

# Beat Fierz

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3827949/publications.pdf>

Version: 2024-02-01

57  
papers

3,024  
citations

218677  
26  
h-index

206112  
48  
g-index

70  
all docs

70  
docs citations

70  
times ranked

3375  
citing authors

#	ARTICLE	IF	CITATIONS
1	Histone H2B ubiquitylation disrupts local and higher-order chromatin compaction. <i>Nature Chemical Biology</i> , 2011, 7, 113-119.	8.0	392
2	Dynamics of Unfolded Polypeptide Chains as Model for the Earliest Steps in Protein Folding. <i>Journal of Molecular Biology</i> , 2003, 332, 265-274.	4.2	248
3	Disulfide-directed histone ubiquitylation reveals plasticity in hDot1L activation. <i>Nature Chemical Biology</i> , 2010, 6, 267-269.	8.0	227
4	Structural mechanism of cGAS inhibition by the nucleosome. <i>Nature</i> , 2020, 587, 668-672.	27.8	157
5	Accelerated chromatin biochemistry using DNA-barcoded nucleosome libraries. <i>Nature Methods</i> , 2014, 11, 834-840.	19.0	129
6	BAF restricts cGAS on nuclear DNA to prevent innate immune activation. <i>Science</i> , 2020, 369, 823-828.	12.6	125
7	Single-molecule FRET reveals multiscale chromatin dynamics modulated by HP1. <i>Nature Communications</i> , 2018, 9, 235.	12.8	113
8	Chromatin as an expansive canvas for chemical biology. <i>Nature Chemical Biology</i> , 2012, 8, 417-427.	8.0	109
9	DNA binding by PHF1 prolongs PRC2 residence time on chromatin and thereby promotes H3K27 methylation. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 1039-1047.	8.2	105
10	Biophysics of Chromatin Dynamics. <i>Annual Review of Biophysics</i> , 2019, 48, 321-345.	10.0	102
11	Multivalency governs HP1 association dynamics with the silent chromatin state. <i>Nature Communications</i> , 2015, 6, 7313.	12.8	94
12	A two-state activation mechanism controls the histone methyltransferase Suv39h1. <i>Nature Chemical Biology</i> , 2016, 12, 188-193.	8.0	90
13	Stability of Nucleosomes Containing Homogenously Ubiquitylated H2A and H2B Prepared Using Semisynthesis. <i>Journal of the American Chemical Society</i> , 2012, 134, 19548-19551.	13.7	83
14	Loop formation in unfolded polypeptide chains on the picoseconds to microseconds time scale. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 2163-2168.	7.1	70
15	Sumoylated Human Histone H4 Prevents Chromatin Compaction by Inhibiting Long-range Internucleosomal Interactions. <i>Journal of Biological Chemistry</i> , 2014, 289, 33827-33837.	3.4	69
16	End-to-End vs Interior Loop Formation Kinetics in Unfolded Polypeptide Chains. <i>Journal of the American Chemical Society</i> , 2007, 129, 672-679.	13.7	67
17	Chromatin Fiber Invasion and Nucleosome Displacement by the Rap1 Transcription Factor. <i>Molecular Cell</i> , 2020, 77, 488-500.e9.	9.7	66
18	Local conformational dynamics in $\alpha$ -helices measured by fast triplet transfer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 1057-1062.	7.1	63

#	ARTICLE	IF	CITATIONS
19	Histone H3K27 Trimethylation Inhibits H3 Binding and Function of SET1-Like H3K4 Methyltransferase Complexes. <i>Molecular and Cellular Biology</i> , 2013, 33, 4936-4946.	2.3	61
20	Dynamic chromatin technologies: from individual molecules to epigenomic regulation in cells. <i>Nature Reviews Genetics</i> , 2017, 18, 457-472.	16.3	60
21	Single-molecule kinetic analysis of HP1-chromatin binding reveals a dynamic network of histone modification and DNA interactions. <i>Nucleic Acids Research</i> , 2017, 45, 10504-10517.	14.5	49
22	On the unusual fluorescence properties of xanthone in water. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 3432.	2.8	46
23	Traceless Synthesis of Asymmetrically Modified Bivalent Nucleosomes. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2903-2906.	13.8	46
24	Single-molecule dynamics and genome-wide transcriptomics reveal that NF- $\kappa$ B (p65)-DNA binding times can be decoupled from transcriptional activation. <i>PLoS Genetics</i> , 2019, 15, e1007891.	3.5	45
25	Engineered Multivalent Sensors to Detect Coexisting Histone Modifications in Living Stem Cells. <i>Cell Chemical Biology</i> , 2018, 25, 51-56.e6.	5.2	39
26	Release of linker histone from the nucleosome driven by polyelectrolyte competition with a disordered protein. <i>Nature Chemistry</i> , 2022, 14, 224-231.	13.6	37
27	Histone Monoubiquitylation Position Determines Specificity and Direction of Enzymatic Cross-talk with Histone Methyltransferases Dot1L and PRC2. <i>Journal of Biological Chemistry</i> , 2012, 287, 23718-23725.	3.4	32
28	Intrachain diffusion in a protein loop fragment from carp parvalbumin. <i>Chemical Physics</i> , 2004, 307, 209-215.	1.9	24
29	Testing the diffusing boundary model for the helix-coil transition in peptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12905-12910.	7.1	23
30	A bi-terminal protein ligation strategy to probe chromatin structure during DNA damage. <i>Chemical Science</i> , 2018, 9, 3704-3709.	7.4	23
31	Engineering chromatin states: Chemical and synthetic biology approaches to investigate histone modification function. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2014, 1839, 644-656.	1.9	17
32	SUV39 SET domains mediate crosstalk of heterochromatic histone marks. <i>ELife</i> , 2021, 10, .	6.0	17
33	Torsin ATPases influence chromatin interaction of the Torsin regulator LAP1. <i>ELife</i> , 2020, 9, .	6.0	17
34	KAP1 is an antiparallel dimer with a functional asymmetry. <i>Life Science Alliance</i> , 2019, 2, e201900349.	2.8	16
35	O-GlcNAcylation of High Mobility Group Box 1 (HMGB1) Alters Its DNA Binding and DNA Damage Processing Activities. <i>Journal of the American Chemical Society</i> , 2021, 143, 16030-16040.	13.7	14
36	The Elusive Structure of Centro-Chromatin: Molecular Order or Dynamic Heterogeneity?. <i>Journal of Molecular Biology</i> , 2021, 433, 166676.	4.2	13

