John M Denu

List of Publications by Year
in descending order

118	14,131	36203	24179
papers	citations	51 h-index	110 g-index

126	126	126	15294
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	OUP accepted manuscript. Brain, 2022, , .	3.7	11
2	Metabolism in the Midwest: research from the Midwest Aging Consortium at the 49th Annual Meeting of the American Aging Association. GeroScience, 2022, 44, 39-52.	2.1	2
3	Metabolomic Analysis of Carbohydrate and Amino Acid Changes Induced by Hypoxia in Naked Mole-Rat Brain and Liver. Metabolites, 2022, 12, 56.	1.3	13
4	Sirt6 regulates lifespan in Drosophila melanogaster. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	29
5	SLC13A5/sodium-citrate co-transporter overexpression causes disrupted white matter integrity and an autistic-like phenotype. Brain Communications, 2022, 4, fcac002.	1.5	10
6	Discovery and Mechanism of Small Molecule Inhibitors Selective for the Chromatin-Binding Domains of Oncogenic UHRF1. Biochemistry, 2022, 61, 354-366.	1.2	8
7	Catalysis by protein acetyltransferase Gcn5. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2021, 1864, 194627.	0.9	10
8	Acetyl-CoA flux from the cytosol to the ER regulates engagement and quality of the secretory pathway. Scientific Reports, 2021, 11, 2013.	1.6	16
9	Self-acetylation at the active site of phosphoenolpyruvate carboxykinase (PCK1) controls enzyme activity. Journal of Biological Chemistry, 2021, 296, 100205.	1.6	5
10	Endoplasmic reticulum acetyltransferases Atase1 and Atase2 differentially regulate reticulophagy, macroautophagy and cellular acetyl-CoA metabolism. Communications Biology, 2021, 4, 454.	2.0	8
11	Gut microbiome variation modulates the effects of dietary fiber on host metabolism. Microbiome, 2021, 9, 117.	4.9	61
12	Tandem histone methyltransferase upregulation defines a unique aggressive prostate cancer phenotype. British Journal of Cancer, 2021, 125, 247-254.	2.9	2
13	Benchmarking Quantitative Performance in Label-Free Proteomics. ACS Omega, 2021, 6, 2494-2504.	1.6	27
14	Fasting drives the metabolic, molecular and geroprotective effects of a calorie-restricted diet in mice. Nature Metabolism, 2021, 3, 1327-1341.	5.1	84
15	Short-chain fatty acids activate acetyltransferase p300. ELife, 2021, 10, .	2.8	42
16	A practical guide for analysis of histone post-translational modifications by mass spectrometry: Best practices and pitfalls. Methods, 2020, 184, 53-60.	1.9	17
17	Mechanism of activation for the sirtuin 6 protein deacylase. Journal of Biological Chemistry, 2020, 295, 1385-1399.	1.6	30
18	Multivalent interactions drive nucleosome binding and efficient chromatin deacetylation by SIRT6. Nature Communications, 2020, 11, 5244.	5.8	36

