## John H Bushweller

List of Publications by Year in descending order

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57758 56724 7,406 112 44 83 citations h-index g-index papers 118 118 118 7825 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	The Intrinsically Disordered Proteins MLLT3 (AF9) and MLLT1 (ENL) – Multimodal Transcriptional Switches With Roles in Normal Hematopoiesis, MLL Fusion Leukemia, and Kidney Cancer. Journal of Molecular Biology, 2022, 434, 167117.	4.2	15
2	KIX domain determines a selective tumor-promoting role for EP300 and its vulnerability in small cell lung cancer. Science Advances, 2022, 8, eabl4618.	10.3	15
3	Small-Molecule Inhibitors of the MLL1 CXXC Domain, an Epigenetic Reader of DNA Methylation. ACS Medicinal Chemistry Letters, 2022, 13, 1363-1369.	2.8	8
4	TNFâ€Î± signaling regulates RUNX1 function in endothelial cells. FASEB Journal, 2021, 35, e21155.	0.5	28
5	An erythroid-to-myeloid cell fate conversion is elicited by LSD1 inactivation. Blood, 2021, 138, 1691-1704.	1.4	17
6	Targeting Runt-Related Transcription Factor 1 Prevents Pulmonary Fibrosis and Reduces Expression of Severe Acute Respiratory Syndrome Coronavirus 2 Host Mediators. American Journal of Pathology, 2021, 191, 1193-1208.	3.8	14
7	The CBFβ-SMMHC/NRP1 Axis Regulates FLT3 and TGF-Beta Pathways in Inv(16) Acute Myeloid Leukemia. Blood, 2021, 138, 3314-3314.	1.4	O
8	The interaction between RUNX2 and core binding factor beta as a potential therapeutic target in canine osteosarcoma. Veterinary and Comparative Oncology, 2020, 18, 52-63.	1.8	5
9	Structure of the Complex of an Iminopyridinedione Protein Tyrosine Phosphatase 4A3 Phosphatase Inhibitor with Human Serum Albumin. Molecular Pharmacology, 2020, 98, 648-657.	2.3	7
10	BCOR Binding to MLL-AF9 Is Essential for Leukemia via Altered EYA1, SIX, and MYC Activity. Blood Cancer Discovery, 2020, 1, 162-177.	5.0	15
11	RUNX1 and RUNX2 transcription factors function in opposing roles to regulate breast cancer stem cells. Journal of Cellular Physiology, 2020, 235, 7261-7272.	4.1	34
12	Protein Disulfide Exchange by the Intramembrane Enzymes DsbB, DsbD, and CcdA. Journal of Molecular Biology, 2020, 432, 5091-5103.	4.2	18
13	Inhibition of the RUNX1-CBF $\hat{l}^2$ transcription factor complex compromises mammary epithelial cell identity: a phenotype potentially stabilized by mitotic gene bookmarking. Oncotarget, 2020, 11, 2512-2530.	1.8	8
14	Targeting transcription factors in cancer — from undruggable to reality. Nature Reviews Cancer, 2019, 19, 611-624.	28.4	515
15	RUNX1-targeted therapy for AML expressing somatic or germline mutation in RUNX1. Blood, 2019, 134, 59-73.	1.4	75
16	RUNX proteins desensitize multiple myeloma to lenalidomide via protecting IKZFs from degradation. Leukemia, 2019, 33, 2006-2021.	7.2	36
17	Solution structure and elevator mechanism of the membrane electron transporter CcdA. Nature Structural and Molecular Biology, 2018, 25, 163-169.	8.2	18
18	A tool compound targeting the core binding factor Runt domain to disrupt binding to $CBF\hat{l}^2$ in leukemic cells. Leukemia and Lymphoma, 2018, 59, 2188-2200.	1.3	11

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19	Small molecule inhibition of the CBF $\hat{l}^2$ /RUNX interaction decreases ovarian cancer growth and migration through alterations in genes related to epithelial-to-mesenchymal transition. Gynecologic Oncology, 2018, 149, 350-360.	1.4	14
20	Direct Binding of BCOR, but Not CBX8, to MLL-AF9 Is Essential for MLL-AF9 Leukemia Via Regulation of the EYA1/SIX1 Gene Network. Blood, 2018, 132, 1316-1316.	1.4	2
21	Structure and Biophysics of CBFβ/RUNX and Its Translocation Products. Advances in Experimental Medicine and Biology, 2017, 962, 21-31.	1.6	10
