Philippe Compain

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5686958/publications.pdf

Version: 2024-02-01

101	3,835	136950 32	138484 58
papers	citations	h-index	g-index

129	129	129	2636
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nucleophilic Ringâ€Opening of 1,6â€Anhydrosugars: Recent Advances and Applications in Organic Synthesis. European Journal of Organic Chemistry, 2021, 2021, 3501-3515.	2.4	5
2	Hybrid Multivalent Jack Bean Î±-Mannosidase Inhibitors: The First Example of Gold Nanoparticles Decorated with Deoxynojirimycin Inhitopes. Molecules, 2021, 26, 5864.	3.8	7
3	Multivalent Effect in Glycosidase Inhibition: The End of the Beginning. Chemical Record, 2020, 20, 10-22.	5.8	49
4	Conformationally constrained fused bicyclic iminosugars: synthetic challenges and opportunities. Arkivoc, 2020, 2019, 4-43.	0.5	9
5	N,O-Dialkyl deoxynojirimycin derivatives as CERT START domain ligands. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 126796.	2.2	6
6	Synthesis and Glycosidase Inhibition Properties of Calix[8]arene-Based Iminosugar Click Clusters. Pharmaceuticals, 2020, 13, 366.	3.8	8
7	Metalâ€Free Deoxygenation of Î±â€Hydroxy Carbonyl Compounds and Beyond. European Journal of Organic Chemistry, 2019, 2019, 6320-6332.	2.4	12
8	Stereoselective Synthesis of C,C-Glycosides from exo-Glycals Enabled by Iron-Mediated Hydrogen Atom Transfer. Organic Letters, 2019, 21, 7262-7267.	4.6	28
9	Selective Targeting of the Interconversion between Glucosylceramide and Ceramide by Scaffold Tailoring of Iminosugar Inhibitors. Molecules, 2019, 24, 354.	3.8	5
10	Tight-binding inhibition of jack bean Î±-mannosidase by glycoimidazole clusters. Organic and Biomolecular Chemistry, 2019, 17, 5801-5817.	2.8	10
11	Spiro Iminosugars: Structural Diversity and Synthetic Strategies. Topics in Heterocyclic Chemistry, 2019, , 261-290.	0.2	2
12	Metalâ€Free Iodineâ€Mediated Deoxygenation of Alcohols in the Position Î± to Electronâ€Withdrawing Groups. European Journal of Organic Chemistry, 2018, 2018, 1538-1545.	2.4	16
13	Giant Glycosidase Inhibitors: Firstâ€and Secondâ€Generation Fullerodendrimers with a Dense Iminosugar Shell. Chemistry - A European Journal, 2018, 24, 2483-2492.	3.3	33
14	Structural Basis of Outstanding Multivalent Effects in Jack Bean Î±â€Mannosidase Inhibition. Angewandte Chemie - International Edition, 2018, 57, 8002-8006.	13.8	44
15	One-Pot, Highly Stereoselective Synthesis of Dithioacetal-Î±,Î±-Diglycosides. Molecules, 2018, 23, 914.	3.8	9
16	An Expeditious Synthesis of 1-Thiotrehalose. Synthesis, 2018, 50, 3927-3930.	2.3	7
17	Glycomimetics: Design, Synthesis, and Therapeutic Applications. Molecules, 2018, 23, 1658.	3.8	19
18	Structural Basis of Outstanding Multivalent Effects in Jack Bean Î±â€Mannosidase Inhibition. Angewandte Chemie, 2018, 130, 8134-8138.	2.0	5

