

Helena Pelantová

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3604118/publications.pdf>

Version: 2024-02-01

64
papers

1,426
citations

257450

24
h-index

395702

33
g-index

69
all docs

69
docs citations

69
times ranked

1742
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemo-enzymatic synthesis of poly-N-acetylglucosamine (poly-LacNAc) structures and their characterization for CGL2-galectin-mediated binding of ECM glycoproteins to biomaterial surfaces. <i>Glycoconjugate Journal</i> , 2009, 26, 141-159.	2.7	66
2	The intestinal microbiota and metabolites in patients with anorexia nervosa. <i>Gut Microbes</i> , 2021, 13, 1-25.	9.8	58
3	Tailored Multivalent Neo-Glycoproteins: Synthesis, Evaluation, and Application of a Library of Galectin-3-Binding Glycan Ligands. <i>Bioconjugate Chemistry</i> , 2017, 28, 2832-2840.	3.6	54
4	Biodegradation of tetrabromobisphenol A by oxidases in basidiomycetous fungi and estrogenic activity of the biotransformation products. <i>Bioresource Technology</i> , 2011, 102, 9409-9415.	9.6	51
5	Combinatorial One-Pot Synthesis of Poly-N-acetylglucosamine Oligosaccharides with Leloir-Glycosyltransferases. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 2492-2500.	4.3	46
6	Quaternary ammonium salts ionic liquids for immobilization of chiral Ru-BINAP complexes in asymmetric hydrogenation of β -ketoesters. <i>Applied Catalysis A: General</i> , 2009, 366, 160-165.	4.3	43
7	Enzymatic Glycosylation of Phenolic Antioxidants: Phosphorylase-Mediated Synthesis and Characterization. <i>Journal of Agricultural and Food Chemistry</i> , 2015, 63, 10131-10139.	5.2	41
8	α -L-rhamnosyl- β -D-glucosidase (Rutinosidase) from <i>Aspergillus niger</i> : Characterization and Synthetic Potential of a Novel Diglycosidase. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 107-117.	4.3	39
9	Biotransformation of nitriles to amides using soluble and immobilized nitrile hydratase from <i>Rhodococcus erythropolis</i> A4. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2008, 50, 107-113.	1.8	38
10	Synthesis of Derivatized Chitoooligomers using Transglycosidases Engineered from the Fungal GH20 β -N-acetylhexosaminidase. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 1941-1950.	4.3	37
11	4-Deoxy-substrates for β -N-acetylhexosaminidases: How to make use of their loose specificity. <i>Glycobiology</i> , 2010, 20, 1002-1009.	2.5	36
12	Impact of novel palmitoylated prolactin-releasing peptide analogs on metabolic changes in mice with diet-induced obesity. <i>PLoS ONE</i> , 2017, 12, e0183449.	2.5	35
13	Urinary metabolomic profiling in mice with diet-induced obesity and type 2 diabetes mellitus after treatment with metformin, vildagliptin and their combination. <i>Molecular and Cellular Endocrinology</i> , 2016, 431, 88-100.	3.2	34
14	Charged Hexosaminides as New Substrates for β -N-acetylhexosaminidase-Catalyzed Synthesis of Immunomodulatory Disaccharides. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 2409-2420.	4.3	33
15	Chemo-enzymatic modification of poly-N-acetylglucosamine (LacNAc) oligomers and N,N-diacetylglucosamine (LacDiNAc) based on galactose oxidase treatment. <i>Beilstein Journal of Organic Chemistry</i> , 2012, 8, 712-725.	2.2	33
16	Chemoenzymatic synthesis of α -L-rhamnosides using recombinant α -L-rhamnosidase from <i>Aspergillus terreus</i> . <i>Bioresource Technology</i> , 2013, 147, 640-644.	9.6	31
17	Two-Step Enzymatic Synthesis of β -N-acetylglucosamine-(1 \rightarrow 4)- β -N-acetylglucosamine (Lac ₂ NAc) Chitoooligomers for Deciphering Galectin Binding Behavior. <i>Advanced Synthesis and Catalysis</i> , 2017, 359, 2101-2108.	4.3	31
18	Glycosyl Azides – An Alternative Way to Disaccharides. <i>Advanced Synthesis and Catalysis</i> , 2007, 349, 1514-1520.	4.3	30

