylesterification Pattern. <i>Biomacromolecules</i> , 2012, 13, 1615-1624. | 5.4 | 49 |
| 14 | Structural characterization of rhamnogalacturonan domains from <i>Panax ginseng</i> C. A. Meyer. <i>Carbohydrate Polymers</i> , 2019, 203, 119-127. | 10.2 | 46 |
| 15 | The <i>Podospira anserina</i> lytic polysaccharide monoxygenase PaLPMO9H catalyzes oxidative cleavage of diverse plant cell wall matrix glycans. <i>Biotechnology for Biofuels</i> , 2017, 10, 63. | 6.2 | 45 |
| 16 | A novel glucose dehydrogenase from the white-rot fungus <i>Pycnoporus cinnabarinus</i> : production in <i>Aspergillus niger</i> and physicochemical characterization of the recombinant enzyme. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 10105-10118. | 3.6 | 38 |
| 17 | RUBY, a Putative Galactose Oxidase, Influences Pectin Properties and Promotes Cell-To-Cell Adhesion in the Seed Coat Epidermis of <i>Arabidopsis</i> . <i>Plant Cell</i> , 2019, 31, 809-831. | 6.6 | 38 |
| 18 | Structure Determination of Large Isomeric Oligosaccharides of Natural Origin through Multipass and Multistage Cyclic Traveling-Wave Ion Mobility Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 12030-12037. | 6.5 | 33 |

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|----|--|------|-----------|
| 19 | Î±-Galactosidase/Sucrose Kinase (AgaSK), a Novel Bifunctional Enzyme from the Human Microbiome Coupling Galactosidase and Kinase Activities. <i>Journal of Biological Chemistry</i> , 2011, 286, 40814-40823. | 3.4 | 32 |
| 20 | Deciphering the structure of isomeric oligosaccharides in a complex mixture by tandem mass spectrometry: Photon activation with vacuum ultra-violet brings unique information and enables definitive structure assignment. <i>Analytica Chimica Acta</i> , 2014, 807, 84-95. | 5.4 | 32 |
| 21 | The agar-specific hydrolase ZgAgaC from the marine bacterium <i>Zobellia galactanivorans</i> defines a new GH16 protein subfamily. <i>Journal of Biological Chemistry</i> , 2019, 294, 6923-6939. | 3.4 | 32 |
| 22 | Charge Transfer Dissociation of Complex Oligosaccharides: Comparison with Collision-Induced Dissociation and Extreme Ultraviolet Dissociative Photoionization. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 1614-1619. | 2.8 | 29 |
| 23 | Structural Characterization and Cytotoxic Properties of a 4-O-Methylglucuronoxylan from <i>Castanea sativa</i> . 2. Evidence of a Structure-Activity Relationship. <i>Journal of Natural Products</i> , 2008, 71, 1404-1409. | 3.0 | 27 |
| 24 | The Deconstruction of Pectic Rhamnogalacturonan I Unmasks the Occurrence of a Novel Arabinogalactan Oligosaccharide Epitope. <i>Plant and Cell Physiology</i> , 2015, 56, pcv128. | 3.1 | 26 |
| 25 | Enzymatic depolymerization of the GY785 exopolysaccharide produced by the deep-sea hydrothermal bacterium <i>Alteromonas infernus</i> : Structural study and enzyme activity assessment. <i>Carbohydrate Polymers</i> , 2018, 188, 101-107. | 10.2 | 25 |
| 26 | High-Energy Photon Activation Tandem Mass Spectrometry Provides Unprecedented Insights into the Structure of Highly Sulfated Oligosaccharides Extracted from Macroalgal Cell Walls. <i>Analytical Chemistry</i> , 2015, 87, 1042-1049. | 6.5 | 24 |
| 27 | Online coupling of high-resolution chromatography with extreme UV photon activation tandem mass spectrometry: Application to the structural investigation of complex glycans by dissociative photoionization. <i>Analytica Chimica Acta</i> , 2016, 933, 1-9. | 5.4 | 24 |
