Franck Fieschi

List of Publications by Year
in descending order

103 papers	5,985 citations	76196 40 h-index	76769 74 g-index
107 all docs	107 docs citations	107 times ranked	7054 citing authors

#	Article	IF	Citations
1	Immunization with synthetic SARS-CoV-2 S glycoprotein virus-like particles protects macaques from infection. Cell Reports Medicine, 2022, 3, 100528.	3.3	6
2	Glycomimetic ligands block the interaction of SARS-CoV-2 spike protein with C-type lectin co-receptors. Chemical Communications, 2022, 58, 5136-5139.	2.2	7
3	Identification of a two-component regulatory system involved in antimicrobial peptide resistance in Streptococcus pneumoniae. PLoS Pathogens, 2022, 18, e1010458.	2.1	9
4	Targeting Tn-Antigen-Positive Human Tumors with a Recombinant Human Macrophage Galactose C-Type Lectin. Molecular Pharmaceutics, 2022, 19, 235-245.	2.3	15
5	Precision Glycodendrimers for DCâ€SIGN Targeting**. European Journal of Organic Chemistry, 2022, 2022, .	1.2	3
6	Clinical, functional and genetic characterization of 16 patients suffering from chronic granulomatous disease variantsÂâ€"Âidentification of 11 novel mutations in CYBB. Clinical and Experimental Immunology, 2021, 203, 247-266.	1.1	14
7	Lectin recognition and hepatocyte endocytosis of GalNAc-decorated nanostructured lipid carriers. Journal of Drug Targeting, 2021, 29, 99-107.	2.1	9
8	Controlled density glycodendron microarrays for studying carbohydrateâ€"lectin interactions. Organic and Biomolecular Chemistry, 2021, 19, 7357-7362.	1.5	6
9	Synthesis, self-assembly and Langerin recognition studies of a resorcinarene-based glycocluster exposing a hyaluronic acid thiodisaccharide mimetic. Organic and Biomolecular Chemistry, 2021, 19, 6455-6467.	1.5	0
10	New lipophilic glycomimetic DC-SIGN ligands: Stereoselective synthesis and SPR-based binding inhibition assays. Bioorganic Chemistry, 2021, 107, 104566.	2.0	4
11	DC/L-SIGN recognition of spike glycoprotein promotes SARS-CoV-2 trans-infection and can be inhibited by a glycomimetic antagonist. PLoS Pathogens, 2021, 17, e1009576.	2.1	133
12	NADPH Oxidases (NOX): An Overview from Discovery, Molecular Mechanisms to Physiology and Pathology. Antioxidants, 2021, 10, 890.	2.2	239
13	Lipid bilayer degradation induced by SARS-CoV-2 spike protein as revealed by neutron reflectometry. Scientific Reports, 2021, 11, 14867.	1.6	21
14	Membrane-Bound Flavocytochrome MsrQ Is a Substrate of the Flavin Reductase Fre in <i>Escherichia coli</i>. ACS Chemical Biology, 2021, 16, 2547-2559.	1.6	3
15	Low-Valent Calix[4]arene Glycoconjugates Based on Hydroxamic Acid Bearing Linkers as Potent Inhibitors in a Model of Ebola Virus Cis-Infection and HCMV-gB-Recombinant Glycoprotein Interaction with MDDC Cells by Blocking DC-SIGN. Journal of Medicinal Chemistry, 2021, 64, 14332-14343.	2.9	5
16	Protein Mannosylation as a Diagnostic and Prognostic Biomarker of Lupus Nephritis: An Unusual Glycan Neoepitope in Systemic Lupus Erythematosus. Arthritis and Rheumatology, 2021, 73, 2069-2077.	2.9	15
17	SARS-CoV-2 spike protein removes lipids from model membranes and interferes with the capacity of high density lipoprotein to exchange lipids. Journal of Colloid and Interface Science, 2021, 602, 732-739.	5.0	18
18	Interdomain Flexibility within NADPH Oxidase Suggested by SANS Using LMNG Stealth Carrier. Biophysical Journal, 2020, 119, 605-618.	0.2	9

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19	Targeting of the C-Type Lectin Receptor Langerin Using Bifunctional Mannosylated Antigens. Frontiers in Cell and Developmental Biology, 2020, 8, 556.	1.8	13
