Mark T Bedford

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6653837/publications.pdf

Version: 2024-02-01

134 papers	15,574 citations	22153 59 h-index	17592 121 g-index
140 all docs	140 docs citations	140 times ranked	14230 citing authors

#	Article	IF	Citations
1	Protein Arginine Methylation in Mammals: Who, What, and Why. Molecular Cell, 2009, 33, 1-13.	9.7	1,487
2	Arginine Methylation. Molecular Cell, 2005, 18, 263-272.	9.7	1,002
3	Protein arginine methyltransferases and cancer. Nature Reviews Cancer, 2013, 13, 37-50.	28.4	880
4	Tudor, MBT and chromo domains gauge the degree of lysine methylation. EMBO Reports, 2006, 7, 397-403.	4.5	438
5	Recognition of Histone H3 Lysine-4 Methylation by the Double Tudor Domain of JMJD2A. Science, 2006, 312, 748-751.	12.6	406
6	Histone arginine methylation. FEBS Letters, 2011, 585, 2024-2031.	2.8	405
7	Immunoaffinity Enrichment and Mass Spectrometry Analysis of Protein Methylation. Molecular and Cellular Proteomics, 2014, 13, 372-387.	3.8	405
8	The Arginine Methyltransferase CARM1 Regulates the Coupling of Transcription and mRNA Processing. Molecular Cell, 2007, 25, 71-83.	9.7	323
9	Association of UHRF1 with methylated H3K9 directs the maintenance of DNA methylation. Nature Structural and Molecular Biology, 2012, 19, 1155-1160.	8.2	313
10	Arginine methylation at a glance. Journal of Cell Science, 2007, 120, 4243-4246.	2.0	297
11	The Novel Human Protein Arginine N-Methyltransferase PRMT6 Is a Nuclear Enzyme Displaying Unique Substrate Specificity. Journal of Biological Chemistry, 2002, 277, 3537-3543.	3.4	288
12	Small Molecule Regulators of Protein Arginine Methyltransferases. Journal of Biological Chemistry, 2004, 279, 23892-23899.	3.4	281
13	Specific protein methylation defects and gene expression perturbations in coactivator-associated arginine methyltransferase 1-deficient mice. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6464-6468.	7.1	254
14	Sam68 RNA Binding Protein Is an In Vivo Substrate for Protein ArginineN-Methyltransferase 1. Molecular Biology of the Cell, 2003, 14, 274-287.	2.1	237
15	Lysine methylation of the NF-ÎºB subunit RelA by SETD6 couples activity of the histone methyltransferase GLP at chromatin to tonic repression of NF-ÎºB signaling. Nature Immunology, 2011, 12, 29-36.	14.5	230
16	Proteome-wide Analysis in Saccharomyces cerevisiae Identifies Several PHD Fingers as Novel Direct and Selective Binding Modules of Histone H3 Methylated at Either Lysine 4 or Lysine 36. Journal of Biological Chemistry, 2007, 282, 2450-2455.	3.4	218
17	PABP1 identified as an arginine methyltransferase substrate using highâ€density protein arrays. EMBO Reports, 2002, 3, 268-273.	4.5	212
18	Arginine Methylation Inhibits the Binding of Proline-rich Ligands to Src Homology 3, but Not WW, Domains. Journal of Biological Chemistry, 2000, 275, 16030-16036.	3.4	208

