Jörg Stetefeld

List of Publications by Year in descending order

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109 papers 5,589 citations

34 h-index 71 g-index

115 all docs

 $\begin{array}{c} 115 \\ \text{docs citations} \end{array}$

115 times ranked 9041 citing authors

#	Article	IF	CITATIONS
1	Dynamic light scattering: a practical guide and applications in biomedical sciences. Biophysical Reviews, 2016, 8, 409-427.	3.2	1,132
2	Coiled coils: a highly versatile protein folding motif. Trends in Cell Biology, 2001, 11, 82-88.	7.9	935
3	Utilization of a right-handed coiled-coil protein from archaebacterium Staphylothermus marinus as a carrier for cisplatin. Anticancer Research, 2009, 29, 11-8.	1.1	167
4	Crystal structure of a naturally occurring parallel right-handed coiled coil tetramer. Nature Structural Biology, 2000, 7, 772-776.	9.7	155
5	Proteolytic E-cadherin activation followed by solution NMR and X-ray crystallography. EMBO Journal, 2004, 23, 1699-1708.	7.8	138
6	The RNA helicase RHAU (DHX36) unwinds a G4-quadruplex in human telomerase RNA and promotes the formation of the P1 helix template boundary. Nucleic Acids Research, 2012, 40, 4110-4124.	14.5	128
7	Crystal Structure of Three Consecutive Laminin-type Epidermal Growth Factor-like (LE) Modules of Laminin \hat{I}^31 Chain Harboring the Nidogen Binding Site. Journal of Molecular Biology, 1996, 257, 644-657.	4.2	123
8	Recessive and dominant mutations in COL12A1 cause a novel EDS/myopathy overlap syndrome in humans and mice. Human Molecular Genetics, 2014, 23, 2339-2352.	2.9	107
9	Structural and functional diversity generated by alternative mRNA splicing. Trends in Biochemical Sciences, 2005, 30, 515-521.	7.5	103
10	Tracking down the different forms of nuclear actin. Trends in Cell Biology, 2006, 16, 391-396.	7.9	92
11	Nucleation and propagation of the collagen triple helix in single-chain and trimerized peptides: transition from third to first order kinetics. Journal of Molecular Biology, 2002, 317, 459-470.	4.2	91
12	Apoptin, a tumor-selective killer. Biochimica Et Biophysica Acta - Molecular Cell Research, 2009, 1793, 1335-1342.	4.1	90
13	Vimentin Coil 1A—A Molecular Switch Involved in the Initiation of Filament Elongation. Journal of Molecular Biology, 2009, 390, 245-261.	4.2	90
14	Substitutions in woolly mammoth hemoglobin confer biochemical properties adaptive for cold tolerance. Nature Genetics, 2010, 42, 536-540.	21.4	86
15	Structural Decoding of the Netrin-1/UNC5 Interaction and its Therapeutical Implications in Cancers. Cancer Cell, 2016, 29, 173-185.	16.8	80
16	Human DDX21 binds and unwinds RNA guanine quadruplexes. Nucleic Acids Research, 2017, 45, 6656-6668.	14.5	79
17	The Î ² -Lactamase Gene Regulator AmpR Is a Tetramer That Recognizes and Binds the d-Ala-d-Ala Motif of Its Repressor UDP-N-acetylmuramic Acid (MurNAc)-pentapeptide. Journal of Biological Chemistry, 2015, 290, 2630-2643.	3.4	77
18	Collagen Stabilization at Atomic Level. Structure, 2003, 11, 339-346.	3.3	76