#	ARTICLE	IF	CITATIONS
19	Enzymatic synthesis of dimeric glycomimetic ligands of NK cell activation receptors. <i>Carbohydrate Research</i> , 2011, 346, 1599-1609.	2.3	26
20	Chemo-enzymatic synthesis of LacdiNAc dimers of varying length as novel galectin ligands. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 101, 47-55.	1.8	26
21	Metabolomic profiling of urinary changes in mice with monosodium glutamate-induced obesity. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 567-578.	3.7	26
22	Biotransformation of heterocyclic dinitriles by <i>Rhodococcus erythropolis</i> and fungal nitrilases. <i>Biotechnology Letters</i> , 2007, 29, 1119-1124.	2.2	25
23	Biotransformation of benzonitrile herbicides via the nitrile hydratase–amidase pathway in rhodococci. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2012, 39, 1811-1819.	3.0	25
24	Bringing nitrilase sequences from databases to life: the search for novel substrate specificities with a focus on dinitriles. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 2193-2202.	3.6	25
25	The β -N-Acetylhexosaminidase in the Synthesis of Bioactive Glycans: Protein and Reaction Engineering. <i>Molecules</i> , 2019, 24, 599.	3.8	25
26	High-Affinity β -(2-Hydroxypropyl)methacrylamide Copolymers with Tailored β -Acetyllactosamine Presentation Discriminate between Galectins. <i>Biomacromolecules</i> , 2020, 21, 641-652.	5.4	24
27	The effects of liraglutide in mice with diet-induced obesity studied by metabolomics. <i>Journal of Endocrinology</i> , 2017, 233, 93-104.	2.6	23
28	Sulfated Metabolites of Flavonolignans and 2,3-Dehydroflavonolignans: Preparation and Properties. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2349.	4.1	23
29	Prokaryotic and Eukaryotic Aryl Sulfotransferases: Sulfation of Quercetin and Its Derivatives. <i>ChemCatChem</i> , 2015, 7, 3152-3162.	3.7	22
30	Biphasic Catalysis with Disaccharide Phosphorylases: Chemoenzymatic Synthesis of β -d-Glucosides Using Sucrose Phosphorylase. <i>Organic Process Research and Development</i> , 2014, 18, 781-787.	2.7	21
31	Chemoenzymatic Preparation and Biophysical Properties of Sulfated Quercetin Metabolites. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2231.	4.1	20
32	Regioselective β -Substitution of Unprotected Thiodigalactosides: Direct Route to Galectin Inhibitors. <i>Chemistry - A European Journal</i> , 2020, 26, 9620-9631.	3.3	20
33	Induction and characterization of an unusual β -d-galactosidase from <i>Talaromyces flavus</i> . <i>Journal of Biotechnology</i> , 2007, 128, 61-71.	3.8	18
34	KnowVolution Campaign of an Aryl Sulfotransferase Increases Activity toward Cellobiose. <i>Chemistry - A European Journal</i> , 2018, 24, 17117-17124.	3.3	18
35	Selective β -N-acetylhexosaminidase from <i>Aspergillus versicolor</i> a tool for producing bioactive carbohydrates. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 1737-1753.	3.6	18
36	Notes on the Asymmetric Hydrogenation of Methyl Acetoacetate in Neoteric Solvents. <i>Catalysis Letters</i> , 2010, 134, 279-287.	2.6	17

