Stefano Roelens

List of Publications by Year
in descending order

70 papers	2,570 citations	172457 29 h-index	197818 49 g-index
74 all docs	74 docs citations	74 times ranked	2058 citing authors

#	Article	IF	Citations
1	A Sulfonated Tweezer-Shaped Receptor Selectively Recognizes Caffeine in Water. Journal of Organic Chemistry, 2022, , .	3.2	0
2	Synthetic carbohydrate-binding agents neutralize SARS-CoV-2 by inhibiting binding of the spike protein to ACE2. IScience, 2022, 25, 104239.	4.1	7
3	A Simple Biomimetic Receptor Selectively Recognizing the GlcNAc 2 Disaccharide in Water. Angewandte Chemie, 2021, 133, 11268-11272.	2.0	5
4	A Simple Biomimetic Receptor Selectively Recognizing the GlcNAc 2 Disaccharide in Water. Angewandte Chemie - International Edition, 2021, 60, 11168-11172.	13.8	14
5	Molecular Recognition of Disaccharides in Water: Preorganized Macrocyclic or Adaptive Acyclic?. Chemistry - A European Journal, 2021, 27, 10456-10460.	3.3	6
6	A Preorganized Hydrogenâ€Bonding Motif for the Molecular Recognition of Carbohydrates. ChemPhysChem, 2020, 21, 257-262.	2.1	19
7	A Class of Potent Inhibitors of the HIV-1 Nucleocapsid Protein Based on Aminopyrrolic Scaffolds. ACS Medicinal Chemistry Letters, 2020, 11, 698-705.	2.8	4
8	Effective Recognition of Caffeine by Diaminocarbazolic Receptors. ChemPlusChem, 2020, 85, 1369-1373.	2.8	7
9	Tn antigen analogues: the synthetic way to â€œupgradeâ€•an attracting tumour associated carbohydrate antigen (TACA). Chemical Communications, 2019, 55, 7729-7736.	4.1	31
10	Biomimetic Carbohydrateâ€Binding Agents (CBAs): Binding Affinities and Biological Activities. ChemBioChem, 2019, 20, 1329-1346.	2.6	37
11	A Biomimetic Synthetic Receptor Selectively Recognising Fucose in Water. Chemistry - A European Journal, 2018, 24, 6828-6836.	3.3	52
12	Chloride anion transporters inhibit growth of methicillin-resistant Staphylococcus aureus (MRSA) in vitro. Chemical Communications, 2016, 52, 7560-7563.	4.1	37
13	Antiviral Activity of Synthetic Aminopyrrolic Carbohydrate Binding Agents: Targeting the Glycans of Viral gp120 to Inhibit HIV Entry. Chemistry - A European Journal, 2015, 21, 10089-10093.	3.3	28
14	A DAC tartrate-based gelator system featuring markedly improved gelation properties: enhancing lifetime and functionality of gel networks. CrystEngComm, 2015, 17, 8021-8030.	2.6	5
15	Synthetic aminopyrrolic receptors have apoptosis inducing activity. Chemical Science, 2015, 6, 7284-7292.	7.4	26
16	Phosphate binding by a novel Zn(ii) complex featuring a trans-1,2-diaminocyclohexane ligand. Effective anion recognition in water. Organic and Biomolecular Chemistry, 2015, 13, 1860-1868.	2.8	15
17	Systematic Dissection of an Aminopyrrolic Cage Receptor for Î²â€Glucopyranosides Reveals the Essentials for Effective Recognition. Chemistry - A European Journal, 2014, 20, 6081-6091.	3.3	38
18	Pyrrolic Tripodal Receptors for the Molecular Recognition of Carbohydrates: Ditopic Receptors for Dimannosides. Chemistry - A European Journal, 2013, 19, 11742-11752.	3.3	23

