Alfonso FernÃ;ndez-Mayoralas

List of Publications by Year in descending order

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Alfonso

#	Article	IF	CITATIONS
1	Asymmetric Aldol Reaction Using Immobilized Proline on Mesoporous Support. Advanced Synthesis and Catalysis, 2005, 347, 1395-1403.	2.1	120
2	Effect of the solvent on enzyme regioselectivity. Journal of the American Chemical Society, 1991, 113, 695-696.	6.6	116
3	Asymmetric Aldol Reaction Catalyzed by a Heterogenized Proline on a Mesoporous Support. The Role of the Nature of Solvents. Journal of Organic Chemistry, 2007, 72, 9353-9356.	1.7	106
4	Enzymic .betaGalactosidation of Modified Monosaccharides: Study of the Enzyme Selectivity for the Acceptor and Its Application to the Synthesis of Disaccharides. Journal of Organic Chemistry, 1994, 59, 737-745.	1.7	91
5	Preparation of pyranoid glycal derivatives from phenyl thioglycosides and glycosyl phenyl sulphones. Carbohydrate Research, 1989, 188, 81-95.	1.1	84
6	Synthesis and biological studies of glycosyl dopamine derivatives as potential antiparkinsonian agents. Carbohydrate Research, 2000, 327, 353-365.	1.1	69
7	Synthesis of glycosyl derivatives as dopamine prodrugs: interaction with glucose carrier GLUT-1Electronic supplementary information (ESI) available: experimental details for the preparation of all derivatives and biological assays. See http://www.rsc.org/suppdata/ob/b2/b212066f/. Organic and Biomolecular Chemistry, 2003, 1, 767-771.	1.5	69
8	Enzymes in the synthesis of bioactive compounds. Bioorganic and Medicinal Chemistry, 2004, 12, 1817-1834.	1.4	68
9	Conformational Behavior of Aza-C-Glycosides:Â Experimental Demonstration of the Relative Role of theexo-anomericEffect and 1,3-Type Interactions in Controlling the Conformation of Regular Glycosides. Journal of the American Chemical Society, 1999, 121, 11318-11329.	6.6	58
10	Activated α,βâ€Unsaturated Aldehydes as Substrate of Dihydroxyacetone Phosphate (DHAP)â€Dependent Aldolases in the Context of a Multienzyme System. Advanced Synthesis and Catalysis, 2009, 351, 2967-2975.	2.1	58
11	Synthesis of Azasugars through a Proline-Catalyzed Reaction. Journal of Organic Chemistry, 2006, 71, 6258-6261.	1.7	46
12	Conformational differences between Fuc(α1–3)GlcNAc and its thioglycoside analogue. Carbohydrate Research, 1998, 308, 19-27.	1.1	44
13	Use of cyclic sulfamidates derived from D-allosamine in nucleophilic displacements: Scope and limitations. Tetrahedron, 1997, 53, 5863-5876.	1.0	43
14	Synthesis of 3- and 2′-fucosyl-lactose and 3,2′-difucosyl-lactose from partially benzylated lactose derivatives. Carbohydrate Research, 1986, 154, 93-101.	1.1	41
15	Regioselective Acetylations of Alkyl .betaD-Xylopyranosides by Use of Lipase PS in Organic Solvents and Application to the Chemoenzymic Synthesis of Oligosaccharides. Journal of Organic Chemistry, 1994, 59, 7027-7032.	1.7	41
16	Oligosaccharides Structurally Related to E-Selectin Ligands Are Inhibitors of Neural Cell Division: Synthesis, Conformational Analysis, and Biological Activity. Journal of Organic Chemistry, 1995, 60, 1502-1519.	1.7	41
