

Gary E Siuzdak

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

203
papers

26,386
citations

70
h-index

161
g-index

213
ext. papers

30,673
ext. citations

10.4
avg, IF

7.08
L-index

#	Paper	IF	Citations
203	XCMS: processing mass spectrometry data for metabolite profiling using nonlinear peak alignment, matching, and identification. <i>Analytical Chemistry</i> , 2006 , 78, 779-87	7.8	3048
202	Metabolomics analysis reveals large effects of gut microflora on mammalian blood metabolites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 3698-703	11.5	1696
201	METLIN: a metabolite mass spectral database. <i>Therapeutic Drug Monitoring</i> , 2005 , 27, 747-51	3.2	1623
200	Innovation: Metabolomics: the apogee of the omics trilogy. <i>Nature Reviews Molecular Cell Biology</i> , 2012 , 13, 263-9	48.7	1517
199	Generation of induced pluripotent stem cells using recombinant proteins. <i>Cell Stem Cell</i> , 2009 , 4, 381-4	18	1469
198	Metabolomics: beyond biomarkers and towards mechanisms. <i>Nature Reviews Molecular Cell Biology</i> , 2016 , 17, 451-9	48.7	967
197	Desorption-ionization mass spectrometry on porous silicon. <i>Nature</i> , 1999 , 399, 243-6	50.4	959
196	XCMS Online: a web-based platform to process untargeted metabolomic data. <i>Analytical Chemistry</i> , 2012 , 84, 5035-9	7.8	799
195	METLIN: A Technology Platform for Identifying Knowns and Unknowns. <i>Analytical Chemistry</i> , 2018 , 90, 3156-3164	7.8	461
194	Clathrate nanostructures for mass spectrometry. <i>Nature</i> , 2007 , 449, 1033-6	50.4	426
193	Metabolic oxidation regulates embryonic stem cell differentiation. <i>Nature Chemical Biology</i> , 2010 , 6, 411-7	11.7	396
192	The metabolome of induced pluripotent stem cells reveals metabolic changes occurring in somatic cell reprogramming. <i>Cell Research</i> , 2012 , 22, 168-77	24.7	388
191	An accelerated workflow for untargeted metabolomics using the METLIN database. <i>Nature Biotechnology</i> , 2012 , 30, 826-8	44.5	378
190	Solvent-dependent metabolite distribution, clustering, and protein extraction for serum profiling with mass spectrometry. <i>Analytical Chemistry</i> , 2006 , 78, 743-52	7.8	336
189	Porous silicon as a versatile platform for laser desorption/ionization mass spectrometry. <i>Analytical Chemistry</i> , 2001 , 73, 612-9	7.8	309
188	Microbial metalloproteomes are largely uncharacterized. <i>Nature</i> , 2010 , 466, 779-82	50.4	292
187	Liquid chromatography quadrupole time-of-flight mass spectrometry characterization of metabolites guided by the METLIN database. <i>Nature Protocols</i> , 2013 , 8, 451-60	18.8	288