#	Article	IF	Citations
19	PRMT8, a New Membrane-bound Tissue-specific Member of the Protein Arginine Methyltransferase Family. Journal of Biological Chemistry, 2005, 280, 32890-32896.	3.4	208
20	Epigenetic regulation of the histone-to-protamine transition during spermiogenesis. Reproduction, 2016, 151, R55-R70.	2.6	204
21	Arginine Methylation Facilitates the Recruitment of TOP3B to Chromatin to Prevent R Loop Accumulation. Molecular Cell, 2014, 53, 484-497.	9.7	199
22	FBP WW domains and the Abl SH3 domain bind to a specific class of proline-rich ligands. EMBO Journal, 1997, 16, 2376-2383.	7.8	195
23	Arginine methyltransferase CARM1 is a promoter-specific regulator of NF-ÎºB-dependent gene expression. EMBO Journal, 2005, 24, 85-96.	7.8	195
24	Crosstalk between ArgÂ1175 methylation and TyrÂ1173 phosphorylation negatively modulates EGFR-mediated ERK activation. Nature Cell Biology, 2011, 13, 174-181.	10.3	192
25	TDRD3 Is an Effector Molecule for Arginine-Methylated Histone Marks. Molecular Cell, 2010, 40, 1016-1023.	9.7	185
26	Carm1 Regulates Pax7 Transcriptional Activity through MLL1/2 Recruitment during Asymmetric Satellite Stem Cell Divisions. Cell Stem Cell, 2012, 11, 333-345.	11.1	184
27	Methylation of Tat by PRMT6 Regulates Human Immunodeficiency Virus Type 1 Gene Expression. Journal of Virology, 2005, 79, 124-131.	3.4	179
28	Loss of the major Type I arginine methyltransferase PRMT1 causes substrate scavenging by other PRMTs. Scientific Reports, 2013, 3, 1311.	3.3	173
29	Arginine Methylation of the Histone H3 Tail Impedes Effector Binding. Journal of Biological Chemistry, 2008, 283, 3006-3010.	3.4	167
30	PRMT9 is a Type II methyltransferase that methylates the splicing factor SAP145. Nature Communications, 2015, 6, 6428.	12.8	167
31	Acetylation on histone H3 lysine 9 mediates a switch from transcription initiation to elongation. Journal of Biological Chemistry, 2017, 292, 14456-14472.	3.4	165
32	Coactivator-associated arginine methyltransferase 1 (CARM1) is a positive regulator of the Cyclin E1 gene. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13351-13356.	7.1	161
33	Discovery of a chemical probe for the L3MBTL3 methyllysine reader domain. Nature Chemical Biology, 2013, 9, 184-191.	8.0	160
34	A protein-domain microarray identifies novel proteinâ€“protein interactions. Biochemical Journal, 2002, 367, 697-702.	3.7	158
35	Ribosomal protein S2 is a substrate for mammalian PRMT3 (protein arginine methyltransferase 3). Biochemical Journal, 2005, 386, 85-91.	3.7	146
36	Arginine Demethylation of G3BP1 Promotes Stress Granule Assembly. Journal of Biological Chemistry, 2016, 291, 22671-22685.	3.4	145