| 28 | Pectin Structure. , 2020, , 17-36. | | 23 |
| 29 | Structural Elucidation of Enzymatically Synthesized Galacto-oligosaccharides Using Ion-Mobility Spectrometry-Tandem Mass Spectrometry. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 3609-3615. | 5.2 | 22 |
| 30 | Negative Polarity Helium Charge Transfer Dissociation Tandem Mass Spectrometry: Radical-Initiated Fragmentation of Complex Polysulfated Anions. <i>Analytical Chemistry</i> , 2017, 89, 3824-3828. | 6.5 | 21 |
| 31 | Distribution of cell wall hemicelluloses in the wheat grain endosperm: a 3D perspective. <i>Planta</i> , 2018, 248, 1505-1513. | 3.2 | 21 |
| 32 | Anomeric Retention of Carbohydrates in Multistage Cyclic Ion Mobility (IMS ⁿ): De Novo Structural Elucidation of Enzymatically Produced Mannosides. <i>Analytical Chemistry</i> , 2021, 93, 6254-6261. | 6.5 | 21 |
| 33 | Evaluation of Î²-galactosidase from <i>Lactobacillus acidophilus</i> as biocatalyst for galacto-oligosaccharides synthesis: Product structural characterization and enzyme immobilization. <i>Journal of Bioscience and Bioengineering</i> , 2018, 126, 697-704. | 2.2 | 20 |
| 34 | Discrimination of Î²-1,4- and Î²-1,3-Linkages in Native Oligosaccharides via Charge Transfer Dissociation Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 1249-1259. | 2.8 | 19 |
| 35 | Insight in the regioselective enzymatic transgalactosylation of salicin catalyzed by Î²-galactosidase from <i>Aspergillus oryzae</i> . <i>Process Biochemistry</i> , 2015, 50, 782-788. | 3.7 | 16 |
| 36 | Characterization of a bacterial copper-dependent lytic polysaccharide monoxygenase with an unusual second coordination sphere. <i>FEBS Journal</i> , 2020, 287, 3298-3314. | 4.7 | 16 |

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|----|--|------|-----------|
| 37 | Agar Extraction By-Products from <i>Gelidium sesquipedale</i> as a Source of Glycerol-Galactosides. <i>Molecules</i> , 2018, 23, 3364. | 3.8 | 15 |
| 38 | Changing surface grafting density has an effect on the activity of immobilized xylanase towards natural polysaccharides. <i>Scientific Reports</i> , 2019, 9, 5763. | 3.3 | 13 |
| 39 | Molecular Networking of High-Resolution Tandem Ion Mobility Spectra: A Structurally Relevant Way of Organizing Data in Glycomics?. <i>Analytical Chemistry</i> , 2021, 93, 10871-10878. | 6.5 | 10 |
| 40 | Acid-detoxified Inaba lipopolysaccharide (pmLPS) is a superior cholera conjugate vaccine immunogen than hydrazine-detoxified lipopolysaccharide and induces vibriocidal and protective antibodies. <i>Pathogens and Disease</i> , 2013, 67, 136-158. | 2.0 | 9 |
| 41 | Characterization of New Oligosaccharides Obtained by An Enzymatic Cleavage of the Exopolysaccharide Produced by the Deep-Sea Bacterium <i>Alteromonas infernus</i> Using its Cell Extract. <i>Molecules</i> , 2019, 24, 3441. | 3.8 | 9 |
| 42 | Characterisation of an exo-(\pm 1,3)-3,6-anhydro-d-galactosidase produced by the marine bacterium <i>Zobellia galactanivorans</i> DsijT: Insight into enzyme preference for natural carrageenan oligosaccharides and kinetic characterisation on a novel chromogenic substrate. <i>International Journal of Biological Macromolecules</i> , 2020, 163, 1471-1479. | 7.5 | 9 |
| 43 | Structural Characterization of Isomeric Oligogalacturonan Mixtures Using Ultrahigh-Performance Liquid Chromatography-Charge Transfer Dissociation Mass Spectrometry. <i>Analytical Chemistry</i> , 2021, 93, 2838-2847. | 6.5 | 9 |