17	Origins of the Double Asymmetric Induction on Proline-Catalyzed Aldol Reactions. Journal of Organic Chemistry, 2008, 73, 7916-7920.	1.7	39
18	Synthesis and modification of carbohydrates using glycosidases and lipases. Topics in Current Chemistry, 1997, , 1-20.	4.0	38

IF # ARTICLE CITATIONS Stereoselective synthesis of the antifungal GM222712. Tetrahedron Letters, 2000, 41, 4379-4382. The synthesis and resolution of (\hat{A}_{\pm}) -1,5,6-tri-O-benzyl-myo-inositol. Carbohydrate Research, 1990, 205, 20 1.1 35 105-123. Chemical and enzymatic diastereoselective cleavage of Î²-d-galactopyranosylsulfoxides. Tetrahedron Letters, 1997, 38, 8267-8270. Inhibitors of Clioma Growth that Reveal the Tumour to the Immune System. Clinical Medicine Insights: 22 0.6 34 Oncology, 2011, 5, CMO.S7685. Convenient syntheses of substituted pyranoid glycals from thiophenyl glycosides and glycosyl phenylsulfones. Tetrahedron Letters, 1989, 30, 2537-2540. Nucleophilic displacements on a cyclic sulfamidate derived from allosamine: application to the 24 2.2 33 synthesis of thiooligosaccharides. Chemical Communications, 1996, , 127-128. Novel Disaccharide Inhibitors of Human Glioma Cell Division. Journal of Medicinal Chemistry, 1998, 41, 2.9 4599-4606. Heterologous Over-expression of 1±-1,6-Fucosyltransferase from Rhizobium sp.: Application to the Synthesis of the Trisaccharidel²-D-GlcNAc(1a†'4)- [l±-L-Fuc-(1a†'6)]-D-GlcNAc, Study of the Acceptor Specificity 1.7 26 33 and Evaluation of Polyhydroxylated Indolizidines as Inhibitors. Chemistry - A European Journal, 2001, 7, 2390-2397. Design and Synthesis of Glycoside Inhibitors of Glioma and Melanoma Growth. Journal of Medicinal Chemistry, 2007, 50, 364-373. Water-Soluble Pendant Copolymers Bearing Proline and Permethylated Î²-Cyclodextrin: pH-Dependent 28 2.2 33 Catalytic Nanoreactors. Macromolecules, 2012, 45, 7676-7683. Synthesis of a Thio-Analogue of Lewis X by Regioselective Opening of Cyclic Sulfamidates. Journal of Órganic Chemistry, 1998, 63, 2719-2723. Stereospecific Synthesis of α- and Î2-C-Glycosides from Glycosyl Sulfoxides: Â Scope and Limitations. 30 1.7 31 Journal of Organic Chemistry, 2001, 66, 1768-1774. Inhibition of proliferation of normal and transformed neural cells by blood group-related 4.2 30 oligosaccharides.. Journal of Experimental Medicine, 1992, 176, 915-918. Protecting Group-Directed, Diastereoselective Samarium Diiodide-Promoted Carbocyclization:  32 1.7 30 Application to the Synthesis of Cyclitols. Journal of Organic Chemistry, 1997, 62, 1916-1917. New hydroxyproline based methacrylic polybetaines: Synthesis, pH sensitivity and catalytic activity. 33 1.8 Polymer, 2009, 50, 4438-4446. Polymeric drugs based on bioactive glycosides for the treatment of brain tumours. Biomaterials, 2009, 34 5.7 29 30, 1613-1626. Linear Copolymers of Proline Methacrylate and Styrene as Catalysts for Aldol Reactions in Water: 2.2 28 Effect of the Copolymer Aggregation on the Enantioselectivity. Macromolecules, 2011, 44, 6268-6276. Stereoselective Synthesis ofcarba- and C-Glycosyl Analogs of Fucopyranosides. European Journal of 36 1.2 27 Organic Chemistry, 2000, 2000, 1285-1296.

