

Yann Chevolut

List of Publications by Year in descending order

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87
papers

2,460
citations

201674

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docs citations

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times ranked

2937
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface Modification of Titanium with Phosphonic Acid To Improve Bone Bonding: Characterization by XPS and ToF-SIMS. <i>Langmuir</i> , 2002, 18, 2582-2589.	3.5	311
2	Microwave Assisted "Click" Chemistry for the Synthesis of Multiple Labeled-Carbohydrate Oligonucleotides on Solid Support. <i>Journal of Organic Chemistry</i> , 2006, 71, 4700-4702.	3.2	188
3	DNA-Based Carbohydrate Biochips: A Platform for Surface Glyco-Engineering. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 2398-2402.	13.8	138
4	Biosensors and Bio-Bar Code Assays Based on Biofunctionalized Magnetic Microbeads. <i>Sensors</i> , 2007, 7, 589-614.	3.8	115
5	Fucosylated Pentaerythryl Phosphodiester Oligomers (PePOs): Automated Synthesis of DNA-Based Glycoclusters and Binding to <i>Pseudomonas aeruginosa</i> Lectin (PA-IL). <i>Bioconjugate Chemistry</i> , 2007, 18, 1637-1643.	3.6	96
6	Cloning and biochemical characterization of the fucanase FcnA: definition of a novel glycoside hydrolase family specific for sulfated fucans. <i>Glycobiology</i> , 2006, 16, 1021-1032.	2.5	95
7	Design of Triazole-Ethered Glycoclusters Exhibiting Three Different Spatial Arrangements and Comparative Study of their Affinities towards PA-IL and RCA 120 by Using a DNA-Based Glycoarray. <i>ChemBioChem</i> , 2009, 10, 1369-1378.	2.6	69
8	AFM investigation of <i>Pseudomonas aeruginosa</i> lectin LecA (PA-IL) filaments induced by multivalent glycoclusters. <i>Chemical Communications</i> , 2011, 47, 9483.	4.1	61
9	MARINE-EXPRESS: taking advantage of high throughput cloning and expression strategies for the post-genomic analysis of marine organisms. <i>Microbial Cell Factories</i> , 2010, 9, 45.	4.0	55
10	Complete assignment of ¹ H and ¹³ C NMR spectra of <i>Gigartina skottsbergii</i> λ-carrageenan using carrabiose oligosaccharides prepared by enzymatic hydrolysis. <i>Carbohydrate Research</i> , 2006, 341, 1859-1869.	2.3	53
11	Synthesis of a Library of Fucosylated Glycoclusters and Determination of their Binding toward <i>Pseudomonas aeruginosa</i> Lectin B (PA-IL) Using a DNA-Based Carbohydrate Microarray. <i>Bioconjugate Chemistry</i> , 2012, 23, 1534-1547.	3.6	51
12	Direct silanization of zirconia for increased biointegration. <i>Acta Biomaterialia</i> , 2016, 46, 323-335.	8.3	46
13	Oligonucleotide Carbohydrate-Centered Galactosyl Cluster Conjugates Synthesized by Click and Phosphoramidite Chemistries. <i>Bioconjugate Chemistry</i> , 2010, 21, 1520-1529.	3.6	43
14	DNA-directed immobilisation of glycomimetics for glycoarrays application: Comparison with covalent immobilisation, and development of an on-chip IC50 measurement assay. <i>Biosensors and Bioelectronics</i> , 2009, 24, 2515-2521.	10.1	42
15	Carbodiimide/NHS Derivatization of COOH-Terminated SAMs: Activation or Byproduct Formation?. <i>Langmuir</i> , 2014, 30, 4545-4550.	3.5	42
16	pH driven addressing of silicon nanowires onto Si ₃ N ₄ /SiO ₂ micro-patterned surfaces. <i>Nanotechnology</i> , 2016, 27, 295602.	2.6	42
17	Low-cost, fast prototyping method of fabrication of the microreactor devices in soda-lime glass. <i>Sensors and Actuators B: Chemical</i> , 2008, 128, 552-559.	7.8	41
18	Improvement of protein immobilization for the elaboration of tumor-associated antigen microarrays: Application to the sensitive and specific detection of tumor markers from breast cancer sera. <i>Biosensors and Bioelectronics</i> , 2013, 40, 385-392.	10.1	41