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19	Structural decoding of netrin-4 reveals a regulatory function towards mature basement membranes. Nature Communications, 2016, 7, 13515.	12.8	74
20	The RNA helicase RHAU (DHX36) suppresses expression of the transcription factor PITX1. Nucleic Acids Research, 2014, 42, 3346-3361.	14.5	71
21	Storage function of cartilage oligomeric matrix protein: the crystal structure of the coiled-coil domain in complex with vitamin D3. EMBO Journal, 2002, 21, 5960-5968.	7.8	59
22	The use of coiled-coil proteins in drug delivery systems. European Journal of Pharmacology, 2009, 625, 101-107.	3.5	55
23	Binding of G-quadruplexes to the N-terminal Recognition Domain of the RNA Helicase Associated with AU-rich Element (RHAU). Journal of Biological Chemistry, 2013, 288, 35014-35027.	3.4	53
24	Contiguous <i>O</i> -Galactosylation of 4(<i>R</i>)-Hydroxy- <scp>I</scp> -proline Residues Forms Very Stable Polyproline II Helices. Journal of the American Chemical Society, 2010, 132, 5036-5042.	13.7	49
25	Maltose-Binding Protein (MBP), a Secretion-Enhancing Tag for Mammalian Protein Expression Systems. PLoS ONE, 2016, 11, e0152386.	2.5	46
26	Modulation of Agrin Function by Alternative Splicing and Ca2+ Binding. Structure, 2004, 12, 503-515.	3.3	45
27	Structure and hydrodynamics of a DNA G-quadruplex with a cytosine bulge. Nucleic Acids Research, 2018, 46, 5319-5331.	14.5	44
28	Activation of Muscle-specific Receptor Tyrosine Kinase and Binding to Dystroglycan Are Regulated by Alternative mRNA Splicing of Agrin. Journal of Biological Chemistry, 2006, 281, 36835-36845.	3.4	42
29	The laminin-binding domain of agrin is structurally related to N-TIMP-1. Nature Structural Biology, 2001, 8, 705-709.	9.7	41
30	Ataxin-10 Interacts with O-Linked \hat{l}^2 -N-Acetylglucosamine Transferase in the Brain. Journal of Biological Chemistry, 2006, 281, 20263-20270.	3.4	39
31	RNA Helicase Associated with AU-rich Element (RHAU/DHX36) Interacts with the 3′-Tail of the Long Non-coding RNA BC200 (BCYRN1). Journal of Biological Chemistry, 2016, 291, 5355-5372.	3.4	38
32	Validation of a simultaneous method for determining polycyclic aromatic compounds and alkylated isomers in biota. Rapid Communications in Mass Spectrometry, 2018, 32, 277-287.	1.5	37
33	Mapping of the laminin-binding site of the N-terminal agrin domain (NtA). EMBO Journal, 2003, 22, 529-536.	7.8	36
34	Molecular basis of a novel adaptation to hypoxic-hypercapnia in a strictly fossorial mole. BMC Evolutionary Biology, 2010, 10, 214.	3.2	36
35	Relaxin Enhances the Collagenolytic Activity and <i>In Vitro</i> Invasiveness by Upregulating Matrix Metalloproteinases in Human Thyroid Carcinoma Cells. Molecular Cancer Research, 2011, 9, 673-687.	3.4	35
36	Human-Gyrovirus-Apoptin Triggers Mitochondrial Death Pathway—Nur77 is Required for Apoptosis Triggering. Neoplasia, 2014, 16, 679-693.	5 . 3	35