186	Assignment of endogenous substrates to enzymes by global metabolite profiling. <i>Biochemistry</i> , 2004 , 43, 14332-9	3.2	278
185	Identification of bioactive metabolites using activity metabolomics. <i>Nature Reviews Molecular Cell Biology</i> , 2019 , 20, 353-367	48.7	258
184	Interactive XCMS Online: simplifying advanced metabolomic data processing and subsequent statistical analyses. <i>Analytical Chemistry</i> , 2014 , 86, 6931-9	7.8	254
183	Nonlinear data alignment for UPLC-MS and HPLC-MS based metabolomics: quantitative analysis of endogenous and exogenous metabolites in human serum. <i>Analytical Chemistry</i> , 2006 , 78, 3289-95	7.8	252
182	From exogenous to endogenous: the inevitable imprint of mass spectrometry in metabolomics. <i>Journal of Proteome Research</i> , 2007 , 6, 459-68	5.6	241
181	An assembly landscape for the 30S ribosomal subunit. <i>Nature</i> , 2005 , 438, 628-32	50.4	214
180	High sensitivity and analyte capture with desorption/ionization mass spectrometry on silylated porous silicon. <i>Analytical Chemistry</i> , 2004 , 76, 4484-9	7.8	211
179	Expanding coverage of the metabolome for global metabolite profiling. <i>Analytical Chemistry</i> , 2011 , 83, 2152-61	7.8	207
178	Toward omic scale metabolite profiling: a dual separation-mass spectrometry approach for coverage of lipid and central carbon metabolism. <i>Analytical Chemistry</i> , 2013 , 85, 6876-84	7.8	204
177	Metabolism links bacterial biofilms and colon carcinogenesis. <i>Cell Metabolism</i> , 2015 , 21, 891-7	24.6	201
176	Multiple organic anion transporters contribute to net renal excretion of uric acid. <i>Physiological Genomics</i> , 2008 , 33, 180-92	3.6	178
175	The expanding role of mass spectrometry in metabolite profiling and characterization. <i>ChemBioChem</i> , 2005 , 6, 1941-51	3.8	175
174	Desorption/ionization on silicon (DIOS) mass spectrometry: background and applications. <i>International Journal of Mass Spectrometry</i> , 2003 , 226, 107-116	1.9	170
173	Multiple ionization mass spectrometry strategy used to reveal the complexity of metabolomics. <i>Analytical Chemistry</i> , 2008 , 80, 421-9	7.8	163
172	Metabolomics activity screening for identifying metabolites that modulate phenotype. <i>Nature Biotechnology</i> , 2018 , 36, 316-320	44.5	160
171	Investigating Molecular Recognition by Mass Spectrometry: Characterization of Calixarene-Based Self-Assembling Capsule Hosts with Charged Guests. <i>Journal of the American Chemical Society</i> , 1999 , 121, 4568-4579	16.4	159
170	Evidence of viral capsid dynamics using limited proteolysis and mass spectrometry. <i>Journal of Biological Chemistry</i> , 1998 , 273, 673-6	5.4	149
169	Data processing, multi-omic pathway mapping, and metabolite activity analysis using XCMS Online. <i>Nature Protocols</i> , 2018 , 13, 633-651	18.8	141

168	Metabolomics implicates altered sphingolipids in chronic pain of neuropathic origin. <i>Nature Chemical Biology</i> , 2012 , 8, 232-4	11.7	141
167	Membrane cofactor protein is a receptor for adenoviruses associated with epidemic keratoconjunctivitis. <i>Journal of Virology</i> , 2004 , 78, 3897-905	6.6	141
166	Endothelial targeting of cowpea mosaic virus (CPMV) via surface vimentin. <i>PLoS Pathogens</i> , 2009 , 5, e1000417	10.4	137
165	Meta-analysis of untargeted metabolomic data from multiple profiling experiments. <i>Nature Protocols</i> , 2012 , 7, 508-16	18.8	135
164	Nanostructure-initiator mass spectrometry metabolite analysis and imaging. <i>Analytical Chemistry</i> , 2011 , 83, 2-7	7.8	135
163	Metabolomics identifies perturbations in human disorders of propionate metabolism. <i>Clinical Chemistry</i> , 2007 , 53, 2169-76	5.5	134
162	A nanostructure-initiator mass spectrometry-based enzyme activity assay. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 3678-83	11.5	132
161	ABHD12 controls brain lysophosphatidylserine pathways that are deregulated in a murine model of the neurodegenerative disease PHARC. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 1500-5	11.5	129
160	Systems biology guided by XCMS Online metabolomics. <i>Nature Methods</i> , 2017 , 14, 461-462	21.6	120
159	Autonomous metabolomics for rapid metabolite identification in global profiling. <i>Analytical Chemistry</i> , 2015 , 87, 884-91	7.8	119
158	Nanostructure-initiator mass spectrometry: a protocol for preparing and applying NIMS surfaces for high-sensitivity mass analysis. <i>Nature Protocols</i> , 2008 , 3, 1341-9	18.8	112
157	Hypoxia-induced metabolic stress in retinal pigment epithelial cells is sufficient to induce photoreceptor degeneration. <i>ELife</i> , 2016 , 5,	8.9	112
156	Nanostructure initiator mass spectrometry: tissue imaging and direct biofluid analysis. <i>Analytical Chemistry</i> , 2009 , 81, 2969-75	7.8	110
155	Chemoenzymatic Preparation of Novel Cyclic Imine Sugars and Rapid Biological Activity Evaluation Using Electrospray Mass Spectrometry and Kinetic Analysis. <i>Journal of the American Chemical Society</i> , 1997 , 119, 8146-8151	16.4	108
154	The structure of apo human glutamate dehydrogenase details subunit communication and allostery. <i>Journal of Molecular Biology</i> , 2002 , 318, 765-77	6.5	106
153	Metabolomic analysis of the cerebrospinal fluid reveals changes in phospholipase expression in the CNS of SIV-infected macaques. <i>Journal of Clinical Investigation</i> , 2008 , 118, 2661-9	15.9	105
152	Variability analysis of human plasma and cerebral spinal fluid reveals statistical significance of changes in mass spectrometry-based metabolomics data. <i>Analytical Chemistry</i> , 2009 , 81, 8538-44	7.8	104
151	Maintaining retinal astrocytes normalizes revascularization and prevents vascular pathology associated with oxygen-induced retinopathy. <i>Glia</i> , 2010 , 58, 43-54	9	103

