

Gary J Patti

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4190608/publications.pdf>

Version: 2024-02-01

106
papers

11,869
citations

46918

47
h-index

32761

100
g-index

116
all docs

116
docs citations

116
times ranked

18228
citing authors

#	ARTICLE	IF	CITATIONS
1	Metabolomics: the apogee of the omics trilogy. <i>Nature Reviews Molecular Cell Biology</i> , 2012, 13, 263-269.	16.1	1,931
2	XCMS Online: A Web-Based Platform to Process Untargeted Metabolomic Data. <i>Analytical Chemistry</i> , 2012, 84, 5035-5039.	3.2	1,087
3	Exogenous Monounsaturated Fatty Acids Promote a Ferroptosis-Resistant Cell State. <i>Cell Chemical Biology</i> , 2019, 26, 420-432.e9.	2.5	556
4	An accelerated workflow for untargeted metabolomics using the METLIN database. <i>Nature Biotechnology</i> , 2012, 30, 826-828.	9.4	472
5	Metabolic oxidation regulates embryonic stem cell differentiation. <i>Nature Chemical Biology</i> , 2010, 6, 411-417.	3.9	454
6	Liquid chromatography quadrupole time-of-flight mass spectrometry characterization of metabolites guided by the METLIN database. <i>Nature Protocols</i> , 2013, 8, 451-460.	5.5	379
7	Interactive XCMS Online: Simplifying Advanced Metabolomic Data Processing and Subsequent Statistical Analyses. <i>Analytical Chemistry</i> , 2014, 86, 6931-6939.	3.2	332
8	Metabolism Links Bacterial Biofilms and Colon Carcinogenesis. <i>Cell Metabolism</i> , 2015, 21, 891-897.	7.2	288
9	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, 6876-6884.	3.2	242
10	Defining the Metabolome: Size, Flux, and Regulation. <i>Molecular Cell</i> , 2015, 58, 699-706.	4.5	234
11	Expanding Coverage of the Metabolome for Global Metabolite Profiling. <i>Analytical Chemistry</i> , 2011, 83, 2152-2161.	3.2	233
12	Lactate metabolism is associated with mammalian mitochondria. <i>Nature Chemical Biology</i> , 2016, 12, 937-943.	3.9	222
13	Systems-Level Annotation of a Metabolomics Data Set Reduces 25,000 Features to Fewer than 1000 Unique Metabolites. <i>Analytical Chemistry</i> , 2017, 89, 10397-10406.	3.2	220
14	Mitochondrial Pyruvate Import Promotes Long-Term Survival of Antibody-Secreting Plasma Cells. <i>Immunity</i> , 2016, 45, 60-73.	6.6	212
15	Mitochondrial fusion supports increased oxidative phosphorylation during cell proliferation. <i>ELife</i> , 2019, 8, .	2.8	198
16	Nicotinamide mononucleotide increases muscle insulin sensitivity in prediabetic women. <i>Science</i> , 2021, 372, 1224-1229.	6.0	192
17	Metabolomics implicates altered sphingolipids in chronic pain of neuropathic origin. <i>Nature Chemical Biology</i> , 2012, 8, 232-234.	3.9	183
18	Biomonitoring in the Era of the Exposome. <i>Environmental Health Perspectives</i> , 2017, 125, 502-510.	2.8	166