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19	Synthesis and Characterization of a Photoactivatable Glycoaryldiazirine for Surface Glycoengineering. <i>Bioconjugate Chemistry</i> , 1999, 10, 169-175.	3.6	39
20	Application of microfluidic chip with integrated optics for electrophoretic separations of proteins. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2007, 845, 218-225.	2.3	39
21	Structure Binding Relationship of Galactosylated Glycoclusters toward <i>Pseudomonas aeruginosa</i> Lectin LecA Using a DNA-Based Carbohydrate Microarray. <i>Bioconjugate Chemistry</i> , 2014, 25, 379-392.	3.6	36
22	Mannose-centered aromatic galactoclusters inhibit the biofilm formation of <i>Pseudomonas aeruginosa</i> . <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 8433-8444.	2.8	35
23	Synthesis of Homo- and Heterofunctionalized Glycoclusters and Binding to <i>Pseudomonas aeruginosa</i> Lectins PA-IL and PA-III. <i>Journal of Organic Chemistry</i> , 2012, 77, 7620-7626.	3.2	34
24	Characterization of Three Amino-Functionalized Surfaces and Evaluation of Antibody Immobilization for the Multiplex Detection of Tumor Markers Involved in Colorectal Cancer. <i>Langmuir</i> , 2013, 29, 1498-1509.	3.5	30
25	Toward the Rational Design of Galactosylated Glycoclusters That Target <i>Pseudomonas aeruginosa</i> Lectin A (LecA): Influence of Linker Arms That Lead to Low Nanomolar Multivalent Ligands. <i>Chemistry - A European Journal</i> , 2016, 22, 11785-11794.	3.3	29
26	Specific recognition of lectins by oligonucleotide glycoconjugates and sorting on a DNA microarray. <i>Chemical Communications</i> , 2009, , 6795.	4.1	28
27	Quantitative analysis (Kd and IC50) of glycoconjugates interactions with a bacterial lectin on a carbohydrate microarray with DNA Direct Immobilization (DDI). <i>Biosensors and Bioelectronics</i> , 2013, 40, 153-160.	10.1	28
28	The influence of the aromatic aglycon of galactoclusters on the binding of LecA: a case study with O-phenyl, S-phenyl, O-benzyl, S-benzyl, O-biphenyl and O-naphthyl aglycons. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 9166-9179.	2.8	28
29	DNA glycoclusters and DNA-based carbohydrate microarrays: From design to applications. <i>RSC Advances</i> , 2012, 2, 12043.	3.6	24
30	Importance of topology for glycocluster binding to <i>Pseudomonas aeruginosa</i> and <i>Burkholderia ambifaria</i> bacterial lectins. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 11244-11254.	2.8	24
31	Second harmonic spectroscopy of ZnO, BiFeO ₃ and LiNbO ₃ nanocrystals. <i>Optical Materials Express</i> , 2019, 9, 1955.	3.0	24
32	Multiplexed binding determination of seven glycoconjugates for <i>Pseudomonas aeruginosa</i> Lectin I (PA-IL) using a DNA-based carbohydrate microarray. <i>Chemical Communications</i> , 2011, 47, 8826.	4.1	22
33	Design and Synthesis of Galactosylated Bifurcated Ligands with Nanomolar Affinity for Lectin LecA from <i>Pseudomonas aeruginosa</i> . <i>ChemBioChem</i> , 2017, 18, 1036-1047.	2.6	22
34	The anti-adhesive effect of glycoclusters on <i>Pseudomonas aeruginosa</i> bacteria adhesion to epithelial cells studied by AFM single cell force spectroscopy. <i>Nanoscale</i> , 2018, 10, 12771-12778.	5.6	22
35	Impact of Silane Monolayers on the Adsorption of Streptavidin on Silica and Its Subsequent Interactions with Biotin: Molecular Dynamics and Steered Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2020, 124, 6786-6796.	2.6	22
36	Integrated microfluidic-microoptical systems fabricated by dry etching of soda-lime glass. <i>Microelectronic Engineering</i> , 2008, 85, 465-469.	2.4	20

