

# Martin Tollinger

## List of Publications by Year in descending order

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73  
papers

2,592  
citations

218592

26  
h-index

206029

48  
g-index

79  
all docs

79  
docs citations

79  
times ranked

3047  
citing authors

#	ARTICLE	IF	CITATIONS
1	Slow Dynamics in Folded and Unfolded States of an SH3 Domain. <i>Journal of the American Chemical Society</i> , 2001, 123, 11341-11352.	6.6	454
2	Ice nucleation by water-soluble macromolecules. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 4077-4091.	1.9	198
3	Direct Observation of the Dynamic Process Underlying Allosteric Signal Transmission. <i>Journal of the American Chemical Society</i> , 2009, 131, 3063-3068.	6.6	111
4	Electrostatic Stabilization of a Native Protein Structure in the Gas Phase. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 873-877.	7.2	111
5	Site-specific contributions to the pH dependence of protein stability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 4545-4550.	3.3	86
6	Synthesis of (6- <sup>13</sup> C)Pyrimidine Nucleotides as Spin-Labels for RNA Dynamics. <i>Journal of the American Chemical Society</i> , 2012, 134, 7558-7569.	6.6	73
7	How a protein prepares for B12 binding: structure and dynamics of the B12-binding subunit of glutamate mutase from <i>Clostridium tetanomorphum</i> . <i>Structure</i> , 1998, 6, 1021-1033.	1.6	72
8	Fold stability during endolysosomal acidification is a key factor for allergenicity and immunogenicity of the major birch pollen allergen. <i>Journal of Allergy and Clinical Immunology</i> , 2016, 137, 1525-1534.	1.5	69
9	Measurement of Side-Chain Carboxyl pKa Values of Glutamate and Aspartate Residues in an Unfolded Protein by Multinuclear NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2002, 124, 5714-5717.	6.6	68
10	Calculation of Residual Dipolar Couplings from Disordered State Ensembles Using Local Alignment. <i>Journal of the American Chemical Society</i> , 2008, 130, 7804-7805.	6.6	67
11	Cooperative Interactions and a Non-native Buried Trp in the Unfolded State of an SH3 Domain. <i>Journal of Molecular Biology</i> , 2002, 322, 163-178.	2.0	64
12	Allosteric Communication in the KIX Domain Proceeds through Dynamic Repacking of the Hydrophobic Core. <i>ACS Chemical Biology</i> , 2013, 8, 1600-1610.	1.6	62
13	Site-Resolved Measurement of Microsecond-to-Millisecond Conformational-Exchange Processes in Proteins by Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2012, 134, 14800-14807.	6.6	61
14	NMR Methods to Study Dynamic Allostery. <i>PLoS Computational Biology</i> , 2016, 12, e1004620.	1.5	61
15	The allosteric communication pathways in KIX domain of CBP. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 14237-14242.	3.3	57
16	Direct structure refinement of high molecular weight proteins against residual dipolar couplings and carbonyl chemical shift changes upon alignment: an application to maltose binding protein. <i>Journal of Biomolecular NMR</i> , 2001, 21, 31-40.	1.6	50
17	Structure of the Major Apple Allergen Mal d 1. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 1606-1612.	2.4	50
18	Probing RNA dynamics via longitudinal exchange and CPMG relaxation dispersion NMR spectroscopy using a sensitive <sup>13</sup> C-methyl label. <i>Nucleic Acids Research</i> , 2011, 39, 4340-4351.	6.5	49