#	ARTICLE	IF	CITATIONS
19	Metabolic regulator LKB1 is crucial for Schwann cell-mediated axon maintenance. <i>Nature Neuroscience</i> , 2014, 17, 1351-1361.	7.1	163
20	Autonomous Metabolomics for Rapid Metabolite Identification in Global Profiling. <i>Analytical Chemistry</i> , 2015, 87, 884-891.	3.2	157
21	Ketogenesis prevents diet-induced fatty liver injury and hyperglycemia. <i>Journal of Clinical Investigation</i> , 2014, 124, 5175-5190.	3.9	156
22	Meta-analysis of untargeted metabolomic data from multiple profiling experiments. <i>Nature Protocols</i> , 2012, 7, 508-516.	5.5	154
23	XCMS: Global Tracking of Isotopic Labels in Untargeted Metabolomics. <i>Analytical Chemistry</i> , 2014, 86, 1632-1639.	3.2	152
24	Nanostructure-Initiator Mass Spectrometry Metabolite Analysis and Imaging. <i>Analytical Chemistry</i> , 2011, 83, 2-7.	3.2	142
25	Identifying off-target effects of etomoxir reveals that carnitine palmitoyltransferase I is essential for cancer cell proliferation independent of β -oxidation. <i>PLoS Biology</i> , 2018, 16, e2003782.	2.6	141
26	Sorting cells alters their redox state and cellular metabolome. <i>Redox Biology</i> , 2018, 16, 381-387.	3.9	137
27	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, 8538-8544.	3.2	128
28	A roadmap for the XCMS family of software solutions in metabolomics. <i>Current Opinion in Chemical Biology</i> , 2016, 30, 87-93.	2.8	115
29	Thermal Degradation of Small Molecules: A Global Metabolomic Investigation. <i>Analytical Chemistry</i> , 2015, 87, 10935-10941.	3.2	112
30	Separation strategies for untargeted metabolomics. <i>Journal of Separation Science</i> , 2011, 34, 3460-3469.	1.3	109
31	Chemical Discovery in the Era of Metabolomics. <i>Journal of the American Chemical Society</i> , 2020, 142, 9097-9105.	6.6	106
32	Metabolic and Transcriptional Modules Independently Diversify Plasma Cell Lifespan and Function. <i>Cell Reports</i> , 2018, 24, 2479-2492.e6.	2.9	103
33	Exogenous Fatty Acids Are the Preferred Source of Membrane Lipids in Proliferating Fibroblasts. <i>Cell Chemical Biology</i> , 2016, 23, 483-493.	2.5	101
34	metaXCMS: Second-Order Analysis of Untargeted Metabolomics Data. <i>Analytical Chemistry</i> , 2011, 83, 696-700.	3.2	95
35	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, 121-128.	3.2	94
36	The Disruption of <i>Celf6</i> , a Gene Identified by Translational Profiling of Serotonergic Neurons, Results in Autism-Related Behaviors. <i>Journal of Neuroscience</i> , 2013, 33, 2732-2753.	1.7	88

