Mark Nitz

List of Publications by Year
in descending order

81 papers	2,926 citations	172207 29 h-index	189595 50 g-index
96 all docs	96 docs citations	96 times ranked	3811 citing authors

#	Article	IF	Citations
1	Highly multiparametric analysis by mass cytometry. Journal of Immunological Methods, 2010, 361, 1-20.	0.6	328
2	Polymer-Based Elemental Tags for Sensitive Bioassays. Angewandte Chemie - International Edition, 2007, 46, 6111-6114.	7.2	247
3	Study of Cell Antigens and Intracellular DNA by Identification of Element-Containing Labels and Metallointercalators Using Inductively Coupled Plasma Mass Spectrometry. Analytical Chemistry, 2008, 80, 2539-2547.	3.2	128
4	Development of analytical methods for multiplex bio-assay with inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2008, 23, 463.	1.6	115
5	Synthesis of a Functional Metal-Chelating Polymer and Steps toward Quantitative Mass Cytometry Bioassays. Analytical Chemistry, 2010, 82, 8961-8969.	3.2	105
6	Flow cytometer with mass spectrometer detection for massively multiplexed single-cell biomarker assay. Pure and Applied Chemistry, 2008, 80, 2627-2641.	0.9	97
7	Cell-type-specific signaling networks in heterocellular organoids. Nature Methods, 2020, 17, 335-342.	9.0	75
8	Patternâ€Based Recognition of Heparin Contaminants by an Array of Selfâ€Assembling Fluorescent Receptors. Angewandte Chemie - International Edition, 2009, 48, 1995-1997.	7.2	66
9	The Structure- and Metal-dependent Activity of Escherichia coli PgaB Provides Insight into the Partial De-N-acetylation of Poly-Î²-1,6-N-acetyl-d-glucosamine. Journal of Biological Chemistry, 2012, 287, 31126-31137.	1.6	65
10	Synthesis of scyllo-inositol derivatives and their effects on amyloid beta peptide aggregation. Bioorganic and Medicinal Chemistry, 2008, 16, 7177-7184.	1.4	64
11	Designing Fluorescent Sensors of Heparin. ChemBioChem, 2007, 8, 391-394.	1.3	63
12	PgaB orthologues contain a glycoside hydrolase domain that cleaves deacetylated poly-Î²(1,6)-N-acetylglucosamine and can disrupt bacterial biofilms. PLoS Pathogens, 2018, 14, e1006998.	2.1	59
13	Protecting Group Free Glycosidations Using <i>p</i>-Toluenesulfonohydrazide Donors. Organic Letters, 2008, 10, 3461-3463.	2.4	56
14	Small molecule <i>Î²</i>â€amyloid inhibitors that stabilize protofibrillar structures <i>in vitro</i> improve cognition and pathology in a mouse model of Alzheimerâ€™s disease. European Journal of Neuroscience, 2010, 31, 203-213.	1.2	53
15	Characterization of the Poly-Î²-1,6- <i>N</i> -Acetylglucosamine Polysaccharide Component of Burkholderia Biofilms. Applied and Environmental Microbiology, 2011, 77, 8303-8309.	1.4	50
16	Modification and periplasmic translocation of the biofilm exopolysaccharide poly-Î²-1,6- <i>N</i> -acetyl- <scp>d</scp> -glucosamine. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11013-11018.	3.3	48
17	Improving Lanthanide Nanocrystal Colloidal Stability in Competitive Aqueous Buffer Solutions using Multivalent PEG-Phosphonate Ligands. Langmuir, 2012, 28, 12861-12870.	1.6	44
18	Modulation of amyloidâ€Î² aggregation and toxicity by inosose stereoisomers. FEBS Journal, 2008, 275, 1663-1674.	2.2	43