20	Influence of the reducing-end anomeric configuration of the Man₉ epitope on DC-SIGN recognition. Organic and Biomolecular Chemistry, 2020, 18, 6086-6094.	1.5	6
21	TETRALEC, Artificial Tetrameric Lectins: A Tool to Screen Ligand and Pathogen Interactions. International Journal of Molecular Sciences, 2020, 21, 5290.	1.8	13
22	Chemoâ€Enzymatic Synthesis of <i>S. mansoni</i> Oâ€Glycans and Their Evaluation as Ligands for Câ€Type Lectin Receptors MGL, DCâ€SIGN, and DCâ€SIGNR. Chemistry - A European Journal, 2020, 26, 12818-12830.	1.7	4
23	Second-Generation Dendrimers with Chondroitin Sulfate Type-E Disaccharides as Multivalent Ligands for Langerin. Biomacromolecules, 2020, 21, 2726-2734.	2.6	6
24	Development of C-type lectin-oriented surfaces for high avidity glycoconjugates: towards mimicking multivalent interactions on the cell surface. Organic and Biomolecular Chemistry, 2020, 18, 4763-4772.	1.5	26
25	Photoswitching mechanism of a fluorescent protein revealed by time-resolved crystallography and transient absorption spectroscopy. Nature Communications, 2020, 11, 741.	5.8	56
26	Rapid Onâ€Chip Synthesis of Complex Glycomimetics from Nâ€Glycan Scaffolds for Improved Lectin Targeting. Chemistry - A European Journal, 2020, 26, 12809-12817.	1.7	7
27	Enhancing Potency and Selectivity of a DCâ€SIGN Glycomimetic Ligand by Fragmentâ€Based Design: Structural Basis. Chemistry - A European Journal, 2019, 25, 14659-14668.	1.7	25
28	Systematic Dual Targeting of Dendritic Cell C-Type Lectin Receptor DC-SIGN and TLR7 Using a Trifunctional Mannosylated Antigen. Frontiers in Chemistry, 2019, 7, 650.	1.8	37
29	Microbe-focused glycan array screening platform. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1958-1967.	3.3	71
30	Quantitative live-cell imaging and 3D modeling reveal critical functional features in the cytosolic complex of phagocyte NADPH oxidase. Journal of Biological Chemistry, 2019, 294, 3824-3836.	1.6	25
31	Unprecedented Thiacalixarene Fucoclusters as Strong Inhibitors of Ebola cis-Cell Infection and HCMV-gB Glycoprotein/DC-SIGN C-type Lectin Interaction. Bioconjugate Chemistry, 2019, 30, 1114-1126.	1.8	16
32	Human Macrophage Galactoseâ€Type Lectin (MGL) Recognizes the Outer Core of <i>Escherichia coli</i> Lipooligosaccharide. ChemBioChem, 2019, 20, 1778-1782.	1.3	21
33	Assemblies of lauryl maltose neopentyl glycol (LMNG) and LMNG-solubilized membrane proteins. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 939-957.	1.4	23
34	Fine Mapping the Interaction Between Dendritic Cell-Specific Intercellular Adhesion Molecule (ICAM)-3-Grabbing Nonintegrin and the Cytomegalovirus Envelope Glycoprotein B. Journal of Infectious Diseases, 2018, 218, 490-503.	1.9	12
35	Rational-Differential Design of Highly Specific Glycomimetic Ligands: Targeting DC-SIGN and Excluding Langerin Recognition. ACS Chemical Biology, 2018, 13, 600-608.	1.6	56
36	New branched amino acids for high affinity dendrimeric DC-SIGN ligands. Bioorganic and Medicinal Chemistry, 2018, 26, 1006-1015.	1.4	9

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37	Chromophore twisting in the excited state of a photoswitchable fluorescent protein captured by time-resolved serial femtosecond crystallography. Nature Chemistry, 2018, 10, 31-37.	6.6	152
38	Onâ€Chip Screening of a Glycomimetic Library with Câ€Type Lectins Reveals Structural Features Responsible for Preferential Binding of Dectinâ€2 over DCâ€SIGN/R and Langerin. Chemistry - A European Journal, 2018, 24, 14448-14460.	1.7	16