150	Bioinformatics: the next frontier of metabolomics. <i>Analytical Chemistry</i> , 2015 , 87, 147-56	7.8	95
149	Annotation: A Computational Solution for Streamlining Metabolomics Analysis. <i>Analytical Chemistry</i> , 2018 , 90, 480-489	7.8	93
148	Antioxidant or neurotrophic factor treatment preserves function in a mouse model of neovascularization-associated oxidative stress. <i>Journal of Clinical Investigation</i> , 2009 , 119, 611-23	15.9	93
147	Monitoring enzyme catalysis with mass spectrometry. <i>Journal of Biological Chemistry</i> , 2000 , 275, 13455-9	5.4	92
146	Detection of carbohydrates and steroids by cation-enhanced nanostructure-initiator mass spectrometry (NIMS) for biofluid analysis and tissue imaging. <i>Analytical Chemistry</i> , 2010 , 82, 121-8	7.8	87
145	metaXCMS: second-order analysis of untargeted metabolomics data. <i>Analytical Chemistry</i> , 2011 , 83, 696-700	7.80	86
144	Mass spectrometry-based metabolomics: a guide for annotation, quantification and best reporting practices. <i>Nature Methods</i> , 2021 , 18, 747-756	21.6	83
143	Quench-flow experiments combined with mass spectrometry show apomyoglobin folds through and obligatory intermediate. <i>Protein Science</i> , 1999 , 8, 45-9	6.3	80
142	Desorption/ionization on silicon mass spectrometry: an application in forensics. <i>Analytica Chimica Acta</i> , 2001 , 442, 183-190	6.6	80
141	Exposome-Scale Investigations Guided by Global Metabolomics, Pathway Analysis, and Cognitive Computing. <i>Analytical Chemistry</i> , 2017 , 89, 11505-11513	7.8	78
140	Selective metabolite and peptide capture/mass detection using fluororous affinity tags. <i>Journal of Proteome Research</i> , 2007 , 6, 1492-9	5.6	78
139	Thermal Degradation of Small Molecules: A Global Metabolomic Investigation. <i>Analytical Chemistry</i> , 2015 , 87, 10935-41	7.8	77
138	Crystallographically identical virus capsids display different properties in solution. <i>Nature Structural Biology</i> , 1999 , 6, 114-6		75
137	Generation of retinal pigment epithelial cells from small molecules and OCT4 reprogrammed human induced pluripotent stem cells. <i>Stem Cells Translational Medicine</i> , 2012 , 1, 96-109	6.9	74
136	Electrospray ion mobility spectrometry of intact viruses. <i>Spectroscopy</i> , 2004 , 18, 31-36		73
135	Surface modification and laser pulse length effects on internal energy transfer in DIOS. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 24450-6	3.4	73
134	A view from above: cloud plots to visualize global metabolomic data. <i>Analytical Chemistry</i> , 2013 , 85, 798-804	8.4	72
133	Evaluation of the safety and immunomodulatory effects of sargramostim in a randomized, double-blind phase 1 clinical Parkinson's disease trial. <i>Npj Parkinson's Disease</i> , 2017 , 3, 10	9.7	70