#	Article	IF	Citations
19	Stereocontrolled synthesis of polyhydroxylated bicyclic azetidines as a new class of iminosugars. Organic and Biomolecular Chemistry, 2018, 16, 4688-4700.	2.8	13
20	Iminosugar-based ceramide mimicry for the design of new CERT START domain ligands. Bioorganic and Medicinal Chemistry, 2017, 25, 1984-1989.	3.0	12
21	Stereodivergent synthesis of right- and left-handed iminoxylitol heterodimers and monomers. Study of their impact on Î²-glucocerebrosidase activity. Organic and Biomolecular Chemistry, 2017, 15, 3681-3705.	2.8	9
22	Construction of giant glycosidase inhibitors from iminosugar-substituted fullerene macromonomers. Journal of Materials Chemistry B, 2017, 5, 6546-6556.	5.8	26
23	Square sugars: challenges and synthetic strategies. Organic and Biomolecular Chemistry, 2017, 15, 3806-3827.	2.8	31
24	Catalytic Câ€“H amination at its limits: challenges and solutions. Organic Chemistry Frontiers, 2017, 4, 2500-2521.	4.5	146
25	Iminosugarâ€Cyclopeptoid Conjugates Raise Multivalent Effect in Glycosidase Inhibition at Unprecedented High Levels. Chemistry - A European Journal, 2016, 22, 5151-5155.	3.3	50
26	Investigation of original multivalent iminosugars as pharmacological chaperones for the treatment of Gaucher disease. Carbohydrate Research, 2016, 429, 98-104.	2.3	22
27	Understanding multivalent effects in glycosidase inhibition using C-glycoside click clusters as molecular probes. New Journal of Chemistry, 2016, 40, 7421-7430.	2.8	20
28	Pushing the limits of catalytic Câ€“H amination in polyoxygenated cyclobutanes. Organic and Biomolecular Chemistry, 2016, 14, 2780-2796.	2.8	13
29	A Convenient, Gram-Scale Synthesis of 1-Deoxymannojirimycin. Synthesis, 2016, 48, 1177-1180.	2.3	9
30	Iminosugars as a new class of cholinesterase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 830-833.	2.2	31
31	Synthesis of a new class of iminosugars based on constrained azaspirocyclic scaffolds by way of catalytic Câ€“H amination. Organic and Biomolecular Chemistry, 2015, 13, 9176-9180.	2.8	14
32	Design, synthesis and photochemical properties of the first examples of iminosugar clusters based on fluorescent cores. Beilstein Journal of Organic Chemistry, 2015, 11, 659-667.	2.2	22
33	Toward a Molecular Lego Approach for the Diversity-Oriented Synthesis of Cyclodextrin Analogues Designed as Scaffolds for Multivalent Systems. Journal of Organic Chemistry, 2015, 80, 10719-10733.	3.2	22
34	Synthesis of Amine-Containing Heterocycles by Metathesis Reactions: Recent Advances and Opportunities. Topics in Heterocyclic Chemistry, 2014, , 111-153.	0.2	14
35	Searching for Glycomimetics That Target Protein Misfolding in Rare Diseases: Successes, Failures, and Unexpected Progress Made in Organic Synthesis. Synlett, 2014, 25, 1215-1240.	1.8	26
36	Glucocerebrosidase Enhancers for Selected Gaucher Disease Genotypes by Modification of Î±â€1â€Câ€Substituted Iminoâ€<scp>D</scp>â€xylitols (DIXs) by Click Chemistry. ChemMedChem, 2014, 9, 1744-1754.	3.2	13