#	ARTICLE	IF	CITATIONS
37	Hepatocyte-Macrophage Acetoacetate Shuttle Protects against Tissue Fibrosis. <i>Cell Metabolism</i> , 2019, 29, 383-398.e7.	7.2	87
38	A View from Above: Cloud Plots to Visualize Global Metabolomic Data. <i>Analytical Chemistry</i> , 2013, 85, 798-804.	3.2	85
39	Global metabolomics reveals metabolic dysregulation in ischemic retinopathy. <i>Metabolomics</i> , 2016, 12, 15.	1.4	80
40	Credentialing Features: A Platform to Benchmark and Optimize Untargeted Metabolomic Methods. <i>Analytical Chemistry</i> , 2014, 86, 9583-9589.	3.2	79
41	Vancomycin and Oritavancin Have Different Modes of Action in <i>Enterococcus faecium</i> . <i>Journal of Molecular Biology</i> , 2009, 392, 1178-1191.	2.0	74
42	Consumption of NADPH for 2-HG Synthesis Increases Pentose Phosphate Pathway Flux and Sensitizes Cells to Oxidative Stress. <i>Cell Reports</i> , 2018, 22, 512-522.	2.9	74
43	Radioresistant Cervical Cancers Are Sensitive to Inhibition of Glycolysis and Redox Metabolism. <i>Cancer Research</i> , 2018, 78, 1392-1403.	0.4	69
44	An Untargeted Metabolomic Workflow to Improve Structural Characterization of Metabolites. <i>Analytical Chemistry</i> , 2013, 85, 7713-7719.	3.2	67
45	International Ring Trial of a High Resolution Targeted Metabolomics and Lipidomics Platform for Serum and Plasma Analysis. <i>Analytical Chemistry</i> , 2019, 91, 14407-14416.	3.2	66
46	Defining and Detecting Complex Peak Relationships in Mass Spectral Data: The Mz.unity Algorithm. <i>Analytical Chemistry</i> , 2016, 88, 9037-9046.	3.2	65
47	Arteriovenous Blood Metabolomics: A Readout of Intra-Tissue Metabostasis. <i>Scientific Reports</i> , 2015, 5, 12757.	1.6	62
48	Longitudinal metabolomics of human plasma reveals prognostic markers of COVID-19 disease severity. <i>Cell Reports Medicine</i> , 2021, 2, 100369.	3.3	61
49	Impaired skeletal muscle mitochondrial pyruvate uptake rewires glucose metabolism to drive whole-body leanness. <i>ELife</i> , 2019, 8, .	2.8	54
50	Isotope Tracing Untargeted Metabolomics Reveals Macrophage Polarization-State-Specific Metabolic Coordination across Intracellular Compartments. <i>IScience</i> , 2018, 9, 298-313.	1.9	53
51	Hepatic ketogenic insufficiency reprograms hepatic glycogen metabolism and the lipidome. <i>JCI Insight</i> , 2018, 3, .	2.3	51
52	Comprehensive bioimaging with fluorinated nanoparticles using breathable liquids. <i>Nature Communications</i> , 2015, 6, 5998.	5.8	50
53	Metabolomic data streaming for biology-dependent data acquisition. <i>Nature Biotechnology</i> , 2014, 32, 524-527.	9.4	45
54	isoMETLIN: A Database for Isotope-Based Metabolomics. <i>Analytical Chemistry</i> , 2014, 86, 9358-9361.	3.2	41

#	ARTICLE	IF	CITATIONS
55	Inaccurate quantitation of palmitate in metabolomics and isotope tracer studies due to plastics. <i>Metabolomics</i> , 2016, 12, 1.	1.4	40
56	After the feature presentation: technologies bridging untargeted metabolomics and biology. <i>Current Opinion in Biotechnology</i> , 2014, 28, 143-148.	3.3	38
57	Dietary serine-microbiota interaction enhances chemotherapeutic toxicity without altering drug conversion. <i>Nature Communications</i> , 2020, 11, 2587.	5.8	37
58	DecoID improves identification rates in metabolomics through database-assisted MS/MS deconvolution. <i>Nature Methods</i> , 2021, 18, 779-787.	9.0	34
59	Characterization of the Peptidoglycan of Vancomycin-Susceptible <i>Enterococcus faecium</i> . <i>Biochemistry</i> , 2008, 47, 8378-8385.	1.2	32
60	Trace Phosphate Improves ZIC-pHILIC Peak Shape, Sensitivity, and Coverage for Untargeted Metabolomics. <i>Journal of Proteome Research</i> , 2018, 17, 3537-3546.	1.8	32
61	A Practical Guide to Metabolomics Software Development. <i>Analytical Chemistry</i> , 2021, 93, 1912-1923.	3.2	30
62	Isotope tracing in adult zebrafish reveals alanine cycling between melanoma and liver. <i>Cell Metabolism</i> , 2021, 33, 1493-1504.e5.	7.2	29
63	Mechanism of High-Level Daptomycin Resistance in <i>Corynebacterium striatum</i> . <i>MSphere</i> , 2018, 3, .	1.3	28
64	Warpgroup: increased precision of metabolomic data processing by consensus integration bound analysis. <i>Bioinformatics</i> , 2016, 32, 268-275.	1.8	26
65	Systems-level analysis of isotopic labeling in untargeted metabolomic data by X13CMS. <i>Nature Protocols</i> , 2019, 14, 1970-1990.	5.5	26
66	Two complementary reversed-phase separations for comprehensive coverage of the semipolar and nonpolar metabolome. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 1287-1297.	1.9	25
67	Glutaminase Inhibitors Induce Thiol-Mediated Oxidative Stress and Radiosensitization in Treatment-Resistant Cervical Cancers. <i>Molecular Cancer Therapeutics</i> , 2020, 19, 2465-2475.	1.9	25
68	Meta-analysis of global metabolomic data identifies metabolites associated with life-span extension. <i>Metabolomics</i> , 2014, 10, 737-743.	1.4	24
69	Targeting unique biological signals on the fly to improve MS/MS coverage and identification efficiency in metabolomics. <i>Analytica Chimica Acta</i> , 2021, 1149, 338210.	2.6	23
70	A Workflow to Perform Targeted Metabolomics at the Untargeted Scale on a Triple Quadrupole Mass Spectrometer. <i>ACS Measurement Science Au</i> , 2021, 1, 35-45.	1.9	23
71	Characterization of structural variations in the peptidoglycan of vancomycin-susceptible <i>Enterococcus faecium</i> : Understanding glycopeptide-antibiotic binding sites using mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 1467-1475.	1.2	22
72	Dose-Response Metabolomics To Understand Biochemical Mechanisms and Off-Target Drug Effects with the TOXcms Software. <i>Analytical Chemistry</i> , 2020, 92, 1856-1864.	3.2	22