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19	Excited States of Nucleic Acids Probed by Proton Relaxation Dispersion NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 12008-12012.	7.2	48
20	relax: the analysis of biomolecular kinetics and thermodynamics using NMR relaxation dispersion data. <i>Bioinformatics</i> , 2014, 30, 2219-2220.	1.8	45
21	Structural Comparison of the Unstable drkN SH3 Domain and a Stable Mutant. <i>Biochemistry</i> , 2005, 44, 15550-15560.	1.2	39
22	Ligand Binding Modulates the Structural Dynamics and Compactness of the Major Birch Pollen Allergen. <i>Biophysical Journal</i> , 2014, 107, 2972-2981.	0.2	35
23	Folding of the KIX Domain: Characterization of the Equilibrium Analog of a Folding Intermediate using <sup>15</sup> N/ <sup>13</sup> C Relaxation Dispersion and Fast <sup>1</sup> H/ <sup>2</sup> H Amide Exchange NMR Spectroscopy. <i>Journal of Molecular Biology</i> , 2008, 380, 726-741.	2.0	34
24	The B12-Binding Subunit of Glutamate Mutase from <i>Clostridium tetanomorphum</i> Traps the Nucleotide Moiety of Coenzyme B12. <i>Journal of Molecular Biology</i> , 2001, 309, 777-791.	2.0	33
25	An Isolated Helix Persists in a Sparsely Populated Form of KIX under Native Conditions. <i>Biochemistry</i> , 2006, 45, 8885-8893.	1.2	32
26	A drug library screen identifies Carbenoxolone as novel FOXO inhibitor that overcomes FOXO3-mediated chemoprotection in high-stage neuroblastoma. <i>Oncogene</i> , 2020, 39, 1080-1097.	2.6	31
27	Ligand-Detected Relaxation Dispersion NMR Spectroscopy: Dynamics of preQ1-RNA Binding. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 560-563.	7.2	28
28	An efficient method for the preparation of methylcobalamin, nature's organometallic methyl transfer catalyst. <i>Journal of Molecular Catalysis A</i> , 1997, 116, 147-155.	4.8	27
29	Measurement of Ligand-Target Residence Times by <sup>1</sup> H Relaxation Dispersion NMR Spectroscopy. <i>Journal of Medicinal Chemistry</i> , 2016, 59, 10788-10793.	2.9	24
30	Studying sparsely populated conformational states in RNA combining chemical synthesis and solution NMR spectroscopy. <i>Methods</i> , 2018, 148, 39-47.	1.9	23
31	The Structure of Methylcob(III)alamin in Aqueous Solution - A Water Molecule as Structuring Element of the Nucleotide Loop. <i>Helvetica Chimica Acta</i> , 1999, 82, 1596-1609.	1.0	21
32	Conformational Flexibility Differentiates Naturally Occurring Bet v 1 Isoforms. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1192.	1.8	18
33	5-Oxyacetic Acid Modification Destabilizes Double Helical Stem Structures and Favors Anionic Watson-Crick like cmo5-U-G Base Pairs. <i>Chemistry - A European Journal</i> , 2018, 24, 18903-18906.	1.7	18
34	Electrochemical Synthesis and Structure Analysis of Neocoenzyme B12 - An Epimer of Coenzyme B12 with a Remarkably Flexible Organometallic Group. <i>Helvetica Chimica Acta</i> , 1999, 82, 848-869.	1.0	16
35	Measuring pKa Values in Protein Folding Transition State Ensembles by NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2005, 127, 8904-8905.	6.6	16
36	Longitudinal exchange: an alternative strategy towards quantification of dynamics parameters in ZZ exchange spectroscopy. <i>Journal of Biomolecular NMR</i> , 2011, 51, 123-129.	1.6	16

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37	Allergen-specific immunotherapy with apples: selected cultivars could be a promising tool for birch pollen allergy. <i>Journal of the European Academy of Dermatology and Venereology</i> , 2020, 34, 1286-1292.	1.3	16
38	NMR Techniques to Study Hydrogen Bonding in Aqueous Solution. <i>Monatshefte für Chemie</i> , 1999, 130, 961-982.	0.9	15
39	Mapping the ligand binding site at protein side-chains in protein-ligand complexes through NOE difference spectroscopy. <i>Journal of Biomolecular NMR</i> , 2001, 20, 195-202.	1.6	15
40	A kinetic study of domain swapping of Protein L. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 6383.	1.3	15
41	Synthesis and incorporation of <sup>13</sup> C-labeled DNA building blocks to probe structural dynamics of DNA by NMR. <i>Nucleic Acids Research</i> , 2017, 45, 9178-9192.	6.5	14
42	Inverse relation between structural flexibility and IgE reactivity of Cor a 1 hazelnut allergens. <i>Scientific Reports</i> , 2021, 11, 4173.	1.6	14
43	Autocorrelation Analysis of NOESY Data Provides Residue Compactness for Folded and Unfolded Proteins. <i>Journal of the American Chemical Society</i> , 2009, 131, 6038-6039.	6.6	13
44	Heteronuclear relaxation in time-dependent spin systems: ( <sup>15</sup> N)-T1 (rho) dispersion during adiabatic fast passage. <i>Journal of Biomolecular NMR</i> , 1999, 13, 213-221.	1.6	11
45	NMR resonance assignments of the major apple allergen Mal d 1. <i>Biomolecular NMR Assignments</i> , 2016, 10, 287-290.	0.4	10
46	Branch site bulge conformations in domain 6 determine functional sugar puckers in group II intron splicing. <i>Nucleic Acids Research</i> , 2019, 47, 11430-11440.	6.5	10
47	pH-Dependent Protonation of the Phl p 6 Pollen Allergen Studied by NMR and cpH-aMD. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 5716-5726.	2.3	10
48	Oral birch pollen immunotherapy with apples: Results of a phase II clinical pilot study. <i>Immunity, Inflammation and Disease</i> , 2021, 9, 503-511.	1.3	10
49	Structure and Zeatin Binding of the Peach Allergen Pru p 1. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 8120-8129.	2.4	10
50	A Protein Pre-Organized to Trap the Nucleotide Moiety of Coenzyme B12: Refined Solution Structure of the B12-Binding Subunit of Glutamate Mutase from <i>Clostridium tetanomorphum</i> . <i>ChemBioChem</i> , 2001, 2, 643-655.	1.3	9
51	Microdroplet Mass Spectrometry Enables Extremely Accelerated Pepsin Digestion of Proteins. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 1841-1845.	1.2	9
52	Characterization of the Hydrodynamic Properties of the Folding Transition State of an SH3 Domain by Magnetization Transfer NMR Spectroscopy. <i>Biochemistry</i> , 2006, 45, 6434-6445.	1.2	8
53	Excited States of Nucleic Acids Probed by Proton Relaxation Dispersion NMR Spectroscopy. <i>Angewandte Chemie</i> , 2016, 128, 12187-12191.	1.6	8
54	In silico Design of Phl p 6 Variants With Altered Fold-Stability Significantly Impacts Antigen Processing, Immunogenicity and Immune Polarization. <i>Frontiers in Immunology</i> , 2020, 11, 1824.	2.2	8