#	ARTICLE	IF	CITATIONS
37	Title is missing!. , 0, , .		13
38	Controlling the supramolecular assembly of nucleosomes asymmetrically modified on H4. Chemical Communications, 2017, 53, 10267-10270.	4.1	11
39	A Modular Ligation Strategy for Asymmetric Bivalent Nucleosomes Trimethylated at K36 and K27. ChemBioChem, 2019, 20, 1124-1128.	2.6	11
40	Synthetic Chromatin Approaches To Probe the Writing and Erasing of Histone Modifications. ChemMedChem, 2014, 9, 495-504.	3.2	10
41	Spurlose Synthese von asymmetrisch modifizierten, bivalenten Nukleosomen. Angewandte Chemie, 2016, 128, 2954-2958.	2.0	10
42	Multivalent Peptide Ligands To Probe the Chromocenter Microenvironment in Living Cells. ACS Chemical Biology, 2023, 18, 1066-1075.	3.4	10
43	Dynamic Chromatin Regulation from a Single Molecule Perspective. ACS Chemical Biology, 2016, 11, 609-620.	3.4	9
44	Using Triplet-Triplet Energy Transfer to Measure Conformational Dynamics in Polypeptide Chains. , 2007, 350, 169-188.		7
45	Chemical and biophysical methods to explore dynamic mechanisms of chromatin silencing. Current Opinion in Chemical Biology, 2019, 51, 1-10.	6.1	6
46	Nucleosome Binding by the Lysine Specific Demethylase 1 (LSD1) Enzyme Enables Histone H3 Demethylation. Biochemistry, 2020, 59, 2479-2483.	2.5	6
47	Multiplexed Single-Molecule Experiments Reveal Nucleosome Invasion Dynamics of the Cas9 Genome Editor. Journal of the American Chemical Society, 2021, 143, 16313-16319.	13.7	6
48	Revealing chromatin organization in metaphase chromosomes. EMBO Journal, 2019, 38, .	7.8	3
49	Observing protein interaction dynamics to chemically defined chromatin fibers by colocalization single-molecule fluorescence microscopy. Methods, 2020, 184, 112-124.	3.8	3
50	Semisynthesis and Reconstitution of Nucleosomes Carrying Asymmetric Histone Modifications. Methods in Molecular Biology, 2020, 2133, 263-291.	0.9	1
51	Chromatin as a Dynamic Platform for Protein-Protein Interactions. Biophysical Journal, 2014, 106, 77a.	0.5	0
52	Molecular and Chemical Mechanism in Epigenetics â€“ Swiss Summer School 2015 July 12â€“17, 2015, Hotel Kurhaus, Arolla, Switzerland. Chimia, 2015, 69, 624.	0.6	0
53	Heterochromatin Assembly and Dynamics on the Single Molecule Level. Biophysical Journal, 2015, 108, 14a.	0.5	0
54	2016 International Symposium on Chemical Biology of the NCCR Chemical Biology  Campus Biotech, Geneva 13â€“15.1.2016. Chimia, 2016, 70, 215-219.	0.6	0

#	ARTICLE	IF	CITATIONS
55	Chromatin Remodeling Induced by the Invasion of Yeast Pioneer Transcription Factor Rap1 Revealed by Single-Molecule FRET. Biophysical Journal, 2019, 116, 39a-40a.	0.5	0
56	Applying Peptide and Protein Synthesis to Study Post-translational Modifications in Epigenetics and Beyond. Chimia, 2021, 75, 484-488.	0.6	0
57	Target Search Dynamics of Sox Transcription Factors. FASEB Journal, 2022, 36, .	0.5	0