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37	Silanization of silica and glass slides for DNA microarrays by impregnation and gas phase protocols: A comparative study. <i>Materials Science and Engineering C</i> , 2011, 31, 384-390.	7.3	20
38	Engineering and Characterization of Polymer Surfaces for Biomedical Applications. <i>Advances in Polymer Science</i> , 2003, , 1-34.	0.8	20
39	Impact of Ag@SiO ₂ core-shell nanoparticles on the photoelectric current of plasmonic inverted organic solar cells. <i>Synthetic Metals</i> , 2018, 239, 22-28.	3.9	19
40	Development of miniaturized immunoassay: Influence of surface chemistry and comparison with enzyme-linked immunosorbent assay and Western blot. <i>Analytical Biochemistry</i> , 2010, 400, 10-18.	2.4	18
41	Synthesis of Galactoclusters by Metal-Free Thiol-Click Chemistry and Their Binding Affinities for <i>Pseudomonas aeruginosa</i> Lectin LecA. <i>European Journal of Organic Chemistry</i> , 2014, 2014, 7621-7630.	2.4	17
42	DNA directed immobilization glycocluster array: applications and perspectives. <i>Current Opinion in Chemical Biology</i> , 2014, 18, 46-54.	6.1	16
43	Magnetic and optical properties of Ag@SiO ₂ -FITC-Fe ₃ O ₄ hybrid nanoparticles. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2014, 182, 92-95.	3.5	16
44	Plasmon-controlled narrower and blue-shifted fluorescence emission in (Au@SiO ₂)SiC nanohybrids. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	15
45	Cancer biomarkers detection using 3D microstructured protein chip: Implementation of customized multiplex immunoassay. <i>Sensors and Actuators B: Chemical</i> , 2012, 175, 22-28.	7.8	14
46	On the Reaction Pathways and Growth Mechanisms of LiNbO ₃ Nanocrystals from the Non-Aqueous Solvothermal Alkoxide Route. <i>Nanomaterials</i> , 2021, 11, 154.	4.1	14
47	Measurement of Enzymatic Activity and Specificity of Human and Avian Influenza Neuraminidases from Whole Virus by Glycoarray and MALDI-TOF Mass Spectrometry. <i>ChemBioChem</i> , 2011, 12, 2071-2080.	2.6	12
48	Luminescence nanothermometry with alkyl-capped silicon nanoparticles dispersed in nonpolar liquids. <i>Nanoscale Research Letters</i> , 2014, 9, 94.	5.7	12
49	Effects of the Surface Densities of Glycoclusters on the Determination of Their IC ₅₀ and IC ₅₀ Value Determination by Using a Microarray. <i>ChemBioChem</i> , 2015, 16, 2329-2336.	2.6	12
50	Anti-heat shock protein autoantibody profiling in breast cancer using customized protein microarray. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 1497-1506.	3.7	12
51	A Scanning Near-Field Optical Microscope Approach to Biomolecule Patterning. <i>Bioconjugate Chemistry</i> , 2001, 12, 332-336.	3.6	11
52	Autoantibodies against heat shock proteins as biomarkers for the diagnosis and prognosis of cancer. <i>Cancer Biomarkers</i> , 2017, 18, 105-116.	1.7	10
53	Fluorescent (Au@SiO ₂)SiC Nanohybrids: Influence of Gold Nanoparticle Diameter and SiC Nanoparticle Surface Density. <i>Plasmonics</i> , 2013, 8, 85-92.	3.4	9
54	Shape-selective purification of gold nanorods with low aspect ratio using a simple centrifugation method. <i>Gold Bulletin</i> , 2017, 50, 69-76.	2.4	9