132	Nanoelectrospray mass spectrometry and precursor ion monitoring for quantitative steroid analysis and attomole sensitivity. <i>Analytical Chemistry</i> , 1999 , 71, 2358-63	7.8	70
131	XCMS-MRM and METLIN-MRM: a cloud library and public resource for targeted analysis of small molecules. <i>Nature Methods</i> , 2018 , 15, 681-684	21.6	69
130	Differential macrophage polarization promotes tissue remodeling and repair in a model of ischemic retinopathy. <i>Scientific Reports</i> , 2011 , 1, 76	4.9	66
129	Direct characterization of solid phase resin-bound molecules by mass spectrometry. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1996 , 6, 979-982	2.9	66
128	Organic anion transporter 3 contributes to the regulation of blood pressure. <i>Journal of the American Society of Nephrology: JASN</i> , 2008 , 19, 1732-40	12.7	65
127	High surface area of porous silicon drives desorption of intact molecules. <i>Journal of the American Society for Mass Spectrometry</i> , 2007 , 18, 1945-9	3.5	64
126	Electrospray ionization of a whole virus: analyzing mass, structure, and viability. <i>ChemBioChem</i> , 2004 , 5, 258-60	3.8	64
125	Desorption/ionization on silicon time-of-flight/time-of-flight mass spectrometry. <i>Analytical Chemistry</i> , 2003 , 75, 2504-6	7.8	62
124	Metabolite and Microbiome Interplay in Cancer Immunotherapy. <i>Cancer Research</i> , 2016 , 76, 6146-6152	10.1	61
123	Spontaneous DNA damage to the nuclear genome promotes senescence, redox imbalance and aging. <i>Redox Biology</i> , 2018 , 17, 259-273	11.3	60
122	Correlating the transcriptome, proteome, and metabolome in the environmental adaptation of a hyperthermophile. <i>Journal of Proteome Research</i> , 2008 , 7, 1027-35	5.6	60
121	Human rhinovirus capsid dynamics is controlled by canyon flexibility. <i>Virology</i> , 2003 , 314, 34-44	3.6	60
120	Mass spectrometry in viral proteomics. <i>Accounts of Chemical Research</i> , 2000 , 33, 179-87	24.3	59
119	Reactivity-based one-pot synthesis of the tumor-associated antigen N3 minor octasaccharide for the development of a photocleavable DIOS-MS sugar array. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 2753-7	16.4	58
118	Molecular basis for the specificity of p27 toward cyclin-dependent kinases that regulate cell division. <i>Journal of Molecular Biology</i> , 2005 , 349, 764-73	6.5	58
117	A mass spectrometry plate reader: monitoring enzyme activity and inhibition with a Desorption/Ionization on Silicon (DIOS) platform. <i>ChemBioChem</i> , 2004 , 5, 921-7	3.8	56
116	Metabolic drift in the aging brain. <i>Aging</i> , 2016 , 8, 1000-20	5.6	56
115	Probing Protein/Protein Interactions with Mass Spectrometry and Isotopic Labeling: Analysis of the p21/Cdk2 Complex. <i>Journal of the American Chemical Society</i> , 1996 , 118, 5320-5321	16.4	55

114	Global metabolomics reveals metabolic dysregulation in ischemic retinopathy. <i>Metabolomics</i> , 2016 , 12, 15	4.7	54
113	Brain region mapping using global metabolomics. <i>Chemistry and Biology</i> , 2014 , 21, 1575-84		54
112	Combined immunocapture and laser desorption/ionization mass spectrometry on porous silicon. <i>Analytical Chemistry</i> , 2010 , 82, 4201-8	7.8	54
111	Selective inhibition of beta-1,4- and alpha-1,3-galactosyltransferases: donor sugar-nucleotide based approach. <i>Bioorganic and Medicinal Chemistry</i> , 1999 , 7, 401-9	3.4	54
110	Affinity mass spectrometry from a tailored porous silicon surface. <i>Chemical Communications</i> , 2004 , 2108-98	5.8	53
109	Autonomous METLIN-Guided In-source Fragment Annotation for Untargeted Metabolomics. <i>Analytical Chemistry</i> , 2019 , 91, 3246-3253	7.8	52
108	Intestinal bitter taste receptor activation alters hormone secretion and imparts metabolic benefits. <i>Molecular Metabolism</i> , 2018 , 16, 76-87	8.8	52
107	Probing protein structure using biochemical and biophysical methods. Proteolysis, matrix-assisted laser desorption/ionization mass spectrometry, high-performance liquid chromatography and size-exclusion chromatography of p21Waf1/Cip1/Sdi1. <i>Journal of Chromatography A</i> , 1997 , 777, 23-30	4.5	52
106	Sepsis plasma protein profiling with immunodepletion, three-dimensional liquid chromatography tandem mass spectrometry, and spectrum counting. <i>Journal of Proteome Research</i> , 2006 , 5, 3154-60	5.6	52
105	Metabolomics-based discovery of a metabolite that enhances oligodendrocyte maturation. <i>Nature Chemical Biology</i> , 2018 , 14, 22-28	11.7	52
104	Metabolomics annotates ABHD3 as a physiologic regulator of medium-chain phospholipids. <i>Nature Chemical Biology</i> , 2011 , 7, 763-5	11.7	51
103	Probing viruses with mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1998 , 33, 203-11	2.2	51
102	Surfactant-enhanced desorption/ionization on silicon mass spectrometry. <i>Analytical Chemistry</i> , 2006 , 78, 272-8	7.8	50
101	New catalysts for the asymmetric hydrosilylation of ketones discovered by mass spectrometry screening. <i>Journal of Organic Chemistry</i> , 2003 , 68, 2540-6	4.2	50
100	Quantitative analysis with desorption/ionization on silicon mass spectrometry using electrospray deposition. <i>Analytical Chemistry</i> , 2003 , 75, 5475-9	7.8	50
99	The METLIN small molecule dataset for machine learning-based retention time prediction. <i>Nature Communications</i> , 2019 , 10, 5811	17.4	50
98	Arteriovenous Blood Metabolomics: A Readout of Intra-Tissue Metabostasis. <i>Scientific Reports</i> , 2015 , 5, 12757	4.9	47
97	Identification of a new endogenous metabolite and the characterization of its protein interactions through an immobilization approach. <i>Journal of the American Chemical Society</i> , 2009 , 131, 378-86	16.4	47