#	Article	IF	Citations
37	Mammalian Protein Arginine Methyltransferase 7 (PRMT7) Specifically Targets RXR Sites in Lysine- and Arginine-rich Regions. Journal of Biological Chemistry, 2013, 288, 37010-37025.	3.4	143
38	Epigenetic Multiple Ligands: Mixed Histone/Protein Methyltransferase, Acetyltransferase, and Class III Deacetylase (Sirtuin) Inhibitors. Journal of Medicinal Chemistry, 2008, 51, 2279-2290.	6.4	133
39	A cellular chemical probe targeting the chromodomains of Polycomb repressive complex 1. Nature Chemical Biology, 2016, 12, 180-187.	8.0	133
40	MPP8 mediates the interactions between DNA methyltransferase Dnmt3a and H3K9 methyltransferase GLP/G9a. Nature Communications, 2011, 2, 533.	12.8	132
41	Readers of histone methylarginine marks. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2014, 1839, 702-710.	1.9	126
42	Human protein arginine methyltransferases in vivo â€“ distinct properties of eight canonical members of the PRMT family. Journal of Cell Science, 2009, 122, 667-677.	2.0	119
43	Arginine Methylation-Dependent Reader-Writer Interplay Governs Growth Control by E2F-1. Molecular Cell, 2013, 52, 37-51.	9.7	119
44	Ribosomal Protein rpS2 Is Hypomethylated in PRMT3-deficient Mice. Journal of Biological Chemistry, 2007, 282, 16917-16923.	3.4	117
45	CARM1 promotes adipocyte differentiation by coactivating PPARÎ³. EMBO Reports, 2008, 9, 193-198.	4.5	114
46	Dynamics of Human Protein Arginine Methyltransferase 1(PRMT1) in Vivo*. Journal of Biological Chemistry, 2005, 280, 38005-38010.	3.4	96
47	Distinct Protein Arginine Methyltransferases Promote ATP-Dependent Chromatin Remodeling Function at Different Stages of Skeletal Muscle Differentiation. Molecular and Cellular Biology, 2009, 29, 1909-1921.	2.3	96
48	Loss of CARM1 Results in Hypomethylation of Thymocyte Cyclic AMP-regulated Phosphoprotein and Deregulated Early T Cell Development. Journal of Biological Chemistry, 2004, 279, 25339-25344.	3.4	92
49	Regulation of Protein Arginine Methyltransferase 8 (PRMT8) Activity by Its N-terminal Domain. Journal of Biological Chemistry, 2007, 282, 36444-36453.	3.4	92
50	PHF20 is an effector protein of p53 double lysine methylation that stabilizes and activates p53. Nature Structural and Molecular Biology, 2012, 19, 916-924.	8.2	89
51	Protein Arginine Methyltransferase 1 Coactivates NF-ÎºB-Dependent Gene Expression Synergistically with CARM1 and PARP1. Journal of Molecular Biology, 2008, 377, 668-678.	4.2	87
52	The AT-hook of the Chromatin Architectural Transcription Factor High Mobility Group A1a Is Arginine-methylated by Protein Arginine Methyltransferase 6. Journal of Biological Chemistry, 2006, 281, 3764-3772.	3.4	85
53	Protein arginine methyltransferase CARM1 attenuates the paraspeckle-mediated nuclear retention of mRNAs containing IRAlus. Genes and Development, 2015, 29, 630-645.	5.9	80
54	A Novel Pro-Arg Motif Recognized by WW Domains. Journal of Biological Chemistry, 2000, 275, 10359-10369.	3.4	78

#	Article	IF	Citations
55	CARM1 and Paraspeckles Regulate Pre-implantation Mouse Embryo Development. Cell, 2018, 175, 1902-1916.e13.	28.9	78
56	Unique Features of Human Protein Arginine Methyltransferase 9 (PRMT9) and Its Substrate RNA Splicing Factor SF3B2. Journal of Biological Chemistry, 2015, 290, 16723-16743.	3.4	77
57	CARM1 is required for proper control of proliferation and differentiation of pulmonary epithelial cells. Development (Cambridge), 2010, 137, 2147-2156.	2.5	73
58	Characterization of the plant homeodomain (PHD) reader family for their histone tail interactions. Epigenetics and Chromatin, 2020, 13, 3.	3.9	73
59	Crystal Structure of TDRD3 and Methyl-Arginine Binding Characterization of TDRD3, SMN and SPF30. PLoS ONE, 2012, 7, e30375.	2.5	71
60	PRMT1 loss sensitizes cells to PRMT5 inhibition. Nucleic Acids Research, 2019, 47, 5038-5048.	14.5	69
61	Novel 3,5-Bis(bromohydroxybenzylidene)piperidin-4-ones as Coactivator-Associated Arginine Methyltransferase 1 Inhibitors: Enzyme Selectivity and Cellular Activity. Journal of Medicinal Chemistry, 2011, 54, 4928-4932.	6.4	65
62	Enzymatic Activity Is Required for the in Vivo Functions of CARM1. Journal of Biological Chemistry, 2010, 285, 1147-1152.	3.4	61
63	PRMT5 regulates IRES-dependent translation via methylation of hnRNP A1. Nucleic Acids Research, 2017, 45, gkw1367.	14.5	61
64	CARM1 regulates replication fork speed and stress response by stimulating PARP1. Molecular Cell, 2021, 81, 784-800.e8.	9.7	61
65	Design, Synthesis and Biological Evaluation of Carboxy Analogues of Arginine Methyltransferase Inhibitorâ€...1 (AMIâ€1). ChemMedChem, 2010, 5, 398-414.	3.2	60
66	Regulated recruitment of tumor suppressor BRCA1 to the p21 gene by coactivator methylation. Genes and Development, 2011, 25, 176-188.	5.9	60
67	ITCH E3 Ubiquitin Ligase Interacts with Ebola Virus VP40 To Regulate Budding. Journal of Virology, 2016, 90, 9163-9171.	3.4	60
68	The Arginine Methyltransferase PRMT6 Regulates DNA Methylation and Contributes to Global DNA Hypomethylation in Cancer. Cell Reports, 2017, 21, 3390-3397.	6.4	60
69	Epigenetic Regulation of Transcriptional Activity of Pregnane X Receptor by Protein Arginine Methyltransferase 1. Journal of Biological Chemistry, 2009, 284, 9199-9205.	3.4	58
70	Discovery of First-in-Class Protein Arginine Methyltransferase 5 (PRMT5) Degraders. Journal of Medicinal Chemistry, 2020, 63, 9977-9989.	6.4	58
71	SARS-CoV-2 Envelope (E) protein interacts with PDZ-domain-2 of host tight junction protein ZO1. PLoS ONE, 2021, 16, e0251955.	2.5	56
72	Synthesis and Biological Validation of Novel Synthetic Histone/Protein Methyltransferase Inhibitors. ChemMedChem, 2007, 2, 987-991.	3.2	52