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37	Noninvasive Diagnosis of Hypolactasia With 4-Galactosylxylose (Gaxilose). Journal of Clinical Gastroenterology, 2014, 48, 29-36.	1.1	26
38	Synthesis, physicochemical characterization and biological evaluation of chitosan sulfate as heparan sulfate mimics. Carbohydrate Polymers, 2018, 191, 225-233.	5.1	26
39	4-O-β-d-galactopyranosyl-3-O-methyl-d-glucose: A new synthesis and application to the evaluation of intestinal lactase. Carbohydrate Research, 1985, 140, 81-91.	1.1	25
40	Relative and Absolute Stereochemistry of Secondary/Secondary Diols:Â Low-Temperature1H NMR of Their bis-MPA Esters§. Journal of Organic Chemistry, 2007, 72, 2297-2301.	1.7	25
41	Synthesis of Carba- and C-Fucopyranosides and Their Evaluation as α-Fucosidase Inhibitors â^' Analysis of an Unusual Conformation Adopted by an Amino-C-fucopyranoside. European Journal of Organic Chemistry, 2001, 2001, 4127-4135.	1.2	24
42	Purification and Structure of Neurostatin, an Inhibitor of Astrocyte Division of Mammalian Brain. Journal of Neurochemistry, 2002, 74, 2547-2556.	2.1	24
43	Proline–cyclodextrin conjugates: synthesis and evaluation as catalysts for aldol reaction in water. Tetrahedron, 2012, 68, 7345-7354.	1.0	24
44	Regioselectivity of the enzymatic transgalactosidation of d- and l-xylose catalysed by β-galactosidases. Carbohydrate Research, 1997, 305, 383-391.	1.1	23
45	An efficient preparation of optically active (E)-γ-hydroxy-α,β-unsaturated phenyl sulfones using lipase-mediated acylations. Tetrahedron Letters, 1991, 32, 5159-5162.	0.7	22
46	4-O-Î ² -spD-Galactopyranosyl-spD-xylose: A new synthesis and application to the evaluation of intestinal lactase. Carbohydrate Research, 1992, 228, 129-135.	1.1	22
47	Experimental Brain Glioma: Growth Arrest and Destruction By a Blood-Group-Related Tetrasaccharide. Journal of Neuropathology and Experimental Neurology, 1996, 55, 169-177.	0.9	22
48	Synthesis of Antimitotic Thioglycosides: In Vitro and in Vivo Evaluation of Their Anticancer Activity. Journal of Medicinal Chemistry, 2011, 54, 6949-6955.	2.9	22
49	The acetonation of lactose and benzyl \hat{l}^2 -lactoside with 2-methoxypropene. Tetrahedron, 1987, 43, 1169-1176.	1.0	21
50	Controlling yield and regioselectivity in the enzymatic synthesis of β-D-galactopyranosyl-β-D-xylopyranosides. Tetrahedron Letters, 1992, 33, 5449-5452.	0.7	21
51	Polymeric matrices based on graft copolymers of PCL onto acrylic backbones for releasing antitumoral drugs. Journal of Biomedical Materials Research - Part A, 2003, 64A, 638-647.	2.1	21
52	Chiral macrocyclic compounds from lactose derivatives. Carbohydrate Research, 1986, 150, 103-109.	1.1	19
53	Enzymatic Transesterification of Alkyl 2,3,4-Tri-O-acyl-β-D-xylopyranosides. Journal of Carbohydrate Chemistry, 1993, 12, 165-171.	0.4	19
54	Glycosyl phenyl sulfoxides as a source of glycosyl carbanions: Stereoselective synthesis of C-fucosides. Tetrahedron Letters, 1998, 39, 7783-7786.	0.7	19

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55	Microfluidic Reactors Based on Rechargeable Catalytic Porous Supports: Heterogeneous Enzymatic Catalysis via Reversible Host–Guest Interactions. ACS Applied Materials & Interfaces, 2017, 9, 4184-4191.	4.0	19
56	A holistic approach to unravelling chondroitin sulfation: Correlations between surface charge, structure and binding to growth factors. Carbohydrate Polymers, 2018, 202, 211-218.	5.1	19
57	Nouvelle voie d'accès à la configuration β-d-mannopyranoside protégée temporairement en positions 3 et 6. Carbohydrate Research, 1987, 165, c11-c13.	1.1	18
58	A direct enzymatic synthesis of β-d-galactopyranosyl-d-xylopyranosides and their use to evaluate rat intestinal lactase activity in vivo. Carbohydrate Research, 1996, 290, 209-216.	1.1	18