96	An automated MALDI mass spectrometry approach for optimizing cyclosporin extraction and quantitation. <i>Analytical Chemistry</i> , 1997 , 69, 3767-71	7.8	46
95	PGRMC2 is an intracellular haem chaperone critical for adipocyte function. <i>Nature</i> , 2019 , 576, 138-142	50.4	44
94	Structural Examination of Supramolecular Architectures by Electrospray Ionization Mass Spectrometry. <i>European Journal of Organic Chemistry</i> , 1999 , 1999, 1325-1331	3.2	43
93	METLIN MS molecular standards database: a broad chemical and biological resource. <i>Nature Methods</i> , 2020 , 17, 953-954	21.6	43
92	Gas-Phase Micelles. <i>Angewandte Chemie International Edition in English</i> , 1995 , 34, 2053-2055		42
91	Peptide and protein analysis with mass spectrometry. <i>Spectroscopy</i> , 2002 , 16, 15-28		41
90	Comprehensive bioimaging with fluorinated nanoparticles using breathable liquids. <i>Nature Communications</i> , 2015 , 6, 5998	17.4	39
89	isoMETLIN: a database for isotope-based metabolomics. <i>Analytical Chemistry</i> , 2014 , 86, 9358-61	7.8	39
88	Mass spectrometry reveals specific and global molecular transformations during viral infection. <i>Journal of Proteome Research</i> , 2006 , 5, 2405-16	5.6	39
87	Monitoring metabolic responses to chemotherapy in single cells and tumors using nanostructure-initiator mass spectrometry (NIMS) imaging. <i>Cancer & Metabolism</i> , 2013 , 1, 4	5.4	37
86	Novel multiprotein complexes identified in the hyperthermophilic archaeon <i>Pyrococcus furiosus</i> by non-denaturing fractionation of the native proteome. <i>Molecular and Cellular Proteomics</i> , 2009 , 8, 735-51	7.6	37
85	Generation of Induced Pluripotent Stem Cells Using Recombinant Proteins. <i>Cell Stem Cell</i> , 2009 , 4, 581	18	36
84	Maturation of a tetra virus capsid alters the dynamic properties and creates a metastable complex. <i>Virology</i> , 2005 , 334, 17-27	3.6	36
83	Identification of modified tryptophan residues in apolipoprotein B-100 derived from copper ion-oxidized low-density lipoprotein. <i>Biochemistry</i> , 1999 , 38, 15903-8	3.2	36
82	Metabolomics Reveals that Dietary Xenoestrogens Alter Cellular Metabolism Induced by Palbociclib/Letrozole Combination Cancer Therapy. <i>Cell Chemical Biology</i> , 2018 , 25, 291-300.e3	8.2	35
81	Cleavable linkers for porous silicon-based mass spectrometry. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 1255-60	16.4	35
80	A fiber-deprived diet disturbs the fine-scale spatial architecture of the murine colon microbiome. <i>Nature Communications</i> , 2019 , 10, 4366	17.4	34
79	High-temperature protein mass mapping using a thermophilic protease. <i>Journal of the American Chemical Society</i> , 2001 , 123, 1774-5	16.4	34