#	Article	IF	Citations
73	Protein methylation and DNA repair. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2007, 618, 91-101.	1.0	50
74	Arginine methyltransferase CARM1/PRMT4 regulates endochondral ossification. BMC Developmental Biology, 2009, 9, 47.	2.1	50
75	A gain-of-function mouse model identifies PRMT6 as a NF-Î²B coactivator. Nucleic Acids Research, 2014, 42, 8297-8309.	14.5	49
76	Developing Spindlin1 small-molecule inhibitors by using protein microarrays. Nature Chemical Biology, 2017, 13, 750-756.	8.0	47
77	Histone peptide microarray screen of chromo and Tudor domains defines new histone lysine methylation interactions. Epigenetics and Chromatin, 2017, 10, 12.	3.9	47
78	G9a-mediated methylation of ERÎ± links the PHF20/MOF histone acetyltransferase complex to hormonal gene expression. Nature Communications, 2016, 7, 10810.	12.8	45
79	E2F1 acetylation directs p300/CBP-mediated histone acetylation at DNA double-strand breaks to facilitate repair. Nature Communications, 2019, 10, 4951.	12.8	45
80	De novo identification of essential protein domains from CRISPR-Cas9 tiling-sgRNA knockout screens. Nature Communications, 2019, 10, 4541.	12.8	44
81	Chaperone-Mediated Autophagy Protein BAG3 Negatively Regulates Ebola and Marburg VP40-Mediated Egress. PLoS Pathogens, 2017, 13, e1006132.	4.7	43
82	CARM1 methylates MED12 to regulate its RNA-binding ability. Life Science Alliance, 2018, 1, e201800117.	2.8	43
83	Systematic Identification of Methyllysine-Driven Interactions for Histone and Nonhistone Targets. Journal of Proteome Research, 2010, 9, 5827-5836.	3.7	37
84	Ubiquitin Ligase WWP1 Interacts with Ebola Virus VP40 To Regulate Egress. Journal of Virology, 2017, 91, .	3.4	37
85	PRMT6 Promotes Lung Tumor Progression via the Alternate Activation of Tumor-Associated Macrophages. Molecular Cancer Research, 2020, 18, 166-178.	3.4	36
86	TIE2-mediated tyrosine phosphorylation of H4 regulates DNA damage response by recruiting ABL1. Science Advances, 2016, 2, e1501290.	10.3	33
87	Mouse Models of Overexpression Reveal Distinct Oncogenic Roles for Different Type I Protein Arginine Methyltransferases. Cancer Research, 2019, 79, 21-32.	0.9	32
88	Loss of the Methyl Lysine Effector Protein PHF20 Impacts the Expression of Genes Regulated by the Lysine Acetyltransferase MOF. Journal of Biological Chemistry, 2012, 287, 429-437.	3.4	30
89	Using oriented peptide array libraries to evaluate methylarginine-specific antibodies and arginine methyltransferase substrate motifs. Scientific Reports, 2016, 6, 28718.	3.3	30
90	PRMT5 C-terminal Phosphorylation Modulates a 14-3-3/PDZ Interaction Switch. Journal of Biological Chemistry, 2017, 292, 2255-2265.	3.4	29