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19	A TRPA1 antagonist reverts oxaliplatin-induced neuropathic pain. Scientific Reports, 2013, 3, 2005.	3.3	58
20	Synthetic Tripodal Receptors for Carbohydrates. Pyrrole, a Hydrogen Bonding Partner for Saccharidic Hydroxyls. Journal of Organic Chemistry, 2012, 77, 7548-7554.	3.2	30
21	Aminopyrrolic Synthetic Receptors for Monosaccharides: A Class of Carbohydrateâ€Binding Agents Endowed with Antibiotic Activity versus Pathogenic Yeasts. Chemistry - A European Journal, 2012, 18, 5064-5072.	3.3	31
22	<i>BC</i>₅₀: A Generalized, Unifying Affinity Descriptor. Chemical Record, 2012, 12, 544-566.	5.8	24
23	Competition between gelation and crystallisation of a peculiar multicomponent liquid system based on ammonium salts. Soft Matter, 2012, 8, 3446.	2.7	45
24	Diels-Alder Based Synthesis of Glycomimetics. , 2012, , 240-254.		0
25	Pyrrolic tripodal receptors for carbohydrates. Role of functional groups and binding geometry on carbohydrate recognition. Organic and Biomolecular Chemistry, 2011, 9, 1085-1091.	2.8	24
26	Chiral Diaminopyrrolic Receptors for Selective Recognition of Mannosides, Part 1: Design, Synthesis, and Affinities of Secondâ€Generation Tripodal Receptors. Chemistry - A European Journal, 2011, 17, 4814-4820.	3.3	43
27	Chiral Diaminopyrrolic Receptors for Selective Recognition of Mannosides, Part 2: A 3D View of the Recognition Modes by Xâ€ray, NMR Spectroscopy, and Molecular Modeling. Chemistry - A European Journal, 2011, 17, 4821-4829.	3.3	35
28	Selective Recognition of Î²â€Mannosides by Synthetic Tripodal Receptors: A 3D View of the Recognition Mode by NMR. European Journal of Organic Chemistry, 2010, 2010, 64-71.	2.4	23
29	A Chiral Pyrrolic Tripodal Receptor Enantioselectively Recognizes Î²â€Mannose and Î²â€Mannosides. Chemistry - A European Journal, 2010, 16, 414-418.	3.3	50
30	Binding of Ionic Species: A General Approach To Measuring Binding Constants and Assessing Affinities. Chemistry - A European Journal, 2009, 15, 2635-2644.	3.3	48
31	Ionâ€Pair Binding: Is Binding Both Binding Better?. Chemistry - A European Journal, 2009, 15, 8296-8302.	3.3	49
32	Aromatic tripodal receptors for (C60-Ih)[5,6]fullerene. Organic and Biomolecular Chemistry, 2009, 7, 3871.	2.8	11
33	A Î²-Mannoside-Selective Pyrrolic Tripodal Receptor. Organic Letters, 2007, 9, 4685-4688.	4.6	54
34	A Tricatecholic Receptor for Carbohydrate Recognition:Â Synthesis and Binding Studies. Journal of Organic Chemistry, 2007, 72, 3933-3936.	3.2	30
35	Pyrrolic Tripodal Receptors Effectively Recognizing Monosaccharides. Affinity Assessment through a Generalized Binding Descriptor. Journal of the American Chemical Society, 2007, 129, 4377-4385.	13.7	84
36	A Self-Assembled Pyrrolic Cage Receptor Specifically Recognizes Î²-Glucopyranosides. Angewandte Chemie - International Edition, 2006, 45, 6693-6696.	13.8	140

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37	A High-Affinity Carbohydrate-Containing Inhibitor of Matrix Metalloproteinases. ChemMedChem, 2006, 1, 598-601.	3.2	28
38	A New Tripodal Receptor for Molecular Recognition of Monosaccharides. A Paradigm for Assessing Glycoside Binding Affinities and Selectivities by 1H NMR Spectroscopy. Journal of the American Chemical Society, 2004, 126, 16456-16465.	13.7	139
39	Binding of Acetylcholine and Tetramethylammonium to Flexible Cyclophane Receptors:â€‰ Improving on Binding Ability by Optimizing Host's Geometry. Journal of Organic Chemistry, 2004, 69, 3654-3661.	3.2	46
40	Binding of Tetramethylammonium to Polyether Side-Chained Aromatic Hosts. Evaluation of the Binding Contribution from Ether Oxygen Donors. Journal of Organic Chemistry, 2003, 68, 8149-8156.	3.2	22
41	Binding of Acetylcholine and Tetramethylammonium to a Cyclophane Receptor:Â Anion's Contribution to the Cationâ^'Ï€ Interaction. Journal of the American Chemical Society, 2002, 124, 8307-8315.	13.7	115
42	Supramolecular Structures by Recognition and Self-Assembly of Complementary Partners:â€‰ An Unprecedented Ionic Hydrogen-Bonded Triple-Stranded Helicate. Journal of Organic Chemistry, 2001, 66, 4930-4933.	3.2	31
43	Hydrogen bonded supramolecular structures: a further insight into the diamine-diol recognition and self-assembly. Canadian Journal of Chemistry, 2000, 78, 723-731.	1.1	7
44	Hydrogen bonded supramolecular structures: a further insight into the diamine-diol recognition and self-assembly. Canadian Journal of Chemistry, 2000, 78, 723-731.	1.1	0
45	Binding of Acetylcholine to a Cyclophane Host. Influence of Water and Reliability of NMR Measurements of Small Association Constants. Supramolecular Chemistry, 1999, 10, 225-232.	1.2	10
46	Electrostatic Attraction of Counterion Dominates the Cationâ^'Ï€ Interaction of Acetylcholine and Tetramethylammonium with Aromatics in Chloroform. Journal of the American Chemical Society, 1999, 121, 11908-11909.	13.7	60
47	Binding of Acetylcholine and Quaternary Ammonium Cations to Macrocyclic and Acyclic â€œPhaneâ€• Esters. Evaluation of the Cationâ^'Ï€ Primary Interaction through Adaptive Aromatic Hosts. Journal of the American Chemical Society, 1998, 120, 12443-12452.	13.7	72
48	Structure and Binding Properties of Four New Oligomeric Cyclophane Esters: 1,4-Xylylene 1,4-Phenylene Diacetates and Dipropionates. Australian Journal of Chemistry, 1998, 51, 361.	0.9	6
49	Organotin-Mediated Monoacylation of Diols with Reversed Chemoselectivity. Mechanism and Selectivity1. Journal of Organic Chemistry, 1996, 61, 5257-5263.	3.2	48
50	Molecular Recognition and Self-Assembly by Non-amidic Hydrogen Bonding. An Exceptional Assembler of Neutral and Charged Supramolecular Structures. Journal of the American Chemical Society, 1995, 117, 7630-7645.	13.7	135
51	Molecular Recognition and Self-Assembly by Weak Hydrogen Bonding: Unprecedented Supramolecular Helicate Structures from Diamine/Diol Motifs. Journal of the American Chemical Society, 1994, 116, 4495-4496.	13.7	109
52	Macrocyclization under thermodynamic control. A theoretical study and its application to the equilibrium cyclooligomerization of .beta.-propiolactone. Journal of the American Chemical Society, 1993, 115, 3901-3908.	13.7	186
53	A protocol for the efficient synthesis of enantiopure .beta.-substituted .beta.-lactones. Journal of Organic Chemistry, 1993, 58, 7932-7936.	3.2	47
54	Group 14 organometallic reagents. 11. Macrocyclic polylactones by catalyzed cyclooligomerization. Tetra[(S)-.beta.-butyrolactone]. Journal of Organic Chemistry, 1992, 57, 1472-1476.	3.2	18