59	Studies on the Uptake of Glucose Derivatives by Red Blood Cells. ChemMedChem, 2007, 2, 496-504.	1.6	17
60	Detection of Metabolite Changes in C6 Glioma Cells Cultured with Antimitotic Oleyl Glycoside by ¹ H MAS NMR. Journal of Medicinal Chemistry, 2009, 52, 1263-1267.	2.9	17
61	The conformation of eight-membered 3,2′-O-isopropylidene acetals of some common disaccharides. Journal of the Chemical Society Perkin Transactions II, 1989, , 1867-1873.	0.9	16
62	Evaluation of rat intestinal lactase in vivo with 4-galactosylxylose. Clinica Chimica Acta, 1992, 210, 221-226.	0.5	16
63	Synthesis of oligosaccharides structurally related to E-selection ligands. Journal of the Chemical Society Chemical Communications, 1994, , 775-776.	2.0	15
64	Noninvasive Evaluation of Intestinal Lactase with 4-Galactosylxylose: Comparison with 3- and 2-Galactosylxylose and Optimization of the Method in Rats. Clinical Chemistry, 2006, 52, 270-277.	1.5	15
65	Optimizing the enzymatic synthesis of \hat{l}^2 -d-galactopyranosyl-d-xyloses for their use in the evaluation of lactase activity in vivo. Bioorganic and Medicinal Chemistry, 2007, 15, 4836-4840.	1.4	15
66	Amino–Acetoneâ€Bridged Cyclodextrins ― Artificial Alcohol Oxidases. European Journal of Organic Chemistry, 2010, 2010, 157-167.	1.2	15
67	Micellar Iron Oxide Nanoparticles Coated with Anti-Tumor Glycosides. Nanomaterials, 2018, 8, 567.	1.9	15
68	Chitosan sulfate-lysozyme hybrid hydrogels as platforms with fine-tuned degradability and sustained inherent antibiotic and antioxidant activities. Carbohydrate Polymers, 2022, 291, 119611.	5.1	15
69	?-D-galactosidase-catalysed synthesis of partially protected ?-linked digalactopyranosides. Biotechnology Letters, 1991, 13, 715-720.	1.1	14
70	The Conformational Behaviour of Fucosyl and Carbafucosyl Mimetics in the Free and in the Pree Protein-Bound States. European Journal of Organic Chemistry, 2001, 2001, 681-689.	1.2	14
71	Central Neural Tumor Destruction by Controlled Release of a Synthetic Glycoside Dispersed in a Biodegradable Polymeric Matrix. Journal of Medicinal Chemistry, 2003, 46, 1286-1288.	2.9	14
72	Phase I and Phase IB Clinical Trials for the Noninvasive Evaluation of Intestinal Lactase With 4-Galactosylxylose (Gaxilose). Journal of Clinical Gastroenterology, 2013, 47, 501-508.	1.1	14

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73	Heparanized chitosans: towards the third generation of chitinous biomaterials. Materials Horizons, 2021, 8, 2596-2614.	6.4	14
74	A New Strategy for Liquid-Phase Synthesis of Disaccharides Based on the Use of Glycosidases. Biocatalysis and Biotransformation, 2000, 18, 271-281.	1.1	13
75	Synthesis, Conformation, and Biological Characterization of a Sugar Derivative of Morphine that is a Potent, Long-Lasting, and Nontolerant Antinociceptive. Journal of Medicinal Chemistry, 2009, 52, 2656-2666.	2.9	13
76	New oleyl glycoside as anti-cancer agent that targets on neutral sphingomyelinase. Biochemical Pharmacology, 2015, 97, 158-172.	2.0	13
77	Deciphering Structural Determinants in Chondroitin Sulfate Binding to FGF-2: Paving the Way to Enhanced Predictability of Their Biological Functions. Polymers, 2021, 13, 313.	2.0	13
78	Synthesis and evaluation of xylopyranoside derivatives as "decoy acceptors―of human β-1,4-galactosyltransferase 7. Molecular BioSystems, 2011, 7, 1312.	2.9	12
79	Inhibition of glial proliferation, promotion of axonal growth and myelin production by synthetic glycolipid: A new approach for spinal cord injury treatment. Restorative Neurology and Neuroscience, 2015, 33, 895-910.	0.4	12