39	Chemoenzymatic Synthesis of N-glycan Positional Isomers and Evidence for Branch Selective Binding by Monoclonal Antibodies and Human C-type Lectin Receptors. ACS Chemical Biology, 2018, 13, 2269-2279.	1.6	38
40	Polyvalent C-glycomimetics based on <scp>l</scp>-fucose or <scp>d</scp>-mannose as potent DC-SIGN antagonists. Organic and Biomolecular Chemistry, 2017, 15, 3995-4004.	1.5	23
41	Facile access to pseudo-thio-1,2-dimannoside, a new glycomimetic DC-SIGN antagonist. Bioorganic and Medicinal Chemistry, 2017, 25, 5142-5147.	1.4	12
42	A Two-component NADPH Oxidase (NOX)-like System in Bacteria Is Involved in the Electron Transfer Chain to the Methionine Sulfoxide Reductase MsrP. Journal of Biological Chemistry, 2017, 292, 2485-2494.	1.6	35
43	Down-regulation of NOX2 activity in phagocytes mediated by ATM-kinase dependent phosphorylation. Free Radical Biology and Medicine, 2017, 113, 1-15.	1.3	25
44	Mannosylcalix[n]arenes as multivalent ligands for DC-SIGN. Carbohydrate Research, 2017, 453-454, 36-43.	1.1	18
45	The NOX Family of Proteins Is Also Present in Bacteria. MBio, 2017, 8, .	1.8	45
46	Solution Behavior of Amphiphilic Glycodendrimers with a Rodâ€Like Core. Macromolecular Bioscience, 2016, 16, 896-905.	2.1	8
47	Nonhydrolyzable C-disaccharides, a new class of DC-SIGN ligands. Carbohydrate Research, 2016, 435, 7-18.	1.1	12
48	Stereoselective innovative synthesis and biological evaluation of new real carba analogues of minimal epitope ManÎ±(1,2)Man as DC-SIGN inhibitors. RSC Advances, 2016, 6, 89578-89584.	1.7	16
49	Detection and quantitative analysis of two independent binding modes of a small ligand responsible for DC-SIGN clustering. Organic and Biomolecular Chemistry, 2016, 14, 335-344.	1.5	18
50	Designing nanomolar antagonists of DC-SIGN-mediated HIV infection: ligand presentation using molecular rods. Chemical Communications, 2015, 51, 3816-3819.	2.2	74
51	Alteration of the Langerin Oligomerization State Affects Birbeck Granule Formation. Biophysical Journal, 2015, 108, 666-677.	0.2	13
52	Langerinâ€“Heparin Interaction: Two Binding Sites for Small and Large Ligands As Revealed by a Combination of NMR Spectroscopy and Cross-Linking Mapping Experiments. Journal of the American Chemical Society, 2015, 137, 4100-4110.	6.6	61
53	DC-SIGN as a Target for Drug Development Based on Carbohydrates. , 2015, , 379-394.		2
54	Identification of NOX2 regions for normal biosynthesis of cytochrome <i>b</i>558 in phagocytes highlighting essential residues for p22<i>phox</i> binding. Biochemical Journal, 2014, 464, 425-437.	1.7	13

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55	A multivalent inhibitor of the DC-SIGN dependent uptake of HIV-1 and Dengue virus. Biomaterials, 2014, 35, 4175-4184.	5.7	105
56	Monovalent mannose-based DC-SIGN antagonists: Targeting the hydrophobic groove of the receptor. European Journal of Medicinal Chemistry, 2014, 75, 308-326.	2.6	29
57	Unique DC-SIGN Clustering Activity of a Small Glycomimetic: A Lesson for Ligand Design. ACS Chemical Biology, 2014, 9, 1377-1385.	1.6	47
58	Selective Targeting of Dendritic Cellâ€Specific Intercellular Adhesion Moleculeâ€3â€Grabbing Nonintegrin (DCâ€SIGN) with Mannoseâ€Based Glycomimetics: Synthesis and Interaction Studies of Bis(benzylamide) Derivatives of a Pseudomannobioside. Chemistry - A European Journal, 2013, 19, 4786-4797.	1.7	53
59	Multivalent glycoconjugates as anti-pathogenic agents. Chemical Society Reviews, 2013, 42, 4709-4727.	18.7	464