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19	Biological and catalytic functions of sirtuin 6 as targets for small-molecule modulators. Journal of Biological Chemistry, 2020, 295, 11021-11041.	1.6	43
20	Metabolism and the Epigenome: A Dynamic Relationship. Trends in Biochemical Sciences, 2020, 45, 731-747.	3.7	53
21	Methyl-Metabolite Depletion Elicits Adaptive Responses to Support Heterochromatin Stability and Epigenetic Persistence. Molecular Cell, 2020, 78, 210-223.e8.	4.5	45
22	Revealing Dynamic Protein Acetylation across Subcellular Compartments. Journal of Proteome Research, 2020, 19, 2404-2418.	1.8	26
23	Mechanism of activation for the sirtuin 6 protein deacylase. Journal of Biological Chemistry, 2020, 295, 1385-1399.	1.6	35
24	Histone Acetyltransferase 1 Links Metabolism and Transcription to Cell-Cycle Progression. Molecular Cell, 2019, 75, 664-665.	4.5	3
25	PGCâ€1a integrates a metabolism and growth network linked to caloric restriction. Aging Cell, 2019, 18, e12999.	3.0	25
26	Acetyl-CoA flux regulates the proteome and acetyl-proteome to maintain intracellular metabolic crosstalk. Nature Communications, 2019, 10, 3929.	5.8	28
27	Site-Specific Lysine Acetylation Stoichiometry Across Subcellular Compartments. Methods in Molecular Biology, 2019, 1983, 79-106.	0.4	8
28	Bacterial Analogs of Plant Tetrahydropyridine Alkaloids Mediate Microbial Interactions in a Rhizosphere Model System. Applied and Environmental Microbiology, 2019, 85, .	1.4	25
29	Obesity-dependent CDK1 signaling stimulates mitochondrial respiration at complex I in pancreatic Î²-cells. Journal of Biological Chemistry, 2019, 294, 4656-4666.	1.6	35
30	Caloric Restriction Engages Hepatic RNA Processing Mechanisms in Rhesus Monkeys. Cell Metabolism, 2018, 27, 677-688.e5.	7.2	56
31	An inactivating mutation in the histone deacetylase SIRT6 causes human perinatal lethality. Genes and Development, 2018, 32, 373-388.	2.7	41
32	Interactions between Roseburia intestinalis and diet modulate atherogenesis in a murine model. Nature Microbiology, 2018, 3, 1461-1471.	5.9	310
33	Dynamic Acetylation of Phosphoenolpyruvate Carboxykinase Toggles Enzyme Activity between Gluconeogenic and Anaplerotic Reactions. Molecular Cell, 2018, 71, 718-732.e9.	4.5	45
34	General method for rapid purification of native chromatin fragments. Journal of Biological Chemistry, 2018, 293, 12271-12282.	1.6	10
35	Antibiotic-induced acceleration of type 1 diabetes alters maturation of innate intestinal immunity. ELife, 2018, 7, .	2.8	70
36	The effects of sex and age on the metabolic response to methionine deprivation, a novel intervention for the treatment of obesity and diabetes. FASEB Journal, 2018, 32, 925.3.	0.2	0

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37	Histone Lysine-to-Methionine Mutations Reduce Histone Methylation and Cause Developmental Pleiotropy. Plant Physiology, 2017, 173, 2243-2252.	2.3	22
38	Chemical signaling between gut microbiota and host chromatin: What is your gut really saying?. Journal of Biological Chemistry, 2017, 292, 8582-8593.	1.6	41
39	Identification of a Tissue-Restricted Isoform of SIRT1 Defines a Regulatory Domain that Encodes Specificity. Cell Reports, 2017, 18, 3069-3077.	2.9	14
40	Using comparative biology to understand how aging affects mitochondrial metabolism. Molecular and Cellular Endocrinology, 2017, 455, 54-61.	1.6	12
41	Identifying Dysregulated Epigenetic Enzyme Activity in Castrate-Resistant Prostate Cancer Development. ACS Chemical Biology, 2017, 12, 2804-2814.	1.6	22
42	Metabolic programming of the epigenome: host and gut microbial metabolite interactions with host chromatin. Translational Research, 2017, 189, 30-50.	2.2	34
43	Dysregulation of Sirtuin 2 (SIRT2) and histone H3K18 acetylation pathways associates with adverse prostate cancer outcomes. BMC Cancer, 2017, 17, 874.	1.1	47
44	A Novel Quantitative Mass Spectrometry Platform for Determining Protein O-GlcNAcylation Dynamics. Molecular and Cellular Proteomics, 2016, 15, 2462-2475.	2.5	63
45	Collagen Matrix Density Drives the Metabolic Shift in Breast Cancer Cells. EBioMedicine, 2016, 13, 146-156.	2.7	90
46	Iron Deprivation Induces Transcriptional Regulation of Mitochondrial Biogenesis. Journal of Biological Chemistry, 2016, 291, 20827-20837.	1.6	28
47	Diet-Microbiota Interactions Mediate Global Epigenetic Programming in Multiple Host Tissues. Molecular Cell, 2016, 64, 982-992.	4.5	405
48	Increased expression of AT-1/SLC33A1 causes an autistic-like phenotype in mice by affecting dendritic branching and spine formation. Journal of Experimental Medicine, 2016, 213, 1267-1284.	4.2	27
49	Pancreatic Î²-Cells From Mice Offset Age-Associated Mitochondrial Deficiency With Reduced KATP Channel Activity. Diabetes, 2016, 65, 2700-2710.	0.3	59
50	Mechanisms and Dynamics of Protein Acetylation in Mitochondria. Trends in Biochemical Sciences, 2016, 41, 231-244.	3.7	236
51	Loss of SIRT3 Provides Growth Advantage for B Cell Malignancies. Journal of Biological Chemistry, 2016, 291, 3268-3279.	1.6	75
52	Reading the Combinatorial Histone Language. ACS Chemical Biology, 2016, 11, 564-574.	1.6	55
53	Binding of the Fkh1 Forkhead Associated Domain to a Phosphopeptide within the Mph1 DNA Helicase Regulates Mating-Type Switching in Budding Yeast. PLoS Genetics, 2016, 12, e1006094.	1.5	16
54	MARCC (Matrixâ€Assisted Reader Chromatin Capture): An Antibodyâ€Free Method to Enrich and Analyze Combinatorial Nucleosome Modifications. Current Protocols in Molecular Biology, 2015, 111, 21.32.1-21.32.21.	2.9	5

