Mark T Bedford

List of Publications by Year
in descending order

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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	Pan-methylarginine antibody generation using PEG linked GAR motifs as antigens. Methods, 2022, 200, 80-86.	3.8	7
2	Methyl-lysine readers PHF20 and PHF20L1 define two distinctÂgene expressionâ€“regulating NSL complexes. Journal of Biological Chemistry, 2022, 298, 101588.	3.4	1
3	Inhibiting Type I Arginine Methyltransferase Activity Promotes T Cellâ€“Mediated Antitumor Immune Responses. Cancer Immunology Research, 2022, 10, 420-436.	3.4	17
4	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
5	The Role of the PRMT5â€“SND1 Axis in Hepatocellular Carcinoma. Epigenomes, 2021, 5, 2.	1.8	8
6	CARM1 regulates replication fork speed and stress response by stimulating PARP1. Molecular Cell, 2021, 81, 784-800.e8.	9.7	61
7	Angiomotin Counteracts the Negative Regulatory Effect of Host WWOX on Viral PPxY-Mediated Egress. Journal of Virology, 2021, 95, .	3.4	3
8	Histone H3 N-terminal mimicry drives a novel network of methyl-effector interactions. Biochemical Journal, 2021, 478, 1943-1958.	3.7	7
9	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
10	Independent transcriptomic and proteomic regulation by type I and II protein arginine methyltransferases. IScience, 2021, 24, 102971.	4.1	20
11	SPINDOC binds PARP1 to facilitate PARylation. Nature Communications, 2021, 12, 6362.	12.8	8
12	Assessing kinetics and recruitment of DNA repair factors using high content screens. Cell Reports, 2021, 37, 110176.	6.4	6
13	Protein domain microarrays as a platform to decipher signaling pathways and the histone code. Methods, 2020, 184, 4-12.	3.8	12
14	Genetic evidence for partial redundancy between the arginine methyltransferases CARM1 and PRMT6. Journal of Biological Chemistry, 2020, 295, 17060-17070.	3.4	27
15	Topoisomerase III-Î² is required for efficient replication of positive-sense RNA viruses. Antiviral Research, 2020, 182, 104874.	4.1	17
16	PRMT5 promotes DNA repair through methylation of 53BP1 and is regulated by Src-mediated phosphorylation. Communications Biology, 2020, 3, 428.	4.4	26
17	Discovery of First-in-Class Protein Arginine Methyltransferase 5 (PRMT5) Degraders. Journal of Medicinal Chemistry, 2020, 63, 9977-9989.	6.4	58
18	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

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19	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
20	PRMT6 Promotes Lung Tumor Progression via the Alternate Activation of Tumor-Associated Macrophages. Molecular Cancer Research, 2020, 18, 166-178.	3.4	36
21	CARM1 inhibition reduces histone acetyltransferase activity causing synthetic lethality in CREBBP/EP300-mutated lymphomas. Leukemia, 2020, 34, 3269-3285.	7.2	28
22	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
23	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
24	Novel phospho-switch function of delta-catenin in dendrite development. Journal of Cell Biology, 2020, 219, .	5.2	20
25	Characterization of the plant homeodomain (PHD) reader family for their histone tail interactions. Epigenetics and Chromatin, 2020, 13, 3.	3.9	73
26	E2F1 acetylation directs p300/CBP-mediated histone acetylation at DNA double-strand breaks to facilitate repair. Nature Communications, 2019, 10, 4951.	12.8	45
27	De novo identification of essential protein domains from CRISPR-Cas9 tiling-sgRNA knockout screens. Nature Communications, 2019, 10, 4541.	12.8	44
28	PRMT1 loss sensitizes cells to PRMT5 inhibition. Nucleic Acids Research, 2019, 47, 5038-5048.	14.5	69
29	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
30	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
31	Mouse Models of Overexpression Reveal Distinct Oncogenic Roles for Different Type I Protein Arginine Methyltransferases. Cancer Research, 2019, 79, 21-32.	0.9	32
32	The arginine methyltransferase CARM1 represses p300â€¢ACTâ€¢CREMÏ„ activity and is required for spermiogenesis. Nucleic Acids Research, 2018, 46, 4327-4343.	14.5	29
33	Quantitative Characterization of Bivalent Probes for a Dual Bromodomain Protein, Transcription Initiation Factor TFIID Subunit 1. Biochemistry, 2018, 57, 2140-2149.	2.5	16
34	CARM1 and Paraspeckles Regulate Pre-implantation Mouse Embryo Development. Cell, 2018, 175, 1902-1916.e13.	28.9	78
35	Screening for histone codebreakers. Journal of Biological Chemistry, 2018, 293, 13766-13767.	3.4	0
36	Identification of Rpl29 as a major substrate of the lysine methyltransferase Set7/9. Journal of Biological Chemistry, 2018, 293, 12770-12780.	3.4	24