80	A comprehensive profiling of sulfatides in myelin from mouse brain using liquid chromatography coupled to high-resolution accurate tandem mass spectrometry. Analytica Chimica Acta, 2017, 951, 89-98.	2.6	12
81	Lipid and ganglioside alterations in tumor cells treated with antimitoticoleyl glycoside. Molecular BioSystems, 2011, 7, 129-138.	2.9	11
82	Effect of Drugs in Cells and Tissues by NMR Spectroscopy. Current Topics in Medicinal Chemistry, 2011, 11, 27-42.	1.0	11
83	Synthetic glycolipids for glioma growth inhibition developed from neurostatin and NF115 compound. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 435-439.	1.0	11
84	Preparation of Optically Active myo-Inositol Derivatives as Intermediates for the Synthesis of Inositol Phosphates. ACS Symposium Series, 1991, , 86-102.	0.5	10
85	Enzymatic ?-galactosidation of ?-xylopyranosides. Biotechnology Letters, 1991, 13, 705-710.	1.1	10
86	Conformational studies on β-galactopyranosyl-(1->3) and (1->4)-xylopyranosides by NMR, molecular mechanics, molecular dynamics, and semiempirical. Tetrahedron, 1994, 50, 6417-6432.	1.0	10
87	Synthesis of oligosaccharide inhibitors of neural cell division. Carbohydrate Research, 1992, 230, 185-190.	1.1	9
88	The preparation of phosphorylated intermediates for the synthesis of racemic and chiral myo-inositol 1,4,5-trisphosphate and its phosphorothioate analogues. Carbohydrate Research, 1992, 234, 157-175.	1.1	9
89	Stereocontrolled glycosylation of sordaricin in the presence of ammonium salts. Tetrahedron Letters, 2000, 41, 4373-4377.	0.7	9
90	Improvement and Validation of <scp>d</scp> â€Xylose Determination in Urine and Serum as a New Tool for the Noninvasive Evaluation of Lactase Activity in Humans. Journal of Clinical Laboratory Analysis, 2014, 28, 478-486.	0.9	9

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91	Assembly of glycoamino acid building blocks: a new strategy for the straightforward synthesis of heparan sulfate mimics. Chemical Communications, 2018, 54, 13455-13458.	2.2	9
92	The Effect of Antitumor Glycosides on Glioma Cells and Tissues as Studied by Proton HR-MAS NMR Spectroscopy. PLoS ONE, 2013, 8, e78391.	1.1	9
93	13C-N.m.r. studies of peracetylated derivatives of O-α- and O-β-d-galactopyranosyl-(1→3)- and -(1→4)-α-d-galactopyranose. Carbohydrate Research, 1987, 161, 144-149.	1.1	8
94	The regioselectivity of dibutylstannylene-mediated oxidation of methyl 3',4'-O-isopropylidene-α- and β-lactoside. A new synthesis of n -acetylllactosamine. Tetrahedron, 1988, 44, 4877-4882.	1.0	8
95	Syntheses of pharmaceutical oligosaccharides catalyzed by immobilized-stabilized derivatives of different β-galactosidases. Journal of Molecular Catalysis, 1993, 84, 373-379.	1.2	8
96	Specific Synthesis of Neurostatin and Gangliosides O-Acetylated in the Outer Sialic Acids Using a Sialate Transferase. PLoS ONE, 2012, 7, e49983.	1.1	8
97	An improved two-resin method for the cleavage of tertiary amines from REM resin. Tetrahedron Letters, 2001, 42, 6675-6678.	0.7	7
98	Straightforward functionalization of breath figures: Simultaneous orthogonal host–guest and pH-responsive interfaces. Journal of Colloid and Interface Science, 2015, 457, 272-280.	5.0	7
99	Editorial [Hot topic: Application of NMR Spectroscopy in Medicinal Chemistry and Drug Discovery (Guest Editors: Alfonso Fernandez-Mayoralas and Leoncio Garrido)]. Current Topics in Medicinal Chemistry, 2011, 11, 1-1.	1.0	6
100	Aqueous micro and nanoreactors based on alternating copolymers of phenylmaleimide and vinylpyrrolidone bearing pendant <scp>l</scp> â€proline stabilized with PEG grafted chains. Journal of Polymer Science Part A, 2017, 55, 1228-1236.	2.5	6
101	Biochemical profiling of rat embryonic stem cells grown on electrospun polyester fibers using synchrotron infrared microspectroscopy. Analytical and Bioanalytical Chemistry, 2018, 410, 3649-3660.	1.9	6