#	Article	IF	Citations
91	The arginine methyltransferase CARM1 represses p300â€¢ACTâ€¢CREMÏ„ activity and is required for spermiogenesis. Nucleic Acids Research, 2018, 46, 4327-4343.	14.5	29
92	Deficient LRRC8A-dependent volume-regulated anion channel activity is associated with male infertility in mice. JCI Insight, 2018, 3, .	5.0	29
93	Adaptor Protein GRB2 Promotes Src Tyrosine Kinase Activation and Podosomal Organization by Protein-tyrosine Phosphatase Ïµ in Osteoclasts. Journal of Biological Chemistry, 2014, 289, 36048-36058.	3.4	28
94	A transcriptional coregulator, SPINÂ·DOC, attenuates the coactivator activity of Spindlin1. Journal of Biological Chemistry, 2017, 292, 20808-20817.	3.4	28
95	Acetylation of CCAR2 Establishes a BET/BRD9 Acetyl Switch in Response to Combined Deacetylase and Bromodomain Inhibition. Cancer Research, 2019, 79, 918-927.	0.9	28
96	CARM1 inhibition reduces histone acetyltransferase activity causing synthetic lethality in CREBBP/EP300-mutated lymphomas. Leukemia, 2020, 34, 3269-3285.	7.2	28
97	Genetic evidence for partial redundancy between the arginine methyltransferases CARM1 and PRMT6. Journal of Biological Chemistry, 2020, 295, 17060-17070.	3.4	27
98	Methods Applied to the Study of Protein Arginine Methylation. Methods in Enzymology, 2012, 512, 71-92.	1.0	26
99	Coactivator-Associated Arginine Methyltransferase 1 Regulates Fetal Hematopoiesis and Thymocyte Development. Journal of Immunology, 2013, 190, 597-604.	0.8	26
100	PRMT5 promotes DNA repair through methylation of 53BP1 and is regulated by Src-mediated phosphorylation. Communications Biology, 2020, 3, 428.	4.4	26
101	Protein-arginine Methyltransferase 1 (PRMT1) Methylates Ash2L, a Shared Component of Mammalian Histone H3K4 Methyltransferase Complexes. Journal of Biological Chemistry, 2011, 286, 12234-12244.	3.4	25
102	Identification of Rpl29 as a major substrate of the lysine methyltransferase Set7/9. Journal of Biological Chemistry, 2018, 293, 12770-12780.	3.4	24
103	Identification of Small-Molecule Enhancers of Arginine Methylation Catalyzed by Coactivator-Associated Arginine Methyltransferase 1. Journal of Medicinal Chemistry, 2012, 55, 9875-9890.	6.4	22
104	Xenoestrogens Regulate the Activity of Arginine Methyltransferases. ChemBioChem, 2011, 12, 323-329.	2.6	20
105	Independent transcriptomic and proteomic regulation by type I and II protein arginine methyltransferases. IScience, 2021, 24, 102971.	4.1	20
106	Novel phospho-switch function of delta-catenin in dendrite development. Journal of Cell Biology, 2020, 219, .	5.2	20
107	PRMT5 is essential for the maintenance of chondrogenic progenitor cells in the limb bud. Development (Cambridge), 2016, 143, 4608-4619.	2.5	19
108	A TRâ€FRETâ€Based Functional Assay for Screening Activators of CARM1. ChemBioChem, 2013, 14, 827-835.	2.6	18