| 44 | Combination of IM-Based Approaches to Unravel the Coexistence of Two Conformers on a Therapeutic Multispecific mAb. <i>Analytical Chemistry</i> , 2022, 94, 7981-7989. | 6.5 | 9 |
| 45 | Synthesis and immunochemical evaluation of a non-methylated disaccharide analogue of the anthrax tetrasaccharide. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 8524. | 2.8 | 8 |
| 46 | Synthesis of an Exhaustive Library of Naturally Occurring Gal<i>f</i>-Man<i>p</i> and Gal<i>p</i>-Man<i>p</i> Disaccharides. Toward Fingerprinting According to Ring Size by Advanced Mass Spectrometry-Based IM-MS and IRMPD. <i>Journal of Organic Chemistry</i> , 2021, 86, 6390-6405. | 3.2 | 8 |
| 47 | Functional exploration of <i>Pseudoalteromonas atlantica</i> as a source of hemicellulose-active enzymes: Evidence for a GH8 xylanase with unusual mode of action. <i>Enzyme and Microbial Technology</i> , 2019, 127, 6-16. | 3.2 | 7 |
| 48 | Charge transfer dissociation of a branched glycan with alkali and alkaline earth metal adducts. <i>Journal of Mass Spectrometry</i> , 2021, 56, e4774. | 1.6 | 7 |
| 49 | Analysis of the diversity of the glycoside hydrolase family 130 in mammal gut microbiomes reveals a novel mannoside-phosphorylase function. <i>Microbial Genomics</i> , 2020, 6, . | 2.0 | 6 |
| 50 | Biorefinery of apple pomace: New insights into xyloglucan building blocks. <i>Carbohydrate Polymers</i> , 2022, 290, 119526. | 10.2 | 6 |
| 51 | Ultra-high-performance liquid chromatography charge transfer dissociation mass spectrometry (UHPLC-CTD-MS) as a tool for analyzing the structural heterogeneity in carrageenan oligosaccharides. <i>Analytical and Bioanalytical Chemistry</i> , 2021, , 1. | 3.7 | 5 |
| 52 | Combination of High-Resolution Multistage Ion Mobility and Tandem MS with High Energy of Activation to Resolve the Structure of Complex Chemoenzymatically Synthesized Glycans. <i>Analytical Chemistry</i> , 2022, 94, 2279-2287. | 6.5 | 4 |
| 53 | Computer-aided engineering of a branching sucrose for the glucodiversification of a tetrasaccharide precursor of <i>S. flexneri</i> antigenic oligosaccharides. <i>Scientific Reports</i> , 2021, 11, 20294. | 3.3 | 3 |
| 54 | The influence of Na/H exchange on the charge transfer dissociation (CTD) spectra of mannuronic acid oligomers. <i>International Journal of Mass Spectrometry</i> , 2021, 468, 116634. | 1.5 | 2 |

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|----|---|-----|-----------|
| 55 | In-depth structural characterization of oligosaccharides released by GH107 endofucanase <i>FcnA</i> reveals enzyme subsite specificity and sulfated fucan substructural features. <i>Glycobiology</i> , 2022, 32, 276-288. | 2.5 | 2 |
| 56 | Prebiotic Isomaltooligosaccharide Provides an Advantageous Fitness to the Probiotic <i>Bacillus subtilis</i> CU1. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6404. | 2.5 | 2 |
| 57 | Selected case studies presenting advanced methodologies to study food and chemical industry materials: From the structural characterization of raw materials to the multisensory integration of food. <i>Innovative Food Science and Emerging Technologies</i> , 2018, 46, 29-40. | 5.6 | 1 |
| 58 | Systematic comparison of eight methods for preparation of high purity sulfated fucans extracted from the brown alga <i>Pelvetia canaliculata</i> . <i>International Journal of Biological Macromolecules</i> , 2022, 201, 143-157. | 7.5 | 1 |