60	Structure of a Glycomimetic Ligand in the Carbohydrate Recognition Domain of C-type Lectin DC-SIGN. Structural Requirements for Selectivity and Ligand Design. Journal of the American Chemical Society, 2013, 135, 2518-2529.	6.6	75
61	Synthesis of a selective inhibitor of a fucose binding bacterial lectin from Burkholderia ambifaria. Organic and Biomolecular Chemistry, 2013, 11, 4086.	1.5	26
62	Synthesis and Characterization of Linkerâ€Armed Fucoseâ€Based Glycomimetics. European Journal of Organic Chemistry, 2013, 2013, 5303-5314.	1.2	18
63	A glycomimetic compound inhibits DC-SIGN-mediated HIV infection in cellular and cervical explant models. Aids, 2012, 26, 127-137.	1.0	58
64	Glycosaminoglycans Are Interactants of Langerin: Comparison with gp120 Highlights an Unexpected Calcium-Independent Binding Mode. PLoS ONE, 2012, 7, e50722.	1.1	42
65	Pseudosaccharide Functionalized Dendrimers as Potent Inhibitors of DC-SIGN Dependent Ebola Pseudotyped Viral Infection. Bioconjugate Chemistry, 2011, 22, 1354-1365.	1.8	82
66	Insights into molecular recognition of LewisX mimics by DC-SIGN using NMR and molecular modelling. Organic and Biomolecular Chemistry, 2011, 9, 7705.	1.5	21
67	Semen Clusterin Is a Novel DC-SIGN Ligand. Journal of Immunology, 2011, 187, 5299-5309.	0.4	65
68	Second generation of fucose-based DC-SIGN ligands : affinity improvement and specificity versus Langerin. Organic and Biomolecular Chemistry, 2011, 9, 5778.	1.5	60
69	NADPH oxidase (NOX) isoforms are inhibited by celastrol with a dual mode of action. British Journal of Pharmacology, 2011, 164, 507-520.	2.7	105
70	Investigating alternative acidic proteases for H/D exchange coupled to mass spectrometry: Plasmepsin 2 but not plasmepsin 4 is active under quenching conditions. Journal of the American Society for Mass Spectrometry, 2010, 21, 76-79.	1.2	29
71	p47 Molecular Activation for Assembly of the Neutrophil NADPH Oxidase Complex. Journal of Biological Chemistry, 2010, 285, 28980-28990.	1.6	41
72	Regulation of NADPH Oxidase Activity in Phagocytes. Journal of Biological Chemistry, 2010, 285, 33197-33208.	1.6	40

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73	Leukotriene BLT2 Receptor Monomers Activate the Gi2 GTP-binding Protein More Efficiently than Dimers. Journal of Biological Chemistry, 2010, 285, 6337-6347.	1.6	51
74	NADPH oxidase activator p67phox behaves in solution as a multidomain protein with semi-flexible linkers. Journal of Structural Biology, 2010, 169, 45-53.	1.3	278
75	Inhibition of DC-SIGN-Mediated HIV Infection by a Linear Trimannoside Mimic in a Tetravalent Presentation. ACS Chemical Biology, 2010, 5, 301-312.	1.6	115
76	DC-SIGN Neck Domain Is a pH-sensor Controlling Oligomerization. Journal of Biological Chemistry, 2009, 284, 21229-21240.	1.6	105
77	Conformational changes in p47^{phox} upon activation highlighted by mass spectrometry coupled to hydrogen/deuterium exchange and limited proteolysis. FEBS Letters, 2009, 583, 835-840.	1.3	22
78	Structural Studies of Langerin and Birbeck Granule: A Macromolecular Organization Model. Biochemistry, 2009, 48, 2684-2698.	1.2	64
79	Overproduction, purification and preliminary crystallographic analysis of the carbohydrate-recognition domain of human langerin. Acta Crystallographica Section F: Structural Biology Communications, 2008, 64, 115-118.	0.7	8
80	Synthesis of Novel DCâ€SIGN Ligands with an Î±â€Fucosylamide Anchor. ChemBioChem, 2008, 9, 1921-1930.	1.3	58
81	Saturation Transfer Difference (STD) NMR Spectroscopy Characterization of Dual Binding Mode of a Mannose Disaccharide to DCâ€SIGN. ChemBioChem, 2008, 9, 2225-2227.	1.3	63