#	Article	IF	Citations
109	Coactivator-Associated Arginine Methyltransferase-1 Function in Alveolar Epithelial Senescence and Elastase-Induced Emphysema Susceptibility. American Journal of Respiratory Cell and Molecular Biology, 2015, 53, 769-781.	2.9	17
110	Topoisomerase III-Î² is required for efficient replication of positive-sense RNA viruses. Antiviral Research, 2020, 182, 104874.	4.1	17
111	Inhibiting Type I Arginine Methyltransferase Activity Promotes T Cellâ€“Mediated Antitumor Immune Responses. Cancer Immunology Research, 2022, 10, 420-436.	3.4	17
112	Quantitative Characterization of Bivalent Probes for a Dual Bromodomain Protein, Transcription Initiation Factor TFIID Subunit 1. Biochemistry, 2018, 57, 2140-2149.	2.5	16
113	Estrogen-induced transcription at individual alleles is independent of receptor level and active conformation but can be modulated by coactivators activity. Nucleic Acids Research, 2020, 48, 1800-1810.	14.5	15
114	Turning Nonselective Inhibitors of Type I Protein Arginine Methyltransferases into Potent and Selective Inhibitors of Protein Arginine Methyltransferase 4 through a Deconstructionâ€“Reconstruction and Fragment-Growing Approach. Journal of Medicinal Chemistry, 2022, 65, 11574-11606.	6.4	15
115	Techniques in Protein Methylation. , 2004, 284, 195-208.		14
116	Protein domain microarrays as a platform to decipher signaling pathways and the histone code. Methods, 2020, 184, 4-12.	3.8	12
117	Host Protein BAG3 is a Negative Regulator of Lassa VLP Egress. Diseases (Basel, Switzerland), 2018, 6, 64.	2.5	11
118	Modular mimicry and engagement of the Hippo pathway by Marburg virus VP40: Implications for filovirus biology and budding. PLoS Pathogens, 2020, 16, e1008231.	4.7	11
119	Protein-Domain Microarrays. , 2004, 264, 173-182.		10
120	The histone and non-histone methyllysine reader activities of the UHRF1 tandem Tudor domain are dispensable for the propagation of aberrant DNA methylation patterning in cancer cells. Epigenetics and Chromatin, 2020, 13, 44.	3.9	10
121	Phosphorylation of the phosphatase PTPROt at Tyr ³⁹⁹ is a molecular switch that controls osteoclast activity and bone mass in vivo. Science Signaling, 2019, 12, .	3.6	9
122	The Role of the PRMT5â€“SND1 Axis in Hepatocellular Carcinoma. Epigenomes, 2021, 5, 2.	1.8	8
123	SPINDOC binds PARP1 to facilitate PARylation. Nature Communications, 2021, 12, 6362.	12.8	8
124	2 The family of protein arginine metkyltransferases. The Enzymes, 2006, 24, 31-50.	1.7	7
125	Regulation of receptor-type protein tyrosine phosphatases by their C-terminal tail domains. Biochemical Society Transactions, 2016, 44, 1295-1303.	3.4	7
126	Histone H3 N-terminal mimicry drives a novel network of methyl-effector interactions. Biochemical Journal, 2021, 478, 1943-1958.	3.7	7

#	Article	IF	Citations
127	Pan-methylarginine antibody generation using PEG linked GAR motifs as antigens. Methods, 2022, 200, 80-86.	3.8	7
128	Assessing kinetics and recruitment of DNA repair factors using high content screens. Cell Reports, 2021, 37, 110176.	6.4	6
129	Phosphorylation of Connexin36 near the C-terminus switches binding affinities for PDZ-domain and 14â€“3â€“3 proteins in vitro. Scientific Reports, 2020, 10, 18378.	3.3	4
130	Methylarginine Recognition by Tudor Domains. , 2015, , 125-147.		3
131	Angiomotin Counteracts the Negative Regulatory Effect of Host WWOX on Viral PPxY-Mediated Egress. Journal of Virology, 2021, 95, .	3.4	3
132	Reprogramming the Histone Code. Chemistry and Biology, 2007, 14, 242-244.	6.0	1
133	Methyl-lysine readers PHF20 and PHF20L1 define two distinctÂgene expressionâ€“regulating NSL complexes. Journal of Biological Chemistry, 2022, 298, 101588.	3.4	1
134	Screening for histone codebreakers. Journal of Biological Chemistry, 2018, 293, 13766-13767.	3.4	0