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37	Host Protein BAG3 is a Negative Regulator of Lassa VLP Egress. Diseases (Basel, Switzerland), 2018, 6, 64.	2.5	11
38	Deficient LRRC8A-dependent volume-regulated anion channel activity is associated with male infertility in mice. JCI Insight, 2018, 3, .	5.0	29
39	CARM1 methylates MED12 to regulate its RNA-binding ability. Life Science Alliance, 2018, 1, e201800117.	2.8	43
40	PRMT5 C-terminal Phosphorylation Modulates a 14-3-3/PDZ Interaction Switch. Journal of Biological Chemistry, 2017, 292, 2255-2265.	3.4	29
41	PRMT5 regulates IRES-dependent translation via methylation of hnRNP A1. Nucleic Acids Research, 2017, 45, gkw1367.	14.5	61
42	Developing Spindlin1 small-molecule inhibitors by using protein microarrays. Nature Chemical Biology, 2017, 13, 750-756.	8.0	47
43	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
44	Ubiquitin Ligase WWP1 Interacts with Ebola Virus VP40 To Regulate Egress. Journal of Virology, 2017, 91, .	3.4	37
45	A transcriptional coregulator, SPINÂ·DOC, attenuates the coactivator activity of Spindlin1. Journal of Biological Chemistry, 2017, 292, 20808-20817.	3.4	28
46	Histone peptide microarray screen of chromo and Tudor domains defines new histone lysine methylation interactions. Epigenetics and Chromatin, 2017, 10, 12.	3.9	47
47	The Arginine Methyltransferase PRMT6 Regulates DNA Methylation and Contributes to Global DNA Hypomethylation in Cancer. Cell Reports, 2017, 21, 3390-3397.	6.4	60
48	Chaperone-Mediated Autophagy Protein BAG3 Negatively Regulates Ebola and Marburg VP40-Mediated Egress. PLoS Pathogens, 2017, 13, e1006132.	4.7	43
49	Using oriented peptide array libraries to evaluate methylarginine-specific antibodies and arginine methyltransferase substrate motifs. Scientific Reports, 2016, 6, 28718.	3.3	30
50	Regulation of receptor-type protein tyrosine phosphatases by their C-terminal tail domains. Biochemical Society Transactions, 2016, 44, 1295-1303.	3.4	7
51	Arginine Demethylation of G3BP1 Promotes Stress Granule Assembly. Journal of Biological Chemistry, 2016, 291, 22671-22685.	3.4	145
52	ITCH E3 Ubiquitin Ligase Interacts with Ebola Virus VP40 To Regulate Budding. Journal of Virology, 2016, 90, 9163-9171.	3.4	60
53	G9a-mediated methylation of ERÎ± links the PHF20/MOF histone acetyltransferase complex to hormonal gene expression. Nature Communications, 2016, 7, 10810.	12.8	45
54	PRMT5 is essential for the maintenance of chondrogenic progenitor cells in the limb bud. Development (Cambridge), 2016, 143, 4608-4619.	2.5	19