#	Article	IF	Citations
37	A Convergent Strategy for the Synthesis of Secondâ€Generation Iminosugar Clusters Using â€œClickableâ€• Trivalent Dendrons. European Journal of Organic Chemistry, 2014, 2014, 1866-1872.	2.4	42
38	A Systematic Investigation of Iminosugar Click Clusters as Pharmacological Chaperones for the Treatment of Gaucher Disease. ChemBioChem, 2014, 15, 309-319.	2.6	57
39	The Multivalent Effect in Glycosidase Inhibition: A New, Rapidly Emerging Topic in Glycoscience. ChemBioChem, 2014, 15, 1239-1251.	2.6	101
40	Iminosugar-based glycopolypeptides: glycosidase inhibition with bioinspired glycoprotein analogue micellar self-assemblies. Chemical Communications, 2014, 50, 3350-3352.	4.1	75
41	Synthesis of the first examples of iminosugar clusters based on cyclopeptoid cores. Beilstein Journal of Organic Chemistry, 2014, 10, 1406-1412.	2.2	38
42	Rescue of Functional CFTR Channels in Cystic Fibrosis: A Dramatic Multivalent Effect Using Iminosugar Clusterâ€Based Correctors. ChemBioChem, 2013, 14, 2050-2058.	2.6	39
43	The Multivalent Effect in Glycosidase Inhibition: Probing the Influence of Valency, Peripheral Ligand Structure, and Topology with Cyclodextrinâ€Based Iminosugar Click Clusters. ChemBioChem, 2013, 14, 2038-2049.	2.6	56
44	Stereoselective Synthesis of Î±â€Glycosyl Azides by TMSOTfâ€Mediated Ring Opening of 1,6â€Anhydro Sugars. European Journal of Organic Chemistry, 2013, 2013, 1963-1972.	2.4	17
45	Synthesis of 4-Membered Carbasugars by Way of Stereoselective SmI2-Mediated Aldehydeâ€“Alkene Cyclization. Journal of Organic Chemistry, 2013, 78, 6751-6757.	3.2	21
46	Cyclodextrinâ€Based Iminosugar Click Clusters: The First Examples of Multivalent Pharmacological Chaperones for the Treatment of Lysosomal Storage Disorders. ChemBioChem, 2012, 13, 661-664.	2.6	63
47	Synthesis of spirocyclopropyl Î³-lactams by tandem intramolecular azetidine ring-opening/closing cascade reaction: synthetic and mechanistic aspects. Tetrahedron, 2012, 68, 4117-4128.	1.9	25
48	Synthesis of Azide-armed Î±-1-C-Alkyl-imino-d-xylitol Derivatives as Key Building Blocks for the Preparation of Iminosugar Click Conjugates. Journal of Carbohydrate Chemistry, 2011, 30, 559-574.	1.1	16
49	Synthesis of Spirocyclopropyl Î³â€Lactams by a Highly Stereoselective Tandem Intramolecular Azetidine Ringâ€Opening/Closing Cascade Reaction. European Journal of Organic Chemistry, 2011, 2011, 6619-6623.	2.4	18
50	Secondâ€Generation Iminoxylitolâ€Based Pharmacological Chaperones for the Treatment of Gaucher Disease. ChemMedChem, 2011, 6, 353-361.	3.2	58
51	Inside Cover: Combating Cystic Fibrosis: In Search for CF Transmembrane Conductance Regulator (CFTR) Modulators / Second-Generation Iminoxylitol-Based Pharmacological Chaperones for the Treatment of Gaucher Disease (ChemMedChem 2/2011). ChemMedChem, 2011, 6, 210-210.	3.2	0
52	The Multivalent Effect in Glycosidase Inhibition: Probing the Influence of Architectural Parameters with Cyclodextrinâ€based Iminosugar Click Clusters. Chemistry - A European Journal, 2011, 17, 13825-13831.	3.3	93
53	1-C-Alkyl imino-d-xylitol and -l-arabinitol derivatives obtained via nucleophilic addition to pentose-derived N-tert-butanesulfinyl imines: sugar- versus chiral auxiliary-induced stereoselectivity. Tetrahedron: Asymmetry, 2011, 22, 609-612.	1.8	14
54	Concise Synthesis of Bicyclic Aminals by Way of Catalytic Intramolecular C-H Amination and Evaluation of Their Reactivity as Iminium Precursors. Letters in Organic Chemistry, 2011, 8, 155-162.	0.5	5