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55	Glycoclusters with Additional Functionalities for Binding to the LecA Lectin from <i>Pseudomonas aeruginosa</i> . <i>ChemistrySelect</i> , 2017, 2, 10420-10427.	1.5	9
56	Click chemistry and Oligonucleotides: How a simple reaction can do so much. <i>Nucleic Acids Symposium Series</i> , 2008, 52, 47-48.	0.3	8
57	Use of magnetic field for addressing, grafting onto support and actuating permanent magnetic filaments applied to enhanced biodetection. <i>Journal of Materials Chemistry</i> , 2010, 20, 8266.	6.7	8
58	Fifty nanometer lines patterned into silica using water developable chitosan bioresist and electron beam lithography. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017, 35, .	1.2	8
59	Screening of a Library of Oligosaccharides Targeting Lectin LecB of <i>Pseudomonas Aeruginosa</i> and Synthesis of High Affinity Oligoglycoclusters. <i>Molecules</i> , 2018, 23, 3073.	3.8	8
60	Curious Binding Energy Increase between the Receptor-Binding Domain of the SARS-CoV-2 Spike Protein and Angiotensin-Converting Enzyme 2 Adsorbed on a Silane Monolayer from Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2021, 125, 11078-11090.	2.6	8
61	Glycoarray by DNA-Directed Immobilization. <i>Methods in Molecular Biology</i> , 2012, 808, 195-219.	0.9	8
62	Oxidized Titanium Tungsten Surface Functionalization by Silane-, Phosphonic Acid-, or Ortho-dihydroxyaryl-Based Organolayers. <i>Langmuir</i> , 2019, 35, 9554-9563.	3.5	7
63	Gold-seeded Lithium Niobate Nanoparticles: Influence of Gold Surface Coverage on Second Harmonic Properties. <i>Nanomaterials</i> , 2021, 11, 950.	4.1	7
64	Chitosan as a Water-Developable 193 nm Photoresist for Green Photolithography. <i>ACS Applied Polymer Materials</i> , 2022, 4, 4508-4519.	4.4	7
65	Polyamidoamine Dendrimers as Crosslinkers for Efficient Electron Transfer between Redox Probes onto Magnetic Nanoparticles. <i>ChemistrySelect</i> , 2018, 3, 2823-2829.	1.5	6
66	X-ray photoelectron spectroscopy investigation and characterisation of plasma polymerised isocyanatoethyl methacrylate. <i>Vacuum</i> , 2002, 68, 161-169.	3.5	5
67	Nanoparticles selectively immobilized onto large arrays of gold micro and nanostructures through surface chemical functionalizations. <i>Journal of Colloid and Interface Science</i> , 2015, 447, 152-158.	9.4	5
68	Quadratic nonlinear optics to assess the morphology of riboflavin doped chitosan for eco-friendly lithography. <i>Optical Materials</i> , 2018, 80, 30-36.	3.6	5
69	A generic surface chemistry for peptide microarrays implementation: Application to the detection of anti-H3 antibody. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1320-1325.	10.1	4
70	Orthogonal chemical functionalization of patterned gold on silica surfaces. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 2272-2277.	2.8	4
71	Biofunctionalized Magnetic Micro/Nanoparticles for Biosensing Technologies. , 0, , 169-197.		3
72	Microfluidic extraction and microarray detection of biomarkers from cancer tissue slides. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 034004.	2.6	3

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73	Orthogonal chemical functionalization of patterned Au/TiW substrate for selective immobilization of nanoparticles. <i>Nanotechnology</i> , 2019, 30, 325601.	2.6	3
74	Electroactive magnetic nanoparticles under magnetic attraction on a microchip electrochemical device. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 475, 345-351.	2.3	3
75	NANOTRAPS: Different Approaches for the Precise Placement of Micro and Nano-Objects from a Colloidal Dispersion Onto Nanometric Scale Sites of a Patterned Macroscopic Surface. <i>Journal of Colloid Science and Biotechnology</i> , 2013, 2, 249-262.	0.2	3
76	Sub-micron lines patterning into silica using water developable chitosan bioresist films for eco-friendly positive tone e-beam and UV lithography. , 2018, , .		3
77	Carbohydrates as Recognition Receptors in Biosensing Applications. , 2010, , 275-341.		2
78	X-ray-induced degradation of OEG-terminated SAMs on silica surfaces during XPS characterization. <i>Surface and Interface Analysis</i> , 2015, 47, 719-722.	1.8	2
79	Site-Selective Self-Assembly of Nano-Objects on a Planar Substrate Based on Surface Chemical Functionalization. <i>Advances in Atom and Single Molecule Machines</i> , 2015, , 93-112.	0.0	2
80	New concepts of integrated photonic biosensors based on porous silicon. , 0, , .		1
81	MICRO-FABRICATION PROCESS FOR AN INTEGRATED BIOSENSOR COMPOSED OF A SPR TRANSDUCER COUPLED TO A MICROCALORIMETRIC SENSOR. <i>International Journal of Nanoscience</i> , 2012, 11, 1240010.	0.7	1
82	Deciphering multivalent glycoclusterâ€œlectin interactions through AFM characterization of the self-assembled nanostructures. <i>Soft Matter</i> , 2019, 15, 7211-7218.	2.7	1
83	Nonlinear plasmonic nanohybrids as probes for multimodal cell imaging and potential phototherapeutic agents. <i>Biomedical Physics and Engineering Express</i> , 2019, 5, 025039.	1.2	1
84	Orthogonal Chemical Functionalization of Au/SiO ₂ /TiW Patterned Substrates. <i>Langmuir</i> , 2020, 36, 14960-14966.	3.5	1
85	Acid deprotection of covalently immobilized peptide probes on glass slides for peptide microarrays. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007, 2007, 2242-6.	0.5	0
86	Cancer Biomarkers Detection using Microstructured Protein Chip: Implementation of Customized Multiplex Immunoassay. <i>Procedia Engineering</i> , 2011, 25, 952-955.	1.2	0
87	Quantification of uPA in breast tumour tissue extracts by microarray immunoassay: Comparison with ELISA technology. <i>Journal of Applied Biomedicine</i> , 2018, 16, 214-220.	1.7	0