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55	Mathematical treatment of adiabatic fast passage pulses for the computation of nuclear spin relaxation rates in proteins with conformational exchange. <i>Journal of Biomolecular NMR</i> , 2011, 51, 35-47.	1.6	7
56	Formic acid reduction and CO <sub>2</sub> activation at Mo <sub>2</sub> C: The important role of surface oxide. <i>Electrochemical Science Advances</i> , 2022, 2, e2100130.	1.2	7
57	Kinetics of DNA Refolding from Longitudinal Exchange NMR Spectroscopy. <i>ChemBioChem</i> , 2011, 12, 2007-2010.	1.3	6
58	Cross-correlated relaxation measurements under adiabatic sweeps: determination of local order in proteins. <i>Journal of Biomolecular NMR</i> , 2015, 63, 353-365.	1.6	6
59	(3 <sup>13</sup> C, 4 <sup>13</sup> C, 5 <sup>13</sup> C, 6 <sup>13</sup> C, 7 <sup>13</sup> C, 11 <sup>13</sup> C)-3,6-Dihydroxy-8-oxo-9-eremophilene-12-oic Acid, a New Phytotoxin of <i>Alternaria alternata</i> ssp. <i>tenuissima</i> Isolates Associated with Fruit Spots on Apple ( <i>Malus</i> Å—) Tj ETQq1 1 0.284314 rgbT /Overlo	1.6	6
60	3D-Printed High-Pressure-Resistant Immobilized Enzyme Microreactor (IMER) for Protein Analysis. <i>Analytical Chemistry</i> , 2022, 94, 8580-8587.	3.2	6
61	Siderocalin Q83 exhibits differential slow dynamics upon ligand binding. <i>Journal of Biomolecular NMR</i> , 2011, 51, 83-88.	1.6	5
62	NMR resonance assignments of the pathogenesis-related peach allergen Pru p 1.0101. <i>Biomolecular NMR Assignments</i> , 2019, 13, 127-130.	0.4	5
63	NMR resonance assignments of the four isoforms of the hazelnut allergen Cor a 1.04. <i>Biomolecular NMR Assignments</i> , 2020, 14, 45-49.	0.4	5
64	Direct methods and residue type specific isotope labeling in NMR structure determination and model-driven sequential assignment. <i>Journal of Biomolecular NMR</i> , 2008, 42, 111-127.	1.6	4
65	NMR resonance assignments of the EVH1 domain of neurofibrominâ€™s recruitment factor Spred1. <i>Biomolecular NMR Assignments</i> , 2017, 11, 305-308.	0.4	4
66	NMR resonance assignments of a hypoallergenic isoform of the major birch pollen allergen Bet v 1. <i>Biomolecular NMR Assignments</i> , 2017, 11, 231-234.	0.4	4
67	Pathogenic Mutations Associated with Legius Syndrome Modify the Spred1 Surface and Are Involved in Direct Binding to the Ras Inactivator Neurofibromin. <i>Journal of Molecular Biology</i> , 2019, 431, 3889-3899.	2.0	4
68	NMR resonance assignments of the PR-10 allergens Act c 8 and Act d 8 from golden and green kiwifruit. <i>Biomolecular NMR Assignments</i> , 2021, 15, 367-371.	0.4	4
69	NMR resonance assignments of the FinO-domain of the RNA chaperone RocC. <i>Biomolecular NMR Assignments</i> , 2021, 15, 61-64.	0.4	3
70	NMR resonance assignments of the archaeal ribosomal protein L7Ae in the apo form and bound to a 25 nt RNA. <i>Biomolecular NMR Assignments</i> , 2015, 9, 177-180.	0.4	2
71	Cosolute modulation of protein oligomerization reactions in the homeostatic timescale. <i>Biophysical Journal</i> , 2021, 120, 2067-2077.	0.2	2
72	NMR Techniques to Study Hydrogen Bonding in Aqueous Solution. , 1999, , 17-38.		1

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73	Relaxation-Induced Polarization Transfer and the Determination of Methyl Group <sup>13</sup> C Chemical Shielding Anisotropy. Journal of Physical Chemistry A, 1999, 103, 5253-5258.	1.1	0