#	Article	IF	Citations
55	Glycosidase Inhibition with Fullerene Iminosugar Balls: A Dramatic Multivalent Effect. Angewandte Chemie - International Edition, 2010, 49, 5753-5756.	13.8	174
56	Synthesis of new Î²-1-C-alkylated imino-l-iditols: A comparative study of their activity as Î²-glucocerebrosidase inhibitors. Bioorganic and Medicinal Chemistry, 2010, 18, 2645-2650.	3.0	30
57	Tactics and strategies for the synthesis of iminosugar C-glycosides: a review. Tetrahedron: Asymmetry, 2009, 20, 672-711.	1.8	154
58	Stereodivergent Access to Polyhydroxylated 10-Azabicyclo[4.3.1]decanes as New Calystegine Analogues. Journal of Organic Chemistry, 2009, 74, 3179-3182.	3.2	24
59	Metal-Free One-Pot Oxidative Amidation of Aldoses with Functionalized Amines. Journal of Organic Chemistry, 2008, 73, 8647-8650.	3.2	24
60	Iterative Multifunctionalization of Unactivated Câ^'H Bonds in Piperidines by Way of Intramolecular Rh(II)-Catalyzed Aminations. Journal of Organic Chemistry, 2008, 73, 2155-2162.	3.2	32
61	Olefin Metathesis of Amineâ€Containing Systems: Beyond the Current Consensus. Advanced Synthesis and Catalysis, 2007, 349, 1829-1846.	4.3	157
62	Intramolecular rhodium-catalyzed activation of Î±-amino Câ€"H bonds: decisive influence of conformational factors in the synthesis of bicyclic aminals from N-sulfamoyloxyacetyl azacycloalkanes. Tetrahedron Letters, 2007, 48, 8531-8535.	1.4	21
63	Synthesis of 4-O-glycosylated 1-deoxynojirimycin derivatives as disaccharide mimics-based inhibitors of human Î²-glucocerebrosidase. Carbohydrate Research, 2007, 342, 1960-1965.	2.3	14
64	Looking forward: a glance into the future of organic chemistry. New Journal of Chemistry, 2006, 30, 823-831.	2.8	11
65	New Aspects of Catalytic Intramolecular Câ^'H Amination:â€‰ Unexpected Formation of a Seven-Membered Ring in Nitrogen-Containing Systems. Organic Letters, 2006, 8, 4493-4496.	4.6	61
66	Î±-1-C-Octyl-1-deoxynojirimycin as a pharmacological chaperone for Gaucher disease. Bioorganic and Medicinal Chemistry, 2006, 14, 7736-7744.	3.0	106
67	A stereodivergent approach to 1-deoxynojirimycin, 1-deoxygalactonojirimycin and 1-deoxymannojirimycin derivatives. Tetrahedron Letters, 2006, 47, 3081-3084.	1.4	19
68	Design and Synthesis of Highly Potent and Selective Pharmacological Chaperones for the Treatment of Gaucher's disease. ChemBioChem, 2006, 7, 1356-1359.	2.6	151
69	General synthesis and biological evaluation of Î±-1-C-substituted derivatives of fagomine (2-deoxynojirimycin-Î±-C-glycosides). Bioorganic and Medicinal Chemistry, 2005, 13, 2313-2324.	3.0	40
70	Design and synthesis of iminosugar-based inhibitors of glucosylceramide synthase: the search for new therapeutic agents against Gaucher disease. Tetrahedron: Asymmetry, 2005, 16, 1747-1756.	1.8	47
71	Intramolecular metal-catalyzed amination of pseudo-anomeric Câ€"H bonds. Tetrahedron Letters, 2005, 46, 4731-4735.	1.4	29
72	1,3-Dipolar Cycloaddition of Nitrilimines to 2,4-Disubstituted-3H-1, 5-Benzodiazepines: Remarkable Effect of C4-Substituent on Diastereoselectivity.. ChemInform, 2004, 35, no.	0.0	0