102	C-Terminal truncation of $\hat{l}\pm$ 1,6-fucosyltransferase from Rhizobium sp. does not annul the transferase activity of the enzyme. Bioorganic and Medicinal Chemistry, 2002, 10, 737-742.	1.4	5
103	Chemoenzymatic polymer-supported liquid phase synthesis of glucose Î ³ -aminobutyric ester. Tetrahedron Letters, 2003, 44, 2383-2385.	0.7	5
104	Polymeric Gene Carriers Bearing Pendant β-Cyclodextrin: The Relevance of Glycoside Permethylation on the "In Vitro―Cell Response. Macromolecular Rapid Communications, 2016, 37, 575-583.	2.0	5
105	Unraveling the Structural Landscape of Chitosan-Based Heparan Sulfate Mimics Binding to Growth Factors: Deciphering Structural Determinants for Optimal Activity. ACS Applied Materials & Interfaces, 2020, 12, 25534-25545.	4.0	5
106	Enzymatic synthesis of disaccharides by β-galactosidase-catalyzed glycosylation of a glycocluster. Journal of Molecular Catalysis B: Enzymatic, 2000, 11, 71-79.	1.8	4
107	Structure / Activity Relationship of Carba- and C-Fucopyranosides as Inhibitors of an α 1,6-Fucosyltransferase by Molecular Modeling and Kinetic Studies. Letters in Organic Chemistry, 2005, 2, 247-251.	0.2	4
108	Development of a new method for d-xylose detection and quantification in urine, based on the use of recombinant xylose dehydrogenase from Caulobacter crescentus. Journal of Biotechnology, 2016, 234, 50-57.	1.9	4

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109	Preparation and Characterization of Aminoglycoside-Loaded Chitosan/Tripolyphosphate/Alginate Microspheres against E. coli. Polymers, 2021, 13, 3326.	2.0	4
110	Acetonation of methyl \hat{I}^2 -maltoside with 2-methoxypropene. Carbohydrate Research, 1988, 182, 153-159.	1.1	3
111	Natural, synthetic and semisynthetic glycolipid inhibitors of glioma growth. Expert Opinion on Therapeutic Patents, 2004, 14, 487-497.	2.4	3
112	A study on partially biodegradable microparticles as carriers of active glycolipids. Acta Biomaterialia, 2010, 6, 1360-1369.	4.1	3
113	Simple and Practical Multigram Synthesis of <scp>d</scp> -Xylonate Using a Recombinant Xylose Dehydrogenase. ACS Omega, 2019, 4, 10593-10598.	1.6	3
114	Lipase-Catalyzed Regioselective Acetylations and Deacetylations of MeOPEG-Bound Xylopyranose. Letters in Organic Chemistry, 2004, 1, 173-175.	0.2	2
115	Novel synthetic sulfoglycolipid <scp>IG</scp> 20 facilitates exocytosis in chromaffin cells through the regulation of sodium channels. Journal of Neurochemistry, 2015, 135, 880-896.	2.1	2
116	Hydroxyl versus permethylated glycopolymers as gene carriers. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 117, 68-76.	2.0	2
117	p <i>K</i> _a Modulation of Pyrrolidine-Based Catalytic Polymers Used for the Preparation of Glycosyl Hydrazides at Physiological pH and Temperature. ACS Applied Bio Materials, 2020, 3, 1955-1967.	2.3	2
118	Novel sulfoglycolipid IG20 causes neuroprotection by activating the phase II antioxidant response in rat hippocampal slices. Neuropharmacology, 2017, 116, 110-121.	2.0	1
119	Analytical Validation of a New Enzymatic and Automatable Method for d-Xylose Measurement in Human Urine Samples. BioMed Research International, 2017, 2017, 1-9.	0.9	1
120	Enzymes in the Synthesis of Bioactive Compounds: The Prodigious Decades. ChemInform, 2004, 35, no.	0.1	0
121	Mass Spectrometry in Pharmacokinetic Studies of a Synthetic Compound for Spinal Cord Injury Treatment. BioMed Research International, 2015, 2015, 1-10.	0.9	0
122	Chemoenzymatic preparation of chondroitin sulfates with a defined sulfation pattern. New Biotechnology, 2016, 33, S43-S44.	2.4	0
123	Preparation of chondroitin derivatives for the recognition of neurotrophic factor. New Biotechnology, 2016, 33, S185.	2.4	0