78	Metabolomic data streaming for biology-dependent data acquisition. <i>Nature Biotechnology</i> , 2014 , 32, 524-7	44.5	33
77	The Role of Metabolomics in Brain Metabolism Research. <i>Journal of NeuroImmune Pharmacology</i> , 2015 , 10, 391-5	6.9	31
76	Quantitative plasma proteomic profiling identifies the vitamin E binding protein afamin as a potential pathogenic factor in SIV induced CNS disease. <i>Journal of Proteome Research</i> , 2010 , 9, 352-8	5.6	31
75	Response and recovery in the plasma metabolome tracks the acute LCMV-induced immune response. <i>Journal of Proteome Research</i> , 2009 , 8, 3578-87	5.6	31
74	The glycerophospho metabolome and its influence on amino acid homeostasis revealed by brain metabolomics of GDE1(-/-) mice. <i>Chemistry and Biology</i> , 2010 , 17, 831-40		31
73	Acylcarnitines are anticoagulants that inhibit factor Xa and are reduced in venous thrombosis, based on metabolomics data. <i>Blood</i> , 2015 , 126, 1595-600	2.2	30
72	Acoustic deposition with NIMS as a high-throughput enzyme activity assay. <i>Analytical and Bioanalytical Chemistry</i> , 2012 , 403, 707-11	4.4	30
71	Cerebrospinal fluid proteomics reveals potential pathogenic changes in the brains of SIV-infected monkeys. <i>Journal of Proteome Research</i> , 2009 , 8, 2253-60	5.6	30
70	Biomarkers for neuroAIDS: the widening scope of metabolomics. <i>Journal of NeuroImmune Pharmacology</i> , 2007 , 2, 72-80	6.9	28
69	Liquid chromatography mass spectrometry of antisense oligonucleotides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1995 , 5, 2863-2868	2.9	28
68	Type I signal peptidase and protein secretion in Staphylococcus epidermidis. <i>Journal of Bacteriology</i> , 2011 , 193, 340-8	3.5	26
67	Rice tungro bacilliform virus open reading frame 3 encodes a single 37-kDa coat protein. <i>Virology</i> , 1999 , 253, 319-26	3.6	25
66	Phospholipid capture combined with non-linear chromatographic correction for improved serum metabolite profiling. <i>Metabolomics</i> , 2006 , 2, 145-154	4.7	24
65	An Interactive Cluster Heat Map to Visualize and Explore Multidimensional Metabolomic Data. <i>Metabolomics</i> , 2015 , 11, 1029-1034	4.7	23
64	Meta-analysis of global metabolomic data identifies metabolites associated with life-span extension. <i>Metabolomics</i> , 2014 , 10, 737-743	4.7	23
63	METLIN: A Tandem Mass Spectral Library of Standards. <i>Methods in Molecular Biology</i> , 2020 , 2104, 149-163	3.4	23
62	Fluorinated Gold Nanoparticles for Nanostructure Imaging Mass Spectrometry. <i>ACS Nano</i> , 2018 , 12, 6938-6948	2.2	22
61	Enhanced in-Source Fragmentation Annotation Enables Novel Data Independent Acquisition and Autonomous METLIN Molecular Identification. <i>Analytical Chemistry</i> , 2020 , 92, 6051-6059	7.8	21