#	Article	IF	Citations
73	Synthesis and biological evaluation of the first example of an eight-membered iminoalditol. Tetrahedron Letters, 2004, 45, 579-581.	1.4	33
74	Î±-1-C-Alkyl-1-deoxynojirimycin derivatives as potent and selective inhibitors of intestinal isomaltase: remarkable effect of the alkyl chain length on glycosidase inhibitory profile. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 5991-5995.	2.2	51
75	Synthesis of a Novel Heterocyclic Ring System by Way of Highly Regio- and Chemoselective 1,3-Dipolar Cycloaddition of Nitrilimines to 1,3,4-Benzotriazepin-5-one Derivatives.. ChemInform, 2003, 34, no.	0.0	0
76	First stereocontrolled synthesis and biological evaluation of 1,6-dideoxy-l-nojirimycin. Tetrahedron: Asymmetry, 2003, 14, 47-51.	1.8	27
77	Ring-opening reactions of iminosugar-derived aziridines: application to the general synthesis of Î±-1-C-substituted derivatives of fagomine. Tetrahedron: Asymmetry, 2003, 14, 1969-1972.	1.8	21
78	General Access to Iminosugar C-Glycoside Building Blocks by Means of Cross-Metathesis:â€‰ A Gateway to Glycoconjugate Mimetics. Organic Letters, 2003, 5, 3269-3272.	4.6	55
79	1,3-Dipolar cycloaddition of nitrilimines to 2,4-disubstituted-3H-1,5-benzodiazepines: remarkable effect of C4-substituent on diastereoselectivity. New Journal of Chemistry, 2003, 27, 1644.	2.8	15
80	Peri and Regioselective Synthesis of New Heterocyclic Compounds from 1,5-Benzodiazepines. Synthetic Communications, 2003, 33, 19-27.	2.1	10
81	2-Naphthylmethyl (NAP) as a Versatile Amino Protecting Group, ChemoÂselective Removal under Mild Conditions. Synlett, 2003, 2003, 2065-2067.	1.8	0
82	Design, Synthesis and Biological Evaluation of Iminosugar-Based Glycosyltransferase Inhibitors. Current Topics in Medicinal Chemistry, 2003, 3, 541-560.	2.1	183
83	Synthesis of a novel heterocyclic ring system by way of highly regio- and chemoselective 1,3-dipolar cycloaddition of nitrilimines to 1,3,4-benzotriazepin-5-one derivatives. New Journal of Chemistry, 2002, 26, 1545-1548.	2.8	13
84	A General Strategy for the Practical Synthesis of NojirimycinC-Glycosides and Analogues. Extension to the First Reported Example of an Iminosugar 1-Phosphonate. Journal of Organic Chemistry, 2002, 67, 6960-6970.	3.2	64
85	Lewis acid promoted cyclocondensations of Î±-ketophosphonoenoates with dienesâ€”from Dielsâ€“Alder to hetero Dielsâ€“Alder reactions. Tetrahedron, 2002, 58, 6521-6529.	1.9	30
86	First total synthesis of (+)-hyacinthacine A2. Tetrahedron: Asymmetry, 2001, 12, 1807-1809.	1.8	71
87	Carbohydrate mimetics-based glycosyltransferase inhibitors. Bioorganic and Medicinal Chemistry, 2001, 9, 3077-3092.	3.0	319
88	A New, Stereocontrolled Approach to Iminosugar C-Glycosides from l-Sorbose. Organic Letters, 2000, 2, 2971-2974.	4.6	16
89	Reaction of the lithio-derivative of methoxy allene with SAMP-hydrazones: Access to enantiopure 3-pyrrolines. Tetrahedron Letters, 1999, 40, 5009-5012.	1.4	36
90	A facile synthesis of 3-alkoxy and 3-amino pyrroles. Tetrahedron Letters, 1999, 40, 8789-8792.	1.4	25

#	Article	IF	Citations
91	Revised structure of a homonojirimycin isomer from Aglaonema treubii: First example of a naturally occurring Î±-homoallonojirimycin. Bioorganic and Medicinal Chemistry Letters, 1999, 9, 3171-3174.	2.2	18
92	Rearrangement of Î±-hydroxy imines to Î±-amino ketones: Mechanistic aspects and synthetic applications. Tetrahedron, 1996, 52, 6647-6664.	1.9	33
93	Palladium(II)-catalyzed formation of Î³-butyrolactones from 4-trimethylsilyl-3-alkyn-1-ols: Synthetic and mechanistic aspects. Tetrahedron, 1996, 52, 10405-10416.	1.9	42
94	Thermal rearrangement of enantioenriched Î±-hydroxy imines -I. Enantiocontrolled synthesis of Î±-substituted Î±-amino ketones. Tetrahedron Letters, 1995, 36, 4059-4062.	1.4	19
95	Thermal rearrangement of enantioenriched Î±-hydroxy imines -II. Formal synthesis of (â˜)-perhydrohistrionicotoxin. Tetrahedron Letters, 1995, 36, 4063-4064.	1.4	15
96	A New and Convenient Synthesis of 1-Benzyl-1-azaspiro [5.5]-undecan-7-one: A Formal Synthesis of (Â±)-Perhydrohistrio-nicotoxin. Synthetic Communications, 1995, 25, 3075-3080.	2.1	3
97	A New Synthesis of Î³-ButyrolactonesviaPalladium(II)-Catalyzed Cyclization of Trimethylsilylalkynes. Synlett, 1994, 1994, 943-945.	1.8	18
98	Highly peri-, regio- and diastereoselective 1,3-dipolar cycloaddition of mesitonitrile oxide to 1,7-dimethyl-2,3-dihydro-1H-1,4-diazepines: unexpected one-step formation of a new triheterocyclic framework. New Journal of Chemistry, 0, , .	2.8	5
99	Naturally Occurring Iminosugars and Related Alkaloids: Structure, Activity and Applications. , 0, , 7-24.		7
100	Tables of Iminosugars, Their Biological Activities and their Potential as Therapeutic Agents. , 0, , 327-455.		5
101	Iminosugar-Based Glycosyltransferase Inhibitors. , 0, , 153-176.		5