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55	Group 14 organometallic reagents. 12. An improved procedure for the synthesis of macrocyclic poly(thialactones). The dramatic effect of reactant mixing. Journal of Organic Chemistry, 1992, 57, 766-768.	3.2	21
56	2,2-Di-n-butyl-1,3,2-dioxastannolane/di-n-butyltin dichloride: an excellent catalytic system for cyclo-oligomerization of lactones. Journal of the Chemical Society Chemical Communications, 1990, , 58.	2.0	11
57	Group 14 organometallic reagents. 9. Organotin-mediated monoacylation of diols with reversed chemoselectivity: a convenient synthetic method. Journal of Organic Chemistry, 1990, 55, 5132-5139.	3.2	62
58	Organotin-mediated synthesis of macrocyclic tetraesters. A combined proton NMR spectroscopy, gel permeation chromatography, and fast atom bombardment mass spectrometry approach to complete product analysis. Macromolecules, 1989, 22, 3275-3280.	4.8	15
59	Group 14 organometallic reagents. 8. Organotin-mediated synthesis of macrocyclic tetraesters: regio- and stereochemistry. Journal of Organic Chemistry, 1989, 54, 2643-2645.	3.2	8
60	13C NMR studies of d- and l-phenylalanine binding to cobalt(II) carboxypeptidase A. Journal of Inorganic Biochemistry, 1988, 32, 1-6.	3.5	23
61	Group 4 organometallic reagents. Part 6. The organotin-mediated monofunctionalization of diols: an insight into the selective monoesterification with acyl chlorides. Journal of the Chemical Society Perkin Transactions II, 1988, , 2105.	0.9	10
62	Organotin-mediated synthesis of macrocyclic polyesters: mechanism and selectivity in the reaction of dioxastannolanes with diacyl dichlorides. Journal of the Chemical Society Perkin Transactions II, 1988, , 1617.	0.9	12
63	Interaction of carbon dioxide and copper(II) carbonic anhydrase. Journal of the American Chemical Society, 1987, 109, 7855-7856.	13.7	29
64	Group 14 organometallic reagents. 4. Stereodynamics of substituted dioxastannolanes. Carbon-13 and tin-119 NMR studies. Journal of Organic Chemistry, 1987, 52, 4444-4449.	3.2	17
65	Group IVA organometallic reagents. 2. Enantiomeric purity determination of 1,2-diols through NMR spectroscopy without chiral auxiliaries. Journal of the American Chemical Society, 1986, 108, 4873-4878.	13.7	47
66	Regioselective acylation of glycols: evidence for organotin-mediated reversal of chemoselectivity. Journal of the Chemical Society Chemical Communications, 1985, , 1457.	2.0	19
67	Group 4 organometallic reagents. A 1H, 13C and 119Sn nuclear magnetic resonance study on 2,2-dibutyl-1,3,2-dioxastannolane structure in solution. Journal of the Chemical Society Perkin Transactions II, 1985, , 799.	0.9	13
68	Activated C,H-Acids:N-Alkyl-9-fluorenimines. Preliminary communication. Helvetica Chimica Acta, 1981, 64, 2524-2527.	1.6	2
69	Ring-closure reactions. 10. A kinetic study for the formation of macrocyclic aromatic ethers. Lack of the rigid group effect on large ring formation. Journal of Organic Chemistry, 1977, 42, 3733-3736.	3.2	5
70	Synthetic receptors for molecular recognition of carbohydrates. Carbohydrate Chemistry, 0, , 149-186.	0.3	7