60	Large scale physiological readjustment during growth enables rapid, comprehensive and inexpensive systems analysis. <i>BMC Systems Biology</i> , 2010 , 4, 64	3.5	21
59	Quantitative ESI-TOF analysis of macromolecular assembly kinetics. <i>Analytical Chemistry</i> , 2008 , 80, 9379-88		21
58	Data Streaming for Metabolomics: Accelerating Data Processing and Analysis from Days to Minutes. <i>Analytical Chemistry</i> , 2017 , 89, 1254-1259	7.8	20
57	Phosphonium labeling for increasing metabolomic coverage of neutral lipids using electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2009 , 23, 1849-55	2.2	20
56	Metabolizing Data in the Cloud. <i>Trends in Biotechnology</i> , 2017 , 35, 481-483	15.1	19
55	A computational framework for proteome-wide pursuit and prediction of metalloproteins using ICP-MS and MS/MS data. <i>BMC Bioinformatics</i> , 2011 , 12, 64	3.6	18
54	Autonomous Multimodal Metabolomics Data Integration for Comprehensive Pathway Analysis and Systems Biology. <i>Analytical Chemistry</i> , 2018 , 90, 8396-8403	7.8	16
53	Discriminating precursors of common fragments for large-scale metabolite profiling by triple quadrupole mass spectrometry. <i>Bioinformatics</i> , 2015 , 31, 2017-23	7.2	16
52	Coagulation and complement protein differences between septic and uninfected systemic inflammatory response syndrome patients. <i>Journal of Trauma</i> , 2007 , 62, 1082-92; discussion 1092-4		16
51	Mobilization of pro-inflammatory lipids in obese Plscr3-deficient mice. <i>Genome Biology</i> , 2007 , 8, R38	18.3	16
50	Metabolic rewiring of the hypertensive kidney. <i>Science Signaling</i> , 2019 , 12,	8.8	16
49	Morphology-Driven Control of Metabolite Selectivity Using Nanostructure-Initiator Mass Spectrometry. <i>Analytical Chemistry</i> , 2017 , 89, 6521-6526	7.8	15
48	Metabolomics relative quantitation with mass spectrometry using chemical derivatization and isotope labeling. <i>Spectroscopy</i> , 2008 , 22, 327-343		15
47	Biochemical mass spectrometry: worth the weight?. <i>Chemistry and Biology</i> , 1996 , 3, 707-15		15
46	Examination of the sialyl lewis X - calcium complex by electrospray mass spectrometry. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1994 , 4, 2863-2866	2.9	15
45	Metabolomics Data Processing Using XCMS. <i>Methods in Molecular Biology</i> , 2020 , 2104, 11-24	1.4	15
44	Aspects of oligonucleotide and peptide sequencing with MALDI and electrospray mass spectrometry. <i>Bioorganic and Medicinal Chemistry</i> , 1998 , 6, 1547-54	3.4	14
43	Smartphone Analytics: Mobilizing the Lab into the Cloud for Omic-Scale Analyses. <i>Analytical Chemistry</i> , 2016 , 88, 9753-9758	7.8	13

42	Global Isotope Metabolomics Reveals Adaptive Strategies for Nitrogen Assimilation. <i>ACS Chemical Biology</i> , 2016 , 11, 1677-85	4.9	13
41	Activation of Kappa Opioid Receptor Regulates the Hypothermic Response to Calorie Restriction and Limits Body Weight Loss. <i>Current Biology</i> , 2019 , 29, 4291-4299.e4	6.3	13
40	Metabolomics guided pathway analysis reveals link between cancer metastasis, cholesterol sulfate, and phospholipids. <i>Cancer & Metabolism</i> , 2017 , 5, 9	5.4	12
39	Investigating Viral Proteins and Intact Viruses with Mass Spectrometry. <i>Topics in Current Chemistry</i> , 2003 , 265-282		12
38	Protein characterization using Liquid Chromatography Desorption Ionization on Silicon Mass Spectrometry (LC-DIOS-MS). <i>Spectroscopy</i> , 2003 , 17, 693-698		12
37	Biomolecule structure characterization in the gas phase using mass spectrometry. <i>Spectroscopy</i> , 2002 , 16, 71-79		11
36	DIOS-MSEED: A chip-based method for measurement of enantiomeric excess by kinetic resolution/mass spectrometry. <i>Israel Journal of Chemistry</i> , 2001 , 41, 313-316	3.4	11
35	Short communication: quantitative proteomic plasma profiling reveals activation of host defense to oxidative stress in chronic SIV and methamphetamine comorbidity. <i>AIDS Research and Human Retroviruses</i> , 2011 , 27, 179-82	1.6	10
34	The identification of an adenovirus receptor by using affinity capture and mass spectrometry. <i>ChemBioChem</i> , 2004 , 5, 1095-9	3.8	10
33	Quantitative metabolomics of photoreceptor degeneration and the effects of stem cell-derived retinal pigment epithelium transplantation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016 , 374,	3	9
32	Small-Molecule Desorption/Ionization Mass Analysis 299-337		8
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