22	Molecular Basis and Targeted Inhibition of CBFβ-SMMHC Acute Myeloid Leukemia. Advances in Experimental Medicine and Biology, 2017, 962, 229-244.	1.6	3
23	RUNX1 is required for oncogenic Myb and Myc enhancer activity in T-cell acute lymphoblastic leukemia. Blood, 2017, 130, 1722-1733.	1.4	64
24	Bacillus anthracis Peptidoglycan Integrity Is Disrupted by the Chemokine CXCL10 through the FtsE/X Complex. Frontiers in Microbiology, 2017, 8, 740.	3.5	12
25	CBFÎ <sup>2</sup> -SMMHC Inhibition Disrupts Enhancer Chromatin Dynamics and Represses MYC Transcriptional Program in Inv(16) Leukemia. Blood, 2017, 130, 784-784.	1.4	0
26	Small Molecule Inhibitor of CBF $\hat{I}^2$ -RUNX Binding for RUNX Transcription Factor Driven Cancers. EBioMedicine, 2016, 8, 117-131.	6.1	84
27	A small-molecule inhibitor of the aberrant transcription factor CBFÎ $^2$ -SMMHC delays leukemia in mice. Science, 2015, 347, 779-784.	12.6	104
28	Tom1 Modulates Binding of Tollip to Phosphatidylinositol 3-Phosphate via a Coupled Folding and Binding Mechanism. Structure, 2015, 23, 1910-1920.	3.3	28
29	Degree of Recruitment of DOT1L to MLL-AF9 Defines Level of H3K79 Di- and Tri-methylation on Target Genes and Transformation Potential. Cell Reports, 2015, 11, 808-820.	6.4	98
30	Importance of a specific amino acid pairing for murine MLL leukemias driven by MLLT1/3 or AFF1/4. Leukemia Research, 2014, 38, 1309-1315.	0.8	5
31	Selective Inhibition of the Leukemia Fusion Protein CBFÎ $^2$ -SMMHC By Small Molecule Al-10-49 in the Treatment of Inv(16) AML. Blood, 2014, 124, 390-390.	1.4	0
32	Leukemia Fusion Target AF9 Is an Intrinsically Disordered Transcriptional Regulator that Recruits Multiple Partners via Coupled Folding and Binding. Structure, 2013, 21, 176-183.	3.3	87
33	Functional Specificity of CpG DNA-binding CXXC Domains in Mixed Lineage Leukemia. Journal of Biological Chemistry, 2013, 288, 29901-29910.	3.4	27
34	Structural and dynamic studies of the transcription factor ERG reveal DNA binding is allosterically autoinhibited. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13374-13379.	7.1	47
35	Structural and Functional Studies Of The Intrinsically Disordered Protein AF9 In MLL-AF9 Leukemia. Blood, 2013, 122, 3762-3762.	1.4	0
36	A Small Molecule Inhibitor of the CBF $\hat{l}^2$ -SMMHC/RUNX Interaction Attenuates Inv(16) Leukemia in Vivo. Blood, 2012, 120, 286-286.	1.4	1

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37	Optimal Mutation Sites for PRE Data Collection and Membrane Protein Structure Prediction. Structure, 2011, 19, 484-495.	3.3	24
38	The Role of the Intrinsically Disordered and Multifunctional AF9 C-Terminal Domain in MLL-AF9 Leukemia,. Blood, 2011, 118, 3464-3464.	1.4	0
39	Accelerated Leukemogenesis by Truncated CBFβ-SMMHC Defective in High-Affinity Binding with RUNX1. Cancer Cell, 2010, 17, 455-468.	16.8	39
40	Application of Fragment-Based Drug Discovery to Membrane Proteins: Identification of Ligands of the Integral Membrane Enzyme DsbB. Chemistry and Biology, 2010, 17, 881-891.	6.0	70
41	Structure of the MLL CXXC domain–DNA complex and its functional role in MLL-AF9 leukemia. Nature Structural and Molecular Biology, 2010, 17, 62-68.	8.2	159
42	The PHD3 Domain of MLL Acts as a CYP33-Regulated Switch between MLL-Mediated Activation and Repression,. Biochemistry, 2010, 49, 6576-6586.	2.5	56
43	Structure of the AML1-ETO NHR3–PKA(RIIα) Complex and Its Contribution to AML1-ETO Activity. Journal of Molecular Biology, 2010, 402, 560-577.	4.2	18
44	DNMT1 Cxxc Domain Can Functionally Substitute In An MLL Fusion Protein. Blood, 2010, 116, 4193-4193.	1.4	0
45	The solution structure and dynamics of the DHâ€PH module of PDZRhoGEF in isolation and in complex with nucleotideâ€free RhoA. Protein Science, 2009, 18, 2067-2079.	7.6	18
46	CBFÎ <sup>2</sup> is critical for AML1-ETO and TEL-AML1 activity. Blood, 2009, 113, 3070-3079.	1.4	51