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37	Apoptins: selective anticancer agents. Trends in Molecular Medicine, 2014, 20, 519-528.	6.7	35
38	Association of a Novel <i>ACTA1</i> Mutation With a Dominant Progressive Scapuloperoneal Myopathy in an Extended Family. JAMA Neurology, 2015, 72, 689.	9.0	35
39	Intersubunit signaling in glutamate-1-semialdehyde-aminomutase. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13688-13693.	7.1	34
40	Nano-structure of the laminin \hat{l}^3 -1 short arm reveals an extended and curved multidomain assembly. Matrix Biology, 2010, 29, 565-572.	3.6	34
41	The α2β1 integrinâ€specific antagonist rhodocetin is a cruciform, heterotetrameric molecule. FASEB Journal, 2009, 23, 2917-2927.	0.5	33
42	Clqâ€tumour necrosis factorâ€related protein 8 (<scp>CTRP8</scp>) is a novel interaction partner of relaxin receptor <scp>RXFP1</scp> in human brain cancer cells. Journal of Pathology, 2013, 231, 466-479.	4.5	33
43	Structural elucidation of full-length nidogen and the laminin–nidogen complex in solution. Matrix Biology, 2014, 33, 60-67.	3.6	32
44	Structure of zinc-independent sorbitol dehydrogenase fromRhodobacter sphaeroidesat 2.4â€Ã resolution. Acta Crystallographica Section D: Biological Crystallography, 2005, 61, 374-379.	2.5	28
45	Recognition of viral RNA stem–loops by the tandem double-stranded RNA binding domains of PKR. Rna, 2013, 19, 333-344.	3.5	27
46	Collagen XXII binds to collagen-binding integrins via the novel motifs GLQGER and GFKGER. Biochemical Journal, 2014, 459, 217-227.	3.7	26
47	Toward a High-Resolution Structure of Phospholamban:Â Design of Soluble Transmembrane Domain Mutantsâ€. Biochemistry, 2000, 39, 6825-6831.	2.5	25
48	Validated quantitative cannabis profiling for Canadian regulatory compliance - Cannabinoids, aflatoxins, and terpenes. Analytica Chimica Acta, 2019, 1088, 79-88.	5.4	25
49	Modeling of Molecular Interaction between Apoptin, BCR-Abl and CrkL - An Alternative Approach to Conventional Rational Drug Design. PLoS ONE, 2012, 7, e28395.	2.5	25
50	Molecular dissection of Wnt3a-Frizzled8 interaction reveals essential and modulatory determinants of Wnt signaling activity. BMC Biology, 2014, 12, 44.	3.8	24
51	Design and Crystal Structure of Bacteriophage T4 Mini-Fibritin NCCF. Journal of Molecular Biology, 2004, 339, 927-935.	4.2	23
52	Epidermal Growth Factor Cytoplasmic Domain Affects ErbB Protein Degradation by the Lysosomal and Ubiquitin-Proteasome Pathway in Human Cancer Cells. Neoplasia, 2012, 14, 396-IN5.	5. 3	23
53	QM and QM/MM Studies of Uranyl Fluorides in the Gas and Aqueous Phases and in the Hydrophobic Cavities of Tetrabrachion. Inorganic Chemistry, 2011, 50, 3141-3152.	4.0	22
54	Site Specific Cleavage Mediated by MMPs Regulates Function of Agrin. PLoS ONE, 2012, 7, e43669.	2.5	22

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55	Determination of a molecular shape for netrin-4 from hydrodynamic and small angle X-ray scattering measurements. Matrix Biology, 2012, 31, 135-140.	3.6	20
56	Identification of halogenated polycyclic aromatic hydrocarbons in biological samples from Alberta Oil-Sands Region. Chemosphere, 2019, 215, 206-213.	8.2	19
57	Biophysical Characterization of G-Quadruplex Recognition in the PITX1 mRNA by the Specificity Domain of the Helicase RHAU. PLoS ONE, 2015, 10, e0144510.	2.5	19
58	The many types of interhelical ionic interactions in coiled coils – An overview. Journal of Structural Biology, 2010, 170, 192-201.	2.8	17
59	Platinum (IV) coiled coil nanotubes selectively kill human glioblastoma cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 913-925.	3.3	17
60	Tâ€shaped arrangement of the recombinant agrin G3 – IgG Fc protein. Protein Science, 2011, 20, 931-940.	7.6	16
61	Nanoscale Assembly of High-Mobility Group AT-Hook 2 Protein with DNA Replication Fork. Biophysical Journal, 2017, 113, 2609-2620.	0.5	16
62	Improved SARS-CoV-2 main protease high-throughput screening assay using a 5-carboxyfluorescein substrate. Journal of Biological Chemistry, 2022, 298, 101739.	3.4	16
63	Structure/function analysis of spinalin, a spine protein of Hydra nematocysts. FEBS Journal, 2006, 273, 3230-3237.	4.7	15
64	Dramatic and concerted conformational changes enable rhodocetin to block $\hat{l}\pm2\hat{l}^21$ integrin selectively. PLoS Biology, 2017, 15, e2001492.	5.6	15
65	The Pentameric Channel of COMPcc in Complex with Different Fatty Acids. PLoS ONE, 2012, 7, e48130.	2.5	15
66	Affinity-Enhanced Multimeric VEGF (Vascular Endothelial Growth Factor) and PIGF (Placental Growth) Tj ETQq0 (Hypertension, 2020, 76, 1176-1184.	0 rgBT /0 2.7	Overlock 10 Tf 14
67	New approaches to reduce sample processing times for the determination of polycyclic aromatic compounds in environmental samples. Chemosphere, 2021, 274, 129738.	8.2	14
68	Favourable mediation of crystal contacts by cocoamidopropylbetaine (CAPB). Acta Crystallographica Section D: Biological Crystallography, 2005, 61, 477-480.	2.5	13
69	Archaea Sâ€layer nanotube from a "black smoker―in complex with cycloâ€octasulfur (<i>>S</i> ₈) rings. Proteins: Structure, Function and Bioinformatics, 2017, 85, 2209-2216.	2.6	13
70	Enumeration of the constitutional isomers of environmentally relevant substituted polycyclic aromatic compounds. Chemosphere, 2018, 202, 9-16.	8.2	13
71	Structure and laminin-binding specificity of the NtA domain expressed in eukaryotic cells. Matrix Biology, 2005, 23, 507-513.	3.6	11
72	Origin and mechanism of thermal insensitivity in mole hemoglobins: a test of the  additional' chloride binding site hypothesis. Journal of Experimental Biology, 2012, 215, 518-525.	1.7	11