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55	Identification of and Molecular Basis for SIRT6 Loss-of-Function Point Mutations in Cancer. Cell Reports, 2015, 13, 479-488.	2.9	64
56	Site-Specific Reactivity of Nonenzymatic Lysine Acetylation. ACS Chemical Biology, 2015, 10, 122-128.	1.6	141
57	Metabolic Regulation of Histone Post-Translational Modifications. ACS Chemical Biology, 2015, 10, 95-108.	1.6	259
58	Quantification of SAHA-Dependent Changes in Histone Modifications Using Data-Independent Acquisition Mass Spectrometry. Journal of Proteome Research, 2015, 14, 3252-3262.	1.8	45
59	Kinetic and Structural Basis for Acyl-Group Selectivity and NAD⁺ Dependence in Sirtuin-Catalyzed Deacylation. Biochemistry, 2015, 54, 3037-3050.	1.2	150
60	SIRT3 Mediates Multi-Tissue Coupling for Metabolic Fuel Switching. Cell Metabolism, 2015, 21, 637-646.	7.2	154
61	Stoichiometry of Site-specific Lysine Acetylation in an Entire Proteome. Journal of Biological Chemistry, 2014, 289, 21326-21338.	1.6	157
62	ChIP-less analysis of chromatin states. Epigenetics and Chromatin, 2014, 7, 7.	1.8	26
63	NAD+ Deficiency in Age-Related Mitochondrial Dysfunction. Cell Metabolism, 2014, 19, 178-180.	7.2	39
64	Activation of the Protein Deacetylase SIRT6 by Long-chain Fatty Acids and Widespread Deacylation by Mammalian Sirtuins. Journal of Biological Chemistry, 2013, 288, 31350-31356.	1.6	545
65	Calorie Restriction and SIRT3 Trigger Global Reprogramming of the Mitochondrial Protein Acetylome. Molecular Cell, 2013, 49, 186-199.	4.5	584
66	Quantification of Mitochondrial Acetylation Dynamics Highlights Prominent Sites of Metabolic Regulation. Journal of Biological Chemistry, 2013, 288, 26209-26219.	1.6	105
67	Minireview Series on Sirtuins: From Biochemistry to Health and Disease. Journal of Biological Chemistry, 2012, 287, 42417-42418.	1.6	10
68	SIRT3 Protein Deacetylates Isocitrate Dehydrogenase 2 (IDH2) and Regulates Mitochondrial Redox Status. Journal of Biological Chemistry, 2012, 287, 14078-14086.	1.6	361
69	The Deacetylase Sirt6 Activates the Acetyltransferase GCN5 and Suppresses Hepatic Gluconeogenesis. Molecular Cell, 2012, 48, 900-913.	4.5	246
70	Identification and Characterization of Small Molecule Inhibitors of a Plant Homeodomain Finger. Biochemistry, 2012, 51, 8293-8306.	1.2	88
71	Fortifying the Link between SIRT1, Resveratrol, and Mitochondrial Function. Cell Metabolism, 2012, 15, 566-567.	7.2	25
72	Sirtuin Catalysis and Regulation. Journal of Biological Chemistry, 2012, 287, 42419-42427.	1.6	193