47	Structure of the AML1-ETO eTAFH domain–HEB peptide complex and its contribution to AML1-ETO activity. Blood, 2009, 113, 3558-3567.	1.4	33
48	The role of CBF $\hat{I}^2$ in AML1-ETO's activity. Blood, 2009, 114, 2849-2850.	1.4	15
49	Structural Basis for MLL Cxxc Domain Protection against CpG DNA Methylation and the Essential Role of This Function in MLL-AF9 Leukemia Blood, 2009, 114, 763-763.	1.4	0
50	NMR Solution Structure of the Integral Membrane Enzyme DsbB: Functional Insights into DsbB-Catalyzed Disulfide Bond Formation. Molecular Cell, 2008, 31, 896-908.	9.7	171
51	MLL protects CpG clusters from methylation within the Hoxa9 gene, maintaining transcript expression. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7517-7522.	7.1	86
52	Allosteric Inhibition of the Protein-Protein Interaction between the Leukemia-Associated Proteins Runx1 and CBF $\hat{I}^2$ . Chemistry and Biology, 2007, 14, 1186-1197.	6.0	114
53	Disease mutations in RUNX1 and RUNX2 create nonfunctional, dominant-negative, or hypomorphic alleles. EMBO Journal, 2007, 26, 1163-1175.	7.8	106
54	Structural Basis for Recognition of SMRT/N-CoR by the MYND Domain and Its Contribution to AML1/ETO's Activity. Cancer Cell, 2007, 11, 483-497.	16.8	106

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55	Development of Small Molecule Inhibitors of the AML1-ETO and CBFÎ <sup>2</sup> -SMMHC Oncoproteins Blood, 2007, 110, 1591-1591.	1.4	1
56	Increasing the Accuracy of Solution NMR Structures of Membrane Proteins by Application of Residual Dipolar Couplings. High-Resolution Structure of Outer Membrane Protein A. Journal of the American Chemical Society, 2006, 128, 6947-6951.	13.7	75
57	Site-Directed Parallel Spin-Labeling and Paramagnetic Relaxation Enhancement in Structure Determination of Membrane Proteins by Solution NMR Spectroscopy. Journal of the American Chemical Society, 2006, 128, 4389-4397.	13.7	149
58	A Mutation in the S-switch Region of the Runt Domain Alters the Dynamics of an Allosteric Network Responsible for CBF $\hat{l}^2$ Regulation. Journal of Molecular Biology, 2006, 364, 1073-1083.	4.2	12
59	The DC-module of doublecortin: Dynamics, domain boundaries, and functional implications. Proteins: Structure, Function and Bioinformatics, 2006, 64, 874-882.	2.6	15
60	High resolution structure of the HDGF PWWP domain: A potential DNA binding domain. Protein Science, 2006, 15, 314-323.	7.6	62
61	The tetramer structure of the Nervy homology two domain, NHR2, is critical for AML1/ETO's activity. Cancer Cell, 2006, 9, 249-260.	16.8	121
62	Probing the Supramodular Architecture of a Multidomain Protein: The Structure of Syntenin in Solution. Structure, 2005, 13, 319-327.	3.3	19
63	Membrane Structures of the Hemifusion-Inducing Fusion Peptide Mutant G1S and theFusion-Blocking Mutant G1V of Influenza Virus HemagglutininSuggest a Mechanism for Pore Opening in MembraneFusion. Journal of Virology, 2005, 79, 12065-12076.	3.4	66
64	Development of Small Molecule Inhibitor of the AML1-ETO Oncoprotein Blood, 2005, 106, 1515-1515.	1.4	0
65	The CBFb-SMMHC Oncoprotein Inhibits Binding of the Runx1 Runt Domain to DNA Blood, 2005, 106, 2709-2709.	1.4	0
66	Development of Small Molecule Inhibitors of the CBFÎ <sup>2</sup> -SMMHC Oncoprotein Blood, 2005, 106, 3359-3359.	1.4	0
67	Structural and Functional Characterization of the NHR2 and Runt Domains of AML1/ETO Blood, 2005, 106, 2854-2854.	1.4	9
68	${\rm CBF\hat{l}^2}$ allosterically regulates the Runx1 Runt domain via a dynamic conformational equilibrium. Nature Structural and Molecular Biology, 2004, 11, 901-906.	8.2	65
69	Synthesis and evaluation of substituted 4-aryloxy- and 4-arylsulfanyl-phenyl-2-aminothiazoles as inhibitors of human breast cancer cell proliferation. Bioorganic and Medicinal Chemistry, 2004, 12, 1029-1036.	3.0	55