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73	Inhibition of glycosylation on a camelid antibody uniquely affects its FcγRI binding activity. European Journal of Pharmaceutical Sciences, 2017, 96, 428-439.	4.0	11
74	Examination of the Discrepancy between Size Estimates for Ovalbumin from Small-Angle X-ray Scattering and Other Physicochemical Measurements. Journal of Physical Chemistry B, 2011, 115, 10725-10729.	2.6	10
75	Monoclonal antibodies reveal the alteration of the rhodocetin structure upon $\hat{l}\pm2\hat{l}^21$ integrin binding. Biochemical Journal, 2011, 440, 1-11.	3.7	10
76	Proteinaceous Nano container Encapsulate Polycyclic Aromatic Hydrocarbons. Scientific Reports, 2019, 9, 1058.	3.3	10
77	Isolation of a Complex Formed Between Acinetobacter baumannii HemA and HemL, Key Enzymes of Tetrapyrroles Biosynthesis. Frontiers in Molecular Biosciences, 2019, 6, 6.	3.5	10
78	Molecular characterization of the RNA-protein complex directing â^2/â^1 programmed ribosomal frameshifting during arterivirus replicase expression. Journal of Biological Chemistry, 2020, 295, 17904-17921.	3.4	10
79	The C-terminal cytoplasmic portion of the NhaP2 cation–proton antiporter from Vibrio cholerae affects its activity and substrate affinity. Molecular and Cellular Biochemistry, 2014, 389, 51-58.	3.1	9
80	Ultrasonic Characterization of Amyloid-Like Ovalbumin Aggregation. ACS Omega, 2017, 2, 4612-4620.	3.5	9
81	Comprehensive two-dimensional gas chromatography high-resolution mass spectrometry for the analysis of substituted and unsubstituted polycyclic aromatic compounds in environmental samples. Journal of Chromatography A, 2018, 1579, 106-114.	3.7	9
82	The Wnt-specific astacin proteinase HAS-7 restricts head organizer formation in Hydra. BMC Biology, 2021, 19, 120.	3.8	9
83	Homogenous overexpression of the extracellular matrix protein Netrin-1 in a hollow fiber bioreactor. Applied Microbiology and Biotechnology, 2021, 105, 6047-6057.	3.6	9
84	An interdomain disulfide bridge links the NtA and first FS domain in agrin. Protein Science, 2009, 18, 2421-2428.	7.6	8
85	Absence of a catalytic water confers resistance to the neurotoxin gabaculine. FASEB Journal, 2010, 24, 404-414.	0.5	8
86	Biophysical analysis of a lethal laminin alpha-1 mutation reveals altered self-interaction. Matrix Biology, 2016, 49, 93-105.	3.6	8
87	Solution Structure of C. elegans UNC-6: A Nematode Paralogue of the Axon Guidance Protein Netrin-1. Biophysical Journal, 2019, 116, 2121-2130.	0.5	8
88	Pyridoxal-5′-phosphate-dependent catalytic antibodies. Journal of Immunological Methods, 2002, 269, 99-110.	1.4	7
89	A Cholesterol Analog Induces an Oligomeric Reorganization of VDAC. Biophysical Journal, 2019, 116, 847-859.	0.5	7
90	Impact of G-quadruplex loop conformation in the PITX1 mRNA on protein and small molecule interaction. Biochemical and Biophysical Research Communications, 2017, 487, 274-280.	2.1	6