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19	Stability studies of hydrazide and hydroxylamine-based glycoconjugates in aqueous solution. Carbohydrate Research, 2009, 344, 278-284.	1.1	43
20	Quantification of Surface Ligands on NaYF4 Nanoparticles by Three Independent Analytical Techniques. Chemistry of Materials, 2015, 27, 4899-4910.	3.2	39
21	Identification of Hypoxic Cells Using an Organotellurium Tag Compatible with Mass Cytometry. Angewandte Chemie - International Edition, 2014, 53, 11473-11477.	7.2	37
22	Organotellurium scaffolds for mass cytometry reagent development. Organic and Biomolecular Chemistry, 2015, 13, 7027-7033.	1.5	36
23	Ega3 from the fungal pathogen Aspergillus fumigatus is an endo-Î±-1,4-galactosaminidase that disrupts microbial biofilms. Journal of Biological Chemistry, 2019, 294, 13833-13849.	1.6	35
24	Efficient synthesis and protein conjugation of Î²-(1â†’6)-d-N-acetylglucosamine oligosaccharides from the polysaccharide intercellular adhesin. Carbohydrate Research, 2009, 344, 570-575.	1.1	34
25	Sodium/myo-Inositol Transporters: Substrate Transport Requirements and Regional Brain Expression in the TgCRND8 Mouse Model of Amyloid Pathology. PLoS ONE, 2011, 6, e24032.	1.1	34
26	Lanthanide nanoparticles for high sensitivity multiparameter single cell analysis. Chemical Science, 2019, 10, 2965-2974.	3.7	34
27	Development of inductively coupled plasmaâ€“mass spectrometry-based protease assays. Analytical Biochemistry, 2010, 398, 93-98.	1.1	33
28	Functional PEGâ€“PAMAM-Tetraphosphonate Capped NaLnF₄ Nanoparticles and their Colloidal Stability in Phosphate Buffer. Langmuir, 2014, 30, 6980-6989.	1.6	33
29	Functional Characterization of <i>Staphylococcus epidermidis</i> IcaB, a De-<i>N</i>-acetylase Important for Biofilm Formation. Biochemistry, 2013, 52, 5463-5471.	1.2	32
30	Isotopologous Organotellurium Probes Reveal Dynamic Hypoxia In Vivo with Cellular Resolution. Angewandte Chemie - International Edition, 2016, 55, 13159-13163.	7.2	32
31	Protecting-Group-Free Synthesis of Glycosyl 1â€“Phosphates. Organic Letters, 2012, 14, 4226-4229.	2.4	31
32	The Protein BpsB Is a Poly-Î²-1,6-N-acetyl-d-glucosamine Deacetylase Required for Biofilm Formation in Bordetella bronchiseptica. Journal of Biological Chemistry, 2015, 290, 22827-22840.	1.6	31
33	Development of mass cytometry methods for bacterial discrimination. Analytical Biochemistry, 2011, 419, 1-8.	1.1	30
34	Peptideâ€“glycosaminoglycan cluster formation involving cell penetrating peptides. Biopolymers, 2011, 95, 722-731.	1.2	30
35	ICP-MS-Based Multiplex Profiling of Glycoproteins Using Lectins Conjugated to Lanthanide-Chelating Polymers. Journal of Proteome Research, 2009, 8, 443-449.	1.8	29
36	Importance of the spatial display of charged residues in heparinâ€“peptide interactions. Biopolymers, 2010, 93, 290-298.	1.2	29

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37	Multiplexed protease assays using element-tagged substrates. Analytical Biochemistry, 2011, 408, 157-159.	1.1	28
38	Use of<i>N</i>,<i>O</i>-Dimethylhydroxylamine As an Anomeric Protecting Group in Carbohydrate Synthesis. Journal of Organic Chemistry, 2011, 76, 1918-1921.	1.7	26
39	Allosteric modulation of the adenosine A2A receptor by cholesterol. ELife, 2022, 11, .	2.8	25
40	Structural Basis for the De-N-acetylation of Poly-Î²-1,6-N-acetyl-d-glucosamine in Gram-positive Bacteria. Journal of Biological Chemistry, 2014, 289, 35907-35917.	1.6	24
41	Multiplexed single-cell analysis of organoid signaling networks. Nature Protocols, 2021, 16, 4897-4918.	5.5	23
42	Remarkably stable inclusion complexes with heptakis-[6-deoxy-6-(2-aminoethylsulfanyl)]-Î²-cyclodextrin. Organic and Biomolecular Chemistry, 2008, 6, 4622.	1.5	22
43	Synthesis and evaluation of inhibitors of E. coli PgaB, a polysaccharide de-N-acetylase involved in biofilm formation. Organic and Biomolecular Chemistry, 2012, 10, 7103.	1.5	22
44	A High-Sensitivity Lanthanide Nanoparticle Reporter for Mass Cytometry: Tests on Microgels as a Proxy for Cells. Langmuir, 2014, 30, 3142-3153.	1.6	22
45	Telluriumâ€based mass cytometry barcode for live and fixed cells. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2018, 93, 685-694.	1.1	22
46	TePhe, a tellurium-containing phenylalanine mimic, allows monitoring of protein synthesis in vivo with mass cytometry. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8155-8160.	3.3	22
47	A Î²-galactosidase probe for the detection of cellular senescence by mass cytometry. Organic and Biomolecular Chemistry, 2017, 15, 6388-6392.	1.5	21
48	The synthesis and photophysical properties of halide sensitive acridizinium dyes. Dyes and Pigments, 2009, 81, 161-165.	2.0	17
49	Synthesis and preliminary biological evaluations of [18F]-1-deoxy-1-fluoro-scyllo-inositol. Chemical Communications, 2009, , 5527.	2.2	17
50	Protecting-group-free O-glysosidation using p-toluenesulfonohydrazide and glycosyl chloride donors. Carbohydrate Research, 2014, 386, 73-77.	1.1	16
51	Evaluation of a Ruthenium coordination complex as photosensitizer for PDT of bladder cancer: Cellular response, tissue selectivity and in vivo response. Translational Biophotonics, 2020, 2, e201900032.	1.4	16
52	In Vivo Uptake of β-Amyloid by Non-Plaque Associated Microglia. Current Alzheimer Research, 2012, 9, 890-901.	0.7	15
53	Combining<i>in situ</i>proteolysis and mass spectrometry to crystallize<i>Escherichia coli</i>PgaB. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 842-845.	0.7	14
54	DNA directed damage using a brominated DAPI derivative. Chemical Communications, 2019, 55, 9971-9974.	2.2	13