70	Charged Gels as Orienting Media for Measurement of Residual Dipolar Couplings in Soluble and Integral Membrane Proteins. Journal of the American Chemical Society, 2004, 126, 16259-16266.	13.7	81
71	Structural and Functional Characterization of the NHR2 and Runt Domains of AML1/ETO Blood, 2004, 104, 482-482.	1.4	1
72	Biochemical and In Vivo Characterization of Amino Acid Substitutions in the Runx1 (AML1) Runt Domain Found in FPD/AML, AML MO, and Cleidocranial Dysplasia (CCD) Patients Blood, 2004, 104, 464-464.	1.4	1

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73	Assignment of 1H, 13C and 15N resonances of the N-terminal microtubule-binding domain of human doublecortin. Journal of Biomolecular NMR, 2003, 25, 81-82.	2.8	2
74	The DCX-domain tandems of doublecortin and doublecortin-like kinase. Nature Structural and Molecular Biology, 2003, 10, 324-333.	8.2	122
75	Structure, dynamics and function of the outer membrane protein A (OmpA) and influenza hemagglutinin fusion domain in detergent micelles by solution NMR. FEBS Letters, 2003, 555, 139-143.	2.8	59
76	Structural and functional characterization of Runx1, CBFβ, and CBFβ-SMMHC. Blood Cells, Molecules, and Diseases, 2003, 30, 147-156.	1.4	16
77	Energetic Contribution of Residues in the Runx1 Runt Domain to DNA Binding. Journal of Biological Chemistry, 2003, 278, 33088-33096.	3.4	35
78	Mutagenesis of the Runt Domain Defines Two Energetic Hot Spots for Heterodimerization with the Core Binding Factor $\hat{l}^2$ Subunit. Journal of Biological Chemistry, 2003, 278, 33097-33104.	3.4	26
79	Hepatoma Derived Growth Factor is a Nuclear Targeted Mitogen. Current Drug Targets, 2003, 4, 367-371.	2.1	32
80	Altered affinity of CBFÎ <sup>2</sup> -SMMHC for Runx1 explains its role in leukemogenesis. Nature Structural Biology, 2002, 9, 674-679.	9.7	65
81	MQ-hCN-based pulse sequences for the measurement of 13C1'-1H1', 13C1'-15N, 1H1'-15N, 13C1'-13C2', 1H1'-13C2',13C6/8-1H6/8, 13C6/8-15N, 1H6/8-15N, 13C6-13C5, 1H6-13C5 dipolar couplings in 13C, 15N-labeled (and RNA). Journal of Biomolecular NMR, 2002, 22, 9-20.	<b>D.N</b> A	19
82	An Optimized PCR-Based Procedure for Production of 13C/15N-Labeled DNA. Biochemical and Biophysical Research Communications, 2001, 284, 295-300.	2.1	11
83	Structure of outer membrane protein A transmembrane domain by NMR spectroscopy. Nature Structural Biology, 2001, 8, 334-338.	9.7	363
84	Membrane structure and fusion-triggering conformational change of the fusion domain from influenza hemagglutinin. Nature Structural Biology, 2001, 8, 715-720.	9.7	406
85	The NOESY Jigsaw: Automated Protein Secondary Structure and Main-Chain Assignment from Sparse, Unassigned NMR Data. Journal of Computational Biology, 2000, 7, 537-558.	1.6	85
86	Energetic and Functional Contribution of Residues in the Core Binding Factor $\hat{l}^2$ (CBF $\hat{l}^2$ ) Subunit to Heterodimerization with CBF $\hat{l}_{\pm}$ . Journal of Biological Chemistry, 2000, 275, 39579-39588.	3.4	55
87	CBF—A biophysical perspective. Seminars in Cell and Developmental Biology, 2000, 11, 377-382.	5.0	21
88	Biophysical characterization of interactions between the core binding factor $\hat{l}_{\pm}$ and $\hat{l}_{\pm}$ subunits and DNA. FEBS Letters, 2000, 470, 167-172.	2.8	47
89	Solution structure of core binding factor beta and map of the CBF alpha binding site. Nature Structural Biology, 1999, 6, 624-627.	9.7	68
90	Haploinsufficiency of CBFA2 causes familial thrombocytopenia with propensity to develop acute myelogenous leukaemia. Nature Genetics, 1999, 23, 166-175.	21.4	1,036

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91	The Ig fold of the core binding factor î± Runt domain is a member of a family of structurally and functionally related Ig-fold DNA-binding domains. Structure, 1999, 7, 1247-1256.	3.3	81