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73	High-Throughput Strategy to Identify Inhibitors of Histone-Binding Domains. Methods in Enzymology, 2012, 512, 161-185.	0.4	2
74	Multivalent Recognition of Histone Tails by the PHD Fingers of CHD5. Biochemistry, 2012, 51, 6534-6544.	1.2	46
75	Identification and characterization of small molecules that inhibit binding of the third plant homeodomain finger of JARID1A to histone H3. FASEB Journal, 2012, 26, 533.2.	0.2	0
76	Processing Mechanism and Substrate Selectivity of the Core NuA4 Histone Acetyltransferase Complex. Biochemistry, 2011, 50, 727-737.	1.2	10
77	SIRT3 Substrate Specificity Determined by Peptide Arrays and Machine Learning. ACS Chemical Biology, 2011, 6, 146-157.	1.6	65
78	Sirt3 Promotes the Urea Cycle and Fatty Acid Oxidation during Dietary Restriction. Molecular Cell, 2011, 41, 139-149.	4.5	344
79	KAT(ching) Metabolism by the Tail: Insight into the Links between Lysine Acetyltransferases and Metabolism. ChemBioChem, 2011, 12, 290-298.	1.3	111
80	Structure and Biochemical Functions of SIRT6. Journal of Biological Chemistry, 2011, 286, 14575-14587.	1.6	239
81	Autoacetylation of the Histone Acetyltransferase Rtt109. Journal of Biological Chemistry, 2011, 286, 24694-24701.	1.6	57
82	Orphan Macrodomain Protein (Human C6orf130) Is an O-Acyl-ADP-ribose Deacylase. Journal of Biological Chemistry, 2011, 286, 35955-35965.	1.6	65
83	Catalytic activation of histone acetyltransferase Rtt109 by a histone chaperone. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20275-20280.	3.3	42
84	Sirt3 Mediates Reduction of Oxidative Damage and Prevention of Age-Related Hearing Loss under Caloric Restriction. Cell, 2010, 143, 802-812.	13.5	1,008
85	SIRT3 Deacetylates Mitochondrial 3-Hydroxy-3-Methylglutaryl CoA Synthase 2 and Regulates Ketone Body Production. Cell Metabolism, 2010, 12, 654-661.	7.2	418
86	Kinetic Mechanism of the Rtt109âˆ'Vps75 Histone Acetyltransferaseâˆ'Chaperone Complex. Biochemistry, 2010, 49, 6375-6385.	1.2	30
87	SIRT3 Promotes the Urea Cycle by Deacetylating Ornithine Transcarbamoylase. FASEB Journal, 2010, 24, 662.3.	0.2	0
88	Kinetic mechanism of a novel HATâ€histone chaperone complex, Rtt109â€Vps75. FASEB Journal, 2010, 24, 458.1.	0.2	0
89	A continuous microplate assay for sirtuins and nicotinamide-producing enzymes. Analytical Biochemistry, 2009, 394, 101-109.	1.1	125
90	Ethanol intoxication increases hepatic mitochondrial protein acetylation but not through sirtuin inhibition. FASEB Journal, 2009, 23, 760.1.	0.2	0