82	Docking, synthesis, and NMR studies of mannosyl trisaccharide ligands for DC-SIGN lectin. Organic and Biomolecular Chemistry, 2008, 6, 2743.	1.5	37
83	Leu505 of Nox2 is crucial for optimal p67phox-dependent activation of the flavocytochromeb558during phagocytic NADPH oxidase assembly. Journal of Leukocyte Biology, 2007, 81, 238-249.	1.5	22
84	Mannose Glycoconjugates Functionalized at Positions 1 and 6. Binding Analysis to DC-SIGN Using Biosensors. Bioconjugate Chemistry, 2007, 18, 963-969.	1.8	21
85	1,2-Mannobioside Mimic: Synthesis, DC-SIGN Interaction by NMR and Docking, and Antiviral Activity. ChemMedChem, 2007, 2, 1030-1036.	1.6	73
86	Small-Angle X-ray Scattering Reveals an Extended Organization for the Autoinhibitory Resting State of the p47phoxModular Protein. Biochemistry, 2006, 45, 7185-7193.	1.2	32
87	CopH from Cupriavidus metallidurans CH34. A Novel Periplasmic Copper-Binding Protein. Biochemistry, 2006, 45, 5557-5566.	1.2	25
88	Mannose hyperbranched dendritic polymers interact with clustered organization of DC-SIGN and inhibit gp120 binding. FEBS Letters, 2006, 580, 2402-2408.	1.3	103
89	Effects of p47 C Terminus Phosphorylations on Binding Interactions with p40 and p67. Journal of Biological Chemistry, 2005, 280, 13752-13761.	1.6	65
90	Dendriticâ€cellâ€specific ICAM3â€grabbing nonâ€integrin is essential for the productive infection of human dendritic cells by mosquitoâ€cellâ€derived dengue viruses. EMBO Reports, 2003, 4, 723-728.	2.0	436

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91	DC-SIGN and L-SIGN Are High Affinity Binding Receptors for Hepatitis C Virus Glycoprotein E2. Journal of Biological Chemistry, 2003, 278, 20358-20366.	1.6	319
92	Human Cytomegalovirus Binding to DC-SIGN Is Required for Dendritic Cell Infection and Target Cell trans-Infection. Immunity, 2002, 17, 653-664.	6.6	329
93	Detection and characterization of merohedral twinning in two protein crystals: bacteriorhodopsin and p67phox. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 784-791.	2.5	7
94	Small Angle Neutron Scattering and Gel Filtration Analyses of Neutrophil NADPH Oxidase Cytosolic Factors Highlight the Role of the C-Terminal End of p47phox in the Association with p40phox. Biochemistry, 2001, 40, 3127-3133.	1.2	25
95	Crystal Structure of the Rac1â˜RhoGDI Complex Involved in NADPH Oxidase Activationâ€‚â€¡. Biochemistry, 2001, 40, 10007-10013.	1.2	127
96	The Active N-terminal Region of p67. Journal of Biological Chemistry, 2001, 276, 21627-21631.	1.6	79
97	The Active Form of the R2F Protein of Class Ib Ribonucleotide Reductase from Corynebacterium ammoniagenesIs a Diferric Protein. Journal of Biological Chemistry, 2000, 275, 25365-25371.	1.6	58
98	The NAD(P)H:Flavin Oxidoreductase from Escherichia coli. Journal of Biological Chemistry, 1999, 274, 18252-18260.	1.6	38
99	The Manganese-containing Ribonucleotide Reductase ofCorynebacterium ammoniagenes Is a Class Ib Enzyme. Journal of Biological Chemistry, 1998, 273, 4329-4337.	1.6	54
100	Is the NAD(P)H:Flavin Oxidoreductase from a Member of the Ferredoxin-NADP+ Reductase Family?. Journal of Biological Chemistry, 1996, 271, 16656-16661.	1.6	32
101	Cys5 and Cys214 of NAD(P)H:Flavin Oxidoreductase from Escherichia coli are Located in the Active Site. FEBS Journal, 1996, 237, 870-875.	0.2	6
102	The Mechanism and Substrate Specificity of the NADPH:Flavin Oxidoreductase from Escherichia coli. Journal of Biological Chemistry, 1995, 270, 30392-30400.	1.6	109
103	Inactivation of ribonucleotide reductase by nitric oxide. Biochemical and Biophysical Research Communications, 1991, 179, 442-448.	1.0	322