92	Binding specificity and mechanistic insight into glutaredoxin-catalyzed protein disulfide reduction 1 1Edited by P. E. Wright. Journal of Molecular Biology, 1999, 292, 151-161.	4.2	44
93	1H, 13C and 15N NMR resonance assignments of vaccinia glutaredoxin-1 in the fully reduced form. , 1998, 12, 353-355.		5
94	Complete heteronuclear NMR resonance assignments and secondary structure of core binding factor beta (1-141). Journal of Biomolecular NMR, 1998, 12, 459-460.	2.8	8
95	A PCR-based method for uniform 13 C/15 N labeling of long DNA oligomers. FEBS Letters, 1998, 436, 372-376.	2.8	14
96	Preparation, Characterization, and Complete Heteronuclear NMR Resonance Assignments of the Glutaredoxin (C14S)â^Ribonucleotide Reductase B1 737â^761 (C754S) Mixed Disulfideâ€. Biochemistry, 1998, 37, 5849-5857.	2.5	16
97	The NMR solution structure of human glutaredoxin in the fully reduced form. Journal of Molecular Biology, 1998, 280, 687-701.	4.2	81
98	Overexpression, Purification, and Biophysical Characterization of the Heterodimerization Domain of the Core-binding Factor $\hat{l}^2$ Subunit. Journal of Biological Chemistry, 1998, 273, 2480-2487.	3.4	20
99	Comparison of Backbone Dynamics of Reduced and OxidizedEscherichia coliGlutaredoxin-1 Using15N NMR Relaxation Measurementsâ€. Biochemistry, 1997, 36, 5029-5044.	2.5	42
100	Complete <sup>1</sup> H, <sup>13</sup> C, and <sup>15</sup> N NMR resonance assignments and secondary structure of human glutaredoxin in the fully reduced form. Protein Science, 1997, 6, 383-390.	7.6	12
101	The CBFβ Subunit Is Essential for CBFα2 (AML1) Function In Vivo. Cell, 1996, 87, 697-708.	28.9	620
102	Stereodynamics of 9,11-Diphenyl-10-azatetracyclo [6.3.0.0.4,110.5,9] undecanes. Highly Restricted Nitrogen Inversion and Isolated Phenyl Rotation. X-ray Crystallographic, Dynamic NMR, and Molecular Mechanics Studies. Journal of Organic Chemistry, 1996, 61, 4319-4327.	3.2	10
103	Biochemical and Biophysical Properties of the Core-binding Factor α2 (AML1) DNA-binding Domain. Journal of Biological Chemistry, 1996, 271, 26251-26260.	3.4	62
104	The Nuclear Magnetic Resonance Solution Structure of the Mixed Disulfide between Escherichia coli Glutaredoxin(C14S) and Glutathione. Journal of Molecular Biology, 1994, 235, 1585-1597.	4.2	134
105	3D 13C-15N-heteronuclear two-spin coherence spectroscopy for polypeptide backbone assignments in 13C-15N-double-labeled proteins. Journal of Biomolecular NMR, 1993, 3, 127-32.	2.8	66
106	Biosynthetic 15N and 13C isotope labelling of glutathione in the mixed disulfide with Escherichia coli glutaredoxin documented by sequence-specific NMR assignments. FEBS Journal, 1993, 218, 327-334.	0.2	6
107	NMR structure of oxidized <i>Escherichia coli</i> glutaredoxin: Comparison with reduced <i>E. coli</i> glutaredoxin and functionally related proteins. Protein Science, 1992, 1, 310-321.	7.6	111
108	Structural and functional characterization of the mutant Escherichia coli glutaredoxin (C14.fwdarw.S) and its mixed disulfide with glutathione. Biochemistry, 1992, 31, 9288-9293.	2.5	215

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109	Sequence-specific1H n.m.r. assignments and determination of the three-dimensional structure of reduced escherichia coli glutaredoxin. Journal of Molecular Biology, 1991, 221, 1311-1324.	4.2	92
110	Synthesis of <i>Cis</i> - and <i>Trans</i> -1-methylcyclohexane-1,4-diols and Their 4-Hemisuccinate Esters. Synthetic Communications, 1989, 19, 745-754.	2.1	9
111	Sulfoxide analogs of dihydro- and tetrahydroprephenate as inhibitors of prephenate dehydratase. Journal of Organic Chemistry, 1989, 54, 2404-2409.	3.2	11
112	Synthesis of dimetallaazacyclobutenes via reaction of polynuclear heteroaromatic nitrogen compounds with triruthenium dodecacarbonyl: reactivity and structural elucidation. Organometallics, 1986, 5, 2193-2198.	2.3	53