#	ARTICLE	IF	CITATIONS
73	Mitochondrial pyruvate carrier inhibitors improve metabolic parameters in diet-induced obese mice. <i>Journal of Biological Chemistry</i> , 2022, 298, 101554.	1.6	20
74	Differential Incorporation of Glucose into Biomass during Warburg Metabolism. <i>Biochemistry</i> , 2014, 53, 4755-4757.	1.2	19
75	Inflammation triggers production of dimethylsphingosine from oligodendrocytes. <i>Neuroscience</i> , 2014, 279, 113-121.	1.1	18
76	Discriminating precursors of common fragments for large-scale metabolite profiling by triple quadrupole mass spectrometry. <i>Bioinformatics</i> , 2015, 31, 2017-2023.	1.8	18
77	Silencing alanine transaminase 2 in diabetic liver attenuates hyperglycemia by reducing gluconeogenesis from amino acids. <i>Cell Reports</i> , 2022, 39, 110733.	2.9	18
78	Knockdown of triglyceride synthesis does not enhance palmitate lipotoxicity or prevent oleate-mediated rescue in rat hepatocytes. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2016, 1861, 1005-1014.	1.2	16
79	Perspectives on Data Analysis in Metabolomics: Points of Agreement and Disagreement from the 2018 ASMS Fall Workshop. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 2031-2036.	1.2	16
80	A Protocol to Compare Methods for Untargeted Metabolomics. <i>Methods in Molecular Biology</i> , 2019, 1862, 1-15.	0.4	16
81	Deletion of Glut1 in early postnatal cartilage reprograms chondrocytes toward enhanced glutamine oxidation. <i>Bone Research</i> , 2021, 9, 38.	5.4	16
82	HERMES: a molecular-formula-oriented method to target the metabolome. <i>Nature Methods</i> , 2021, 18, 1370-1376.	9.0	16
83	Loss of SNORA73 reprograms cellular metabolism and protects against steatohepatitis. <i>Nature Communications</i> , 2021, 12, 5214.	5.8	14
84	Hepatic monoacylglycerol acyltransferase 1 is induced by prolonged food deprivation to modulate the hepatic fasting response. <i>Journal of Lipid Research</i> , 2019, 60, 528-538.	2.0	12
85	HIF1 α is required for NK cell metabolic adaptation during virus infection. <i>ELife</i> , 2021, 10, .	2.8	12
86	Variability in C ₃ -Plant Cell-Wall Biosynthesis in a High-CO ₂ Atmosphere by Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2010, 132, 6335-6341.	6.6	11
87	Alteration of Cellular Reduction Potential Will Change ⁶⁴ Cu-ATSM Signal With or Without Hypoxia. <i>Journal of Nuclear Medicine</i> , 2020, 61, 427-432.	2.8	11
88	Evidence that 2-hydroxyglutarate is not readily metabolized in colorectal carcinoma cells. <i>Cancer & Metabolism</i> , 2015, 3, 13.	2.4	10
89	Method Revealing Bacterial Cell-Wall Architecture by Time-Dependent Isotope Labeling and Quantitative Liquid Chromatography/Mass Spectrometry. <i>Analytical Chemistry</i> , 2009, 81, 2437-2445.	3.2	9
90	Alterations in Spinal Cord Metabolism during Treatment of Neuropathic Pain. <i>Journal of NeuroImmune Pharmacology</i> , 2015, 10, 396-401.	2.1	8