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55	TIE2-mediated tyrosine phosphorylation of H4 regulates DNA damage response by recruiting ABL1. Science Advances, 2016, 2, e1501290.	10.3	33
56	Epigenetic regulation of the histone-to-protamine transition during spermiogenesis. Reproduction, 2016, 151, R55-R70.	2.6	204
57	A cellular chemical probe targeting the chromodomains of Polycomb repressive complex 1. Nature Chemical Biology, 2016, 12, 180-187.	8.0	133
58	Protein arginine methyltransferase CARM1 attenuates the paraspeckle-mediated nuclear retention of mRNAs containing IRAlus. Genes and Development, 2015, 29, 630-645.	5.9	80
59	PRMT9 is a Type II methyltransferase that methylates the splicing factor SAP145. Nature Communications, 2015, 6, 6428.	12.8	167
60	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
61	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
62	Methylarginine Recognition by Tudor Domains. , 2015, , 125-147.		3
63	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
64	A gain-of-function mouse model identifies PRMT6 as a NF-Î°B coactivator. Nucleic Acids Research, 2014, 42, 8297-8309.	14.5	49
65	Immunoaffinity Enrichment and Mass Spectrometry Analysis of Protein Methylation. Molecular and Cellular Proteomics, 2014, 13, 372-387.	3.8	405
66	Readers of histone methylarginine marks. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2014, 1839, 702-710.	1.9	126
67	Arginine Methylation Facilitates the Recruitment of TOP3B to Chromatin to Prevent R Loop Accumulation. Molecular Cell, 2014, 53, 484-497.	9.7	199
68	A TRâ€FRETâ€Based Functional Assay for Screening Activators of CARM1. ChemBioChem, 2013, 14, 827-835.	2.6	18
69	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
70	Arginine Methylation-Dependent Reader-Writer Interplay Governs Growth Control by E2F-1. Molecular Cell, 2013, 52, 37-51.	9.7	119
71	Coactivator-Associated Arginine Methyltransferase 1 Regulates Fetal Hematopoiesis and Thymocyte Development. Journal of Immunology, 2013, 190, 597-604.	0.8	26
72	Protein arginine methyltransferases and cancer. Nature Reviews Cancer, 2013, 13, 37-50.	28.4	880

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73	Discovery of a chemical probe for the L3MBTL3 methyllysine reader domain. Nature Chemical Biology, 2013, 9, 184-191.	8.0	160
74	Loss of the major Type I arginine methyltransferase PRMT1 causes substrate scavenging by other PRMTs. Scientific Reports, 2013, 3, 1311.	3.3	173
75	Methods Applied to the Study of Protein Arginine Methylation. Methods in Enzymology, 2012, 512, 71-92.	1.0	26
76	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
77	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
78	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
79	Association of UHRF1 with methylated H3K9 directs the maintenance of DNA methylation. Nature Structural and Molecular Biology, 2012, 19, 1155-1160.	8.2	313
80	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
81	Crystal Structure of TDRD3 and Methyl-Arginine Binding Characterization of TDRD3, SMN and SPF30. PLoS ONE, 2012, 7, e30375.	2.5	71
82	MPP8 mediates the interactions between DNA methyltransferase Dnmt3a and H3K9 methyltransferase GLP/G9a. Nature Communications, 2011, 2, 533.	12.8	132
83	Crosstalk between ArgÂ1175 methylation and TyrÂ1173 phosphorylation negatively modulates EGFR-mediated ERK activation. Nature Cell Biology, 2011, 13, 174-181.	10.3	192
84	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
85	Histone arginine methylation. FEBS Letters, 2011, 585, 2024-2031.	2.8	405
86	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
87	Xenoestrogens Regulate the Activity of Arginine Methyltransferases. ChemBioChem, 2011, 12, 323-329.	2.6	20
88	Regulated recruitment of tumor suppressor BRCA1 to the p21 gene by coactivator methylation. Genes and Development, 2011, 25, 176-188.	5.9	60
89	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
90	Design, Synthesis and Biological Evaluation of Carboxy Analogues of Arginine Methyltransferase Inhibitorâ€...1 (AMIâ€1). ChemMedChem, 2010, 5, 398-414.	3.2	60