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55	An Inactive Dispersin B Probe for Monitoring PNAG Production in Biofilm Formation. ACS Chemical Biology, 2020, 15, 1204-1211.	1.6	13
56	Mono-acylation of a polyamine-Î²-cyclodextrin based on guest mediated acyl migration. Chemical Communications, 2011, 47, 8614.	2.2	11
57	Direct Staudingerâ€“Phosphonite Reaction Provides Methylphosphonamidates as Inhibitors of CE4 Deâ€Nâ€acetylases. ChemBioChem, 2015, 16, 1350-1356.	1.3	11
58	Synthesis of defined mono-de-N-acetylated Î²-(1â†’6)-N-acetyl-d-glucosamine oligosaccharides to characterize PgaB hydrolase activity. Organic and Biomolecular Chemistry, 2019, 17, 9456-9466.	1.5	11
59	Heparin Dependent Coiledâ€Coil Formation. ChemBioChem, 2008, 9, 1545-1548.	1.3	10
60	AÎ²(1-42) Assembly in the Presence of <i>scyllo</i>-Inositol Derivatives: Identification of an Oxime Linkage as Important for the Development of Assembly Inhibitors. ACS Chemical Neuroscience, 2012, 3, 167-177.	1.7	10
61	Monosaccharide inhibitors targeting carbohydrate esterase family 4 de-N-acetylases. Bioorganic and Medicinal Chemistry, 2018, 26, 5631-5643.	1.4	10
62	PelX is a UDP-N-acetylglucosamine C4-epimerase involved in Pel polysaccharideâ€“dependent biofilm formation. Journal of Biological Chemistry, 2020, 295, 11949-11962.	1.6	10
63	Isotopologous Organotellurium Probes Reveal Dynamic Hypoxia In Vivo with Cellular Resolution. Angewandte Chemie, 2016, 128, 13353-13357.	1.6	9
64	Synthesis of C6-substituted UDP-GlcNAc derivatives. Carbohydrate Research, 2020, 495, 108071.	1.1	9
65	A new ELISA assay demonstrates sex differences in the concentration of serum polysialic acid. Analytical Biochemistry, 2020, 600, 113743.	1.1	9
66	Chromogenic Carbamate and Acetal Substrates for Glycosaminidases. Journal of Carbohydrate Chemistry, 2011, 30, 549-558.	0.4	8
67	TBAF Effects 3,6-Anhydro Formation from 6-O-Tosyl Pyranosides. Organic Letters, 2020, 22, 1453-1457.	2.4	8
68	Synthesis of a core disaccharide from the Streptococcus pneumoniae type 23F capsular polysaccharide antigen. Carbohydrate Research, 2010, 345, 2282-2286.	1.1	7
69	Access to Versatile Î²â€Cyclodextrin Scaffolds through Guestâ€Mediated Monoacylation. Chemistry - A European Journal, 2016, 22, 1062-1069.	1.7	6
70	Highly Functionalized Î²â€Cyclodextrins by Solidâ€Supported Synthesis. Chemistry - A European Journal, 2018, 24, 4459-4467.	1.7	6
71	Applications of an inactive Dispersin B probe to monitor biofilm polysaccharide production. Methods in Enzymology, 2022, 665, 209-231.	0.4	6
72	Structural and functional analysis of deâ€<i>N</i>â€acetylase PgaB from periodontopathogen <i>Aggregatibacter actinomycetemcomitans</i>. Molecular Oral Microbiology, 2017, 32, 324-340.	1.3	5

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73	Signal Amplification for Imaging Mass Cytometry. Bioconjugate Chemistry, 2019, 30, 2805-2810.	1.8	5
74	Methods for analyzing tellurium imaging mass cytometry data. PLoS ONE, 2019, 14, e0221714.	1.1	5
75	Intrinsic Turnâ€On Response of Thioflavinâ€...T in Complexes. Chemistry - A European Journal, 2020, 26, 3479-3483.	1.7	5
76	Site specific protein O-glucosylation with bacterial toxins. Chemical Communications, 2016, 52, 13024-13026.	2.2	4
77	Efficacy of ruthenium coordination complexâ€"based Rutherrin in a preclinical rat glioblastoma model. Neuro-Oncology Advances, 2019, 1, vdz006.	0.4	4
78	Validation oflâ€Tellurienylalanine as a Phenylalanine Isostere. ChemBioChem, 2020, 21, 1136-1139.	1.3	4
79	Termination of Poly-<i>N</i>-acetylglucosamine (PNAG) Polymerization with <i>N</i>-Acetylglucosamine Analogues. ACS Chemical Biology, 2022, 17, 3036-3046.	1.6	4
80	An Iodinated DAPIâ€Based Reagent for Mass Cytometry. ChemBioChem, 2021, 22, 532-538.	1.3	2
81	Incorporation of TePhe into Expressed Proteins is Minimally Perturbing. ChemBioChem, 2021, 22, 2449-2456.	1.3	1