#	ARTICLE	IF	CITATIONS
37	Strategy for NMR metabolomic analysis of urine in mouse models of obesity” from sample collection to interpretation of acquired data. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2015, 115, 225-235.	2.8	17
38	Enzyme-mediated transglycosylation of rutinose (6-O- β -D-glucopyranosyl- β -D-glucose) to phenolic compounds by a diglycosidase from <i>Acremonium</i> sp. DSM 24697. <i>Biotechnology and Applied Biochemistry</i> , 2019, 66, 53-59.	3.8	15
39	Complex Positive Effects of SGLT-2 Inhibitor Empagliflozin in the Liver, Kidney and Adipose Tissue of Hereditary Hypertriglyceridemic Rats: Possible Contribution of Attenuation of Cell Senescence and Oxidative Stress. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10606.	4.1	15
40	Vegan Diet Is Associated With Favorable Effects on the Metabolic Performance of Intestinal Microbiota: A Cross-Sectional Multi-Omics Study. <i>Frontiers in Nutrition</i> , 2021, 8, 783302.	3.7	14
41	Enzymatic synthesis of new C-6-acylated derivatives of NAG-thiazoline and evaluation of their inhibitor activities towards fungal β -N-acetylhexosaminidase. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013, 87, 128-134.	1.8	13
42	Inhibition of GlcNAc-Processing Glycosidases by C-6-Azido-NAG-Thiazoline and Its Derivatives. <i>Molecules</i> , 2014, 19, 3471-3488.	3.8	13
43	Acceptor Specificity of β -N-Acetylhexosaminidase from <i>Talaromyces flavus</i> : A Rational Explanation. <i>International Journal of Molecular Sciences</i> , 2019, 20, 6181.	4.1	13
44	Sulfated Metabolites of Luteolin, Myricetin, and Ampelopsin: Chemoenzymatic Preparation and Biophysical Properties. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 11197-11206.	5.2	12
45	Towards Keratan Sulfate – Chemoenzymatic Cascade Synthesis of Sulfated <i>N</i> -Acetyllactosamine (LacNAc) Glycan Oligomers. <i>Advanced Synthesis and Catalysis</i> , 2016, 358, 584-596.	4.3	11
46	Chemoenzymatic Synthesis of Branched <i>N</i> -Acetyllactosamine Glycan Oligomers for Galectin-3 Inhibition. <i>Advanced Synthesis and Catalysis</i> , 2017, 359, 4015-4024.	4.3	11
47	Metabolomics Based on MS in Mice with Diet-Induced Obesity and Type 2 Diabetes Mellitus: the Effect of Vildagliptin, Metformin, and Their Combination. <i>Applied Biochemistry and Biotechnology</i> , 2019, 188, 165-184.	2.9	11
48	A novel enzymatic tool for transferring GalNAc moiety onto challenging acceptors. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2020, 1868, 140319.	2.3	11
49	Arrival time distributions of product ions reveal isomeric ratio of deprotonated molecules in ion mobility-mass spectrometry of hyaluronan-derived oligosaccharides. <i>Journal of Mass Spectrometry</i> , 2015, 50, 854-863.	1.6	10
50	Identifying Efficient <i>Clostridium difficile</i> Toxin A Binders with a Multivalent Neo-Glycoprotein Glycan Library. <i>Bioconjugate Chemistry</i> , 2019, 30, 2373-2383.	3.6	9
51	Minor lipids profiling in subcutaneous and epicardial fat tissue using LC/MS with an optimized preanalytical phase. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2019, 1113, 50-59.	2.3	9
52	How Site-Directed Mutagenesis Boosted Selectivity of a Promiscuous Enzyme. <i>Advanced Synthesis and Catalysis</i> , 2020, 362, 4138-4150.	4.3	8
53	Chemoenzymatic Synthesis of <i>D</i> -Glucosides using Cellobiose Phosphorylase from <i>Clostridium thermocellum</i> . <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 1961-1969.	4.3	7
54	Chemoenzymatic Synthesis and Radical Scavenging of Sulfated Hydroxytyrosol, Tyrosol, and Acetylated Derivatives. <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 7281-7288.	5.2	7

#	ARTICLE	IF	CITATIONS
55	Lipid Profiling in Epicardial and Subcutaneous Adipose Tissue of Patients with Coronary Artery Disease. <i>Journal of Proteome Research</i> , 2020, 19, 3993-4003.	3.7	7
56	Engineered Glycosidases for the Synthesis of Analogs of Human Milk Oligosaccharides. <i>International Journal of Molecular Sciences</i> , 2022, 23, 4106.	4.1	7
57	Determination of Butyrate Synthesis Capacity in Gut Microbiota: Quantification of but Gene Abundance by qPCR in Fecal Samples. <i>Biomolecules</i> , 2021, 11, 1303.	4.0	6
58	Exploration of GH94 Sequence Space for Enzyme Discovery Reveals a Novel Glucosylgalactose Phosphorylase Specificity. <i>ChemBioChem</i> , 2021, 22, 3319-3325.	2.6	6
59	NMR- and MS-Based Untargeted Metabolomic Study of Stool and Serum Samples from Patients with Anorexia Nervosa. <i>Journal of Proteome Research</i> , 2022, 21, 778-787.	3.7	6
60	Condensation reactions catalyzed by β -N-acetylgalactosaminidase from <i>Aspergillus niger</i> yielding β -N-acetylgalactosaminides. <i>Biocatalysis and Biotransformation</i> , 2010, 28, 150-155.	2.0	5
61	Targeted fucosylation of glycans with engineered bacterial fucosyltransferase variants. <i>ChemCatChem</i> , 0, , .	3.7	2
62	Sulfated Phenolic Substances: Preparation and Optimized HPLC Analysis. <i>International Journal of Molecular Sciences</i> , 2022, 23, 5743.	4.1	2
63	Inhibition of microbial β -N-acetylhexosaminidases by 4-deoxy- and galacto-analogues of NAG-thiazoline. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 5321-5323.	2.2	1
64	Semisynthesis and spectral characterization of 5-methylpyranopelargonidin and 4-methylfuropelargonidin and their separation and detection in strawberry fruit wine. <i>Journal of Chromatography A</i> , 2017, 1510, 40-50.	3.7	1