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91	Catalysis and substrate selection by histone/protein lysine acetyltransferases. Current Opinion in Structural Biology, 2008, 18, 682-689.	2.6	194
92	Acetylation-dependent ADP-ribosylation by Trypanosoma brucei Sir2. Journal of Biological Chemistry, 2008, 283, 5317-5326.	1.6	50
93	The Function of Nudix Hydrolase Ysa1 in Saccharomyces cerevisiae. FASEB Journal, 2008, 22, 1057.5.	0.2	0
94	Analogs of the Sirtuin Metabolite as Chemical probes of Nudix hydrolases. FASEB Journal, 2008, 22, 1058.3.	0.2	0
95	Acetyl-lysine Analog Peptides as Mechanistic Probes of Protein Deacetylases. Journal of Biological Chemistry, 2007, 282, 37256-37265.	1.6	133
96	Vitamins and Aging: Pathways to NAD+ Synthesis. Cell, 2007, 129, 453-454.	13.5	37
97	Histone H3-K56 Acetylation Is Catalyzed by Histone Chaperone-Dependent Complexes. Molecular Cell, 2007, 25, 703-712.	4.5	268
98	Sir2 Deacetylases Exhibit Nucleophilic Participation of Acetyl-Lysine in NAD+Cleavage. Journal of the American Chemical Society, 2007, 129, 5802-5803.	6.6	77
99	Catalytic Mechanism of a MYST Family Histone Acetyltransferaseâ€. Biochemistry, 2007, 46, 623-629.	1.2	114
100	Mechanism-Based Inhibition of Sir2 Deacetylases by Thioacetyl-Lysine Peptide. Biochemistry, 2007, 46, 14478-14486.	1.2	138
101	The Function of Nudix Hydrolase Ysa1 in Saccharomyces cerevisiae. FASEB Journal, 2007, 21, A631.	0.2	0
102	Sir2 Protein Deacetylases:Â Evidence for Chemical Intermediates and Functions of a Conserved Histidineâ€. Biochemistry, 2006, 45, 272-282.	1.2	113
103	Sirtuins deacetylate and activate mammalian acetyl-CoA synthetases. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10230-10235.	3.3	715
104	Sir2 regulated deacetylation and activation of mammalian Acetyl CoA Synthetase 1. FASEB Journal, 2006, 20, A959.	0.2	0
105	The Chemistry and Biology of Sirtuin Enzymes. FASEB Journal, 2006, 20, A1474.	0.2	0
106	The Sir2 family of protein deacetylases. Current Opinion in Chemical Biology, 2005, 9, 431-440.	2.8	224
107	Vitamin B3 and sirtuin function. Trends in Biochemical Sciences, 2005, 30, 479-483.	3.7	75
108	Assays for mechanistic investigations of protein/histone acetyltransferases. Methods, 2005, 36, 321-331.	1.9	70

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109	Substrate Specificity and Kinetic Mechanism of the Sir2 Family of NAD+-Dependent Histone/Protein Deacetylasesâ€. Biochemistry, 2004, 43, 9877-9887.	1.2	206
110	Linking chromatin function with metabolic networks: Sir2 family of NAD+-dependent deacetylases. Trends in Biochemical Sciences, 2003, 28, 41-48.	3.7	203
111	Mechanism of Nicotinamide Inhibition and Transglycosidation by Sir2 Histone/Protein Deacetylases. Journal of Biological Chemistry, 2003, 278, 50985-50998.	1.6	212
112	Conserved Enzymatic Production and Biological Effect of O-Acetyl-ADP-ribose by Silent Information Regulator 2-like NAD+-dependent Deacetylases. Journal of Biological Chemistry, 2002, 277, 12632-12641.	1.6	145
113	[29] Redox regulation of protein tyrosine phosphatases by hydrogen peroxide: Detecting sulfenic acid intermediates and examining reversible inactivation. Methods in Enzymology, 2002, 348, 297-305.	0.4	48
114	Histone Acetyltransferases. Annual Review of Biochemistry, 2001, 70, 81-120.	5.0	1,751
115	Synergistic Coupling of Histone H3 Phosphorylation and Acetylation in Response to Epidermal Growth Factor Stimulation. Molecular Cell, 2000, 5, 905-915.	4.5	718
116	Kinetic Mechanism of Human Histone Acetyltransferase P/CAFâ€. Biochemistry, 2000, 39, 11961-11969.	1.2	89
117	Catalytic Mechanism and Function of Invariant Glutamic Acid 173 from the Histone Acetyltransferase GCN5 Transcriptional Coactivator. Journal of Biological Chemistry, 1999, 274, 18157-18160.	1.6	198
118	Transition-State Structures for the Native Dual-Specific Phosphatase VHR and D92N and S131A Mutants. Contributions to the Driving Force for Catalysis. Biochemistry, 1996, 35, 7084-7092.	1.2	75