#	ARTICLE	IF	CITATIONS
91	Determining conserved metabolic biomarkers from a million database queries. <i>Bioinformatics</i> , 2015, 31, 3721-3724.	1.8	8
92	Ontology-based metabolomics data integration with quality control. <i>Bioanalysis</i> , 2019, 11, 1139-1154.	0.6	7
93	A Protocol for Untargeted Metabolomic Analysis: From Sample Preparation to Data Processing. <i>Methods in Molecular Biology</i> , 2021, 2276, 357-382.	0.4	7
94	Targeting fatty acid β -oxidation impairs monocyte differentiation and prolongs heart allograft survival. <i>JCI Insight</i> , 2022, 7, .	2.3	7
95	Oxygen-17 Appears Only in Protein in Water-Stressed Soybean Leaves Labeled by $^{17}\text{O}_2$. <i>Journal of the American Chemical Society</i> , 2010, 132, 10802-10807.	6.6	6
96	Transport-exclusion pharmacology to localize lactate dehydrogenase activity within cells. <i>Cancer & Metabolism</i> , 2018, 6, 19.	2.4	6
97	Combining Isotopologue Workflows and Simultaneous Multidimensional Separations to Detect, Identify, and Validate Metabolites in Untargeted Analyses. <i>Analytical Chemistry</i> , 2022, 94, 2527-2535.	3.2	6
98	Bar Coding MS^2 Spectra for Metabolite Identification. <i>Analytical Chemistry</i> , 2016, 88, 2538-2542.	3.2	4
99	Profiling cancer metabolism at the m^{omic} level: a last resort or the next frontier?. <i>Cancer & Metabolism</i> , 2016, 4, 2.	2.4	3
100	Leveraging insights into cancer metabolism—a symposium report. <i>Annals of the New York Academy of Sciences</i> , 2020, 1462, 5-13.	1.8	3
101	Meta-analysis of global metabolomics and proteomics data to link alterations with phenotype. <i>Spectroscopy</i> , 2011, 26, 151-154.	0.8	0
102	AVB-500, a selective inhibitor of GAS6-AXL, in combination with paclitaxel alters uterine serous cancer cell metabolism. <i>Gynecologic Oncology</i> , 2021, 162, S97.	0.6	0
103	Preventing ovarian cancer cell metastasis through inhibition of discoidin domain receptor 2 (DDR2) in the tumor microenvironment: a metabolomic analysis. <i>Gynecologic Oncology</i> , 2021, 162, S245.	0.6	0
104	Quantitative rotational-echo double resonance for Carbon-13 spin clusters. <i>Journal of Magnetic Resonance</i> , 2021, 330, 107043.	1.2	0
105	Metabolite Concentrations Are Unstable during Cell Sorting. <i>FASEB Journal</i> , 2018, 32, 658.11.	0.2	0
106	Understanding the Impact of IDH2 Mutations on the Redox Balance of Cancer Cells. <i>FASEB Journal</i> , 2018, 32, 811.13.	0.2	0