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91	Energy flow and intersubunit signalling in GSAM: A non-equilibrium molecular dynamics study. Computational and Structural Biotechnology Journal, 2020, 18, 1651-1663.	4.1	6
92	Solution structure and oligomeric state of the E. coliglycerol facilitator. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183191.	2.6	6
93	Boron rich nanotube drug carrier system is suited for boron neutron capture therapy. Scientific Reports, 2021, 11, 15520.	3.3	6
94	Evidence for Self-Association of a Miniaturized Version of Agrin from Hydrodynamic and Small-Angle X-ray Scattering Measurements. Journal of Physical Chemistry B, 2011, 115, 11286-11293.	2.6	5
95	Kinemage of action – Proposed reaction mechanism of glutamate-1-semialdehyde aminomutase at an atomic level. Biochemical and Biophysical Research Communications, 2011, 413, 572-576.	2.1	5
96	Reductive power of the archaea right-handed coiled coil nanotube (RHCC-NT) and incorporation of mercury clusters inside protein cages. Journal of Structural Biology, 2018, 203, 281-287.	2.8	5
97	Modulating antibodyâ€dependent cellular cytotoxicity of epidermal growth factor receptorâ€specific heavyâ€chain antibodies through hinge engineering. Immunology and Cell Biology, 2019, 97, 526-537.	2.3	5
98	Energetics of Storage and Diffusion of Water and Cyclo-Octasulfur for a Nonpolar Cavity of RHCC Tetrabrachion by Molecular Dynamics Simulations. Computational and Structural Biotechnology Journal, 2019, 17, 675-683.	4.1	5
99	Increasing cannabis use and importance as an environmental contaminant mixture and associated risks to exposed biota: A review. Critical Reviews in Environmental Science and Technology, 2022, 52, 203-239.	12.8	5
100	Structural and Hydrodynamic Characterization of Dimeric Human Oligoadenylate Synthetase 2. Biophysical Journal, 2020, 118, 2726-2740.	0.5	4
101	Microfluidic Devices for Studying the Effect of Netrin†on Neutrophil and Breast Cancer Cell Migration. Advanced Biology, 2018, 2, 1700178.	3.0	3
102	Identification of Functionally Important Residues in the Pyridoxal-5â€~-Phosphate-Dependent Catalytic Antibody 15A9. Biochemistry, 2004, 43, 6612-6619.	2.5	2
103	A C-Terminally Truncated Variant of Neurospora crassa VDAC Assembles Into a Partially Functional Form in the Mitochondrial Outer Membrane and Forms Multimers in vitro. Frontiers in Physiology, 2021, 12, 739001.	2.8	2
104	1H, 13C, and 15N chemical shift assignments for the N-terminal extracellular domain of T-cadherin. Journal of Biomolecular NMR, 2007, 38, 179-179.	2.8	1
105	Absorption of polycyclic aromatic hydrocarbons by a highly absorptive polymeric medium. Chemosphere, 2018, 201, 441-447.	8.2	1
106	Interaction studies of a protein and carbohydrate system using an integrated approach: a case study of the miniagrin–heparin system. European Biophysics Journal, 2018, 47, 751-759.	2.2	1
107	Solution structure of the cytoplasmic domain of NhaP2 a K+/H+ antiporter from Vibrio cholera. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183225.	2.6	1
108	Cover Image, Volume 85, Issue 12. Proteins: Structure, Function and Bioinformatics, 2017, 85, C1.	2.6	0

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109	A novel passive sampling device for low molecular weight PAHs with a proteinaceous medium. Environmental Nanotechnology, Monitoring and Management, 2022, 17, 100609.	2.9	O