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91	CARM1 is required for proper control of proliferation and differentiation of pulmonary epithelial cells. Development (Cambridge), 2010, 137, 2147-2156.	2.5	73
92	Enzymatic Activity Is Required for the in Vivo Functions of CARM1. Journal of Biological Chemistry, 2010, 285, 1147-1152.	3.4	61
93	Systematic Identification of Methyllysine-Driven Interactions for Histone and Nonhistone Targets. Journal of Proteome Research, 2010, 9, 5827-5836.	3.7	37
94	TDRD3 Is an Effector Molecule for Arginine-Methylated Histone Marks. Molecular Cell, 2010, 40, 1016-1023.	9.7	185
95	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
96	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
97	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
98	Arginine methyltransferase CARM1/PRMT4 regulates endochondral ossification. BMC Developmental Biology, 2009, 9, 47.	2.1	50
99	Protein Arginine Methylation in Mammals: Who, What, and Why. Molecular Cell, 2009, 33, 1-13.	9.7	1,487
100	CARM1 promotes adipocyte differentiation by coactivating PPARÎ³. EMBO Reports, 2008, 9, 193-198.	4.5	114
101	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
102	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
103	Arginine Methylation of the Histone H3 Tail Impedes Effector Binding. Journal of Biological Chemistry, 2008, 283, 3006-3010.	3.4	167
104	Regulation of Protein Arginine Methyltransferase 8 (PRMT8) Activity by Its N-terminal Domain. Journal of Biological Chemistry, 2007, 282, 36444-36453.	3.4	92
105	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
106	Arginine methylation at a glance. Journal of Cell Science, 2007, 120, 4243-4246.	2.0	297
107	Ribosomal Protein rpS2 Is Hypomethylated in PRMT3-deficient Mice. Journal of Biological Chemistry, 2007, 282, 16917-16923.	3.4	117
108	The Arginine Methyltransferase CARM1 Regulates the Coupling of Transcription and mRNA Processing. Molecular Cell, 2007, 25, 71-83.	9.7	323

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109	Synthesis and Biological Validation of Novel Synthetic Histone/Protein Methyltransferase Inhibitors. ChemMedChem, 2007, 2, 987-991.	3.2	52
110	Reprogramming the Histone Code. Chemistry and Biology, 2007, 14, 242-244.	6.0	1
111	Protein methylation and DNA repair. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2007, 618, 91-101.	1.0	50
112	Recognition of Histone H3 Lysine-4 Methylation by the Double Tudor Domain of JMJD2A. Science, 2006, 312, 748-751.	12.6	406
113	Tudor, MBT and chromo domains gauge the degree of lysine methylation. EMBO Reports, 2006, 7, 397-403.	4.5	438
114	2 The family of protein arginine metkyltransferases. The Enzymes, 2006, 24, 31-50.	1.7	7
115	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
116	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
117	Ribosomal protein S2 is a substrate for mammalian PRMT3 (protein arginine methyltransferase 3). Biochemical Journal, 2005, 386, 85-91.	3.7	146
118	Arginine methyltransferase CARM1 is a promoter-specific regulator of NF-Î°B-dependent gene expression. EMBO Journal, 2005, 24, 85-96.	7.8	195
119	Dynamics of Human Protein Arginine Methyltransferase 1(PRMT1) in Vivo*. Journal of Biological Chemistry, 2005, 280, 38005-38010.	3.4	96
120	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
121	Methylation of Tat by PRMT6 Regulates Human Immunodeficiency Virus Type 1 Gene Expression. Journal of Virology, 2005, 79, 124-131.	3.4	179
122	Arginine Methylation. Molecular Cell, 2005, 18, 263-272.	9.7	1,002
123	Protein-Domain Microarrays. , 2004, 264, 173-182.		10
124	Small Molecule Regulators of Protein Arginine Methyltransferases. Journal of Biological Chemistry, 2004, 279, 23892-23899.	3.4	281
125	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
126	Techniques in Protein Methylation. , 2004, 284, 195-208.		14

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127	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
128	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
129	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
130	A protein-domain microarray identifies novel proteinâ€“protein interactions. Biochemical Journal, 2002, 367, 697-702.	3.7	158
131	PABP1 identified as an arginine methyltransferase substrate using highâ€density protein arrays. EMBO Reports, 2002, 3, 268-273.	4.5	212
132	A Novel Pro-Arg Motif Recognized by WW Domains. Journal of Biological Chemistry, 2000, 275, 10359-10369.	3.4	78
133	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
134	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