Richard A Kammerer

List of Publications by Year
in descending order

94 papers	5,454 citations	61984 43 h-index	88630 70 g-index
97 all docs	97 docs citations	97 times ranked	7016 citing authors

#	Article	IF	Citations
1	COMP-Ang1: A designed angiopoietin-1 variant with nonleaky angiogenic activity. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5547-5552.	7.1	236
2	Structural basis of tubulin tyrosination by tubulin tyrosine ligase. Journal of Cell Biology, 2013, 200, 259-270.	5.2	189
3	Stabilization of short collagen-like triple helices by protein engineering. Journal of Molecular Biology, 2001, 308, 1081-1089.	4.2	177
4	Cortexillins, Major Determinants of Cell Shape and Size, Are Actin-Bundling Proteins with a Parallel Coiled-Coil Tail. Cell, 1996, 86, 631-642.	28.9	172
5	An autonomous folding unit mediates the assembly of two-stranded coiled coils. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 13419-13424.	7.1	166
6	Exploring amyloid formation by a de novo design. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4435-4440.	7.1	166
7	Crystal structure of a naturally occurring parallel right-handed coiled coil tetramer. Nature Structural Biology, 2000, 7, 772-776.	9.7	155
8	Microtubule minus-end regulation at spindle poles by an ASPMâ€“katanin complex. Nature Cell Biology, 2017, 19, 480-492.	10.3	147
9	Designed angiopoietin-1 variant, COMP-Ang1, protects against radiation-induced endothelial cell apoptosis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5553-5558.	7.1	134
10	Oligomerization and Multimerization Are Critical for Angiopoietin-1 to Bind and Phosphorylate Tie2. Journal of Biological Chemistry, 2005, 280, 20126-20131.	3.4	134
11	Subdomain-Specific Localization of Climp-63 (P63) in the Endoplasmic Reticulum Is Mediated by Its Luminal Î±-Helical Segment. Journal of Cell Biology, 2001, 153, 1287-1300.	5.2	127
12	Molecular basis of coiled-coil formation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7062-7067.	7.1	116
13	The coiled-coil trigger site of the rod domain of cortexillin I unveils a distinct network of interhelical and intrahelical salt bridges. Structure, 2000, 8, 223-230.	3.3	114
14	A distinct 14 residue site triggers coiled-coil formation in cortexillin I. EMBO Journal, 1998, 17, 1883-1891.	7.8	113
15	Spectraplakins Promote Microtubule-Mediated Axonal Growth by Functioning As Structural Microtubule-Associated Proteins and EB1-Dependent +TIPs (Tip Interacting Proteins). Journal of Neuroscience, 2012, 32, 9143-9158.	3.6	104
16	Structural basis for recognition of synaptic vesicle protein 2C by botulinum neurotoxin A. Nature, 2014, 505, 108-111.	27.8	103
17	Tenascin-C Hexabrachion Assembly Is a Sequential Two-step Process Initiated by Coiled-coil Î±-Helices. Journal of Biological Chemistry, 1998, 273, 10602-10608.	3.4	99
18	Configurational entropy elucidates the role of salt-bridge networks in protein thermostability. Protein Science, 2007, 16, 1349-1359.	7.6	99

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19	Op18/stathmin caps a kinked protofilament-like tubulin tetramer. EMBO Journal, 2000, 19, 572-580.	7.8	92
20	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
21	Centriolar CPAP/SAS-4 Imparts Slow Processive Microtubule Growth. Developmental Cell, 2016, 37, 362-376.	7.0	90
22	Heterodimerization of a Functional GABABReceptor Is Mediated by Parallel Coiled-Coil Î±-Helicesâ€. Biochemistry, 1999, 38, 13263-13269.	2.5	88
23	A conserved trimerization motif controls the topology of short coiled coils. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13891-13896.	7.1	88
24	Mutations in HPSE2 Cause Urofacial Syndrome. American Journal of Human Genetics, 2010, 86, 963-969.	6.2	88
25	A Novel Receptor-induced Activation Site in the Nipah Virus Attachment Glycoprotein (G) Involved in Triggering the Fusion Glycoprotein (F). Journal of Biological Chemistry, 2009, 284, 1628-1635.	3.4	83
26	Collagen Stabilization at Atomic Level. Structure, 2003, 11, 339-346.	3.3	76
27	Î±-Helical coiled-coil oligomerization domains in extracellular proteins. Matrix Biology, 1997, 15, 555-565.	3.6	74
28	Remorins form a novel family of coiled coil-forming oligomeric and filamentous proteins associated with apical, vascular and embryonic tissues in plants. Plant Molecular Biology, 2004, 55, 579-594.	3.9	74
29	SAS-6 engineering reveals interdependence between cartwheel and microtubules in determining centrioleÄarchitecture. Nature Cell Biology, 2016, 18, 393-403.	10.3	73
30	All-trans retinol, vitamin D and other hydrophobic compounds bind in the axial pore of the five-stranded coiled-coil domain of cartilage oligomeric matrix protein. EMBO Journal, 1998, 17, 5265-5272.	7.8	67
31	Domain analysis of cortexillin I: actin-bundling, PIP2-binding and the rescue of cytokinesis. EMBO Journal, 1999, 18, 5274-5284.	7.8	67
32	Molecular basis of coiled-coil oligomerization-state specificity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19850-19855.	7.1	66
33	Coronin 1 Regulates Cognition and Behavior through Modulation of cAMP/Protein Kinase A Signaling. PLoS Biology, 2014, 12, e1001820.	5.6	62
34	Angiopoietin-1 variant reduces LPS-induced microvascular dysfunction in a murine model of sepsis. Critical Care, 2012, 16, R182.	5.8	57
35	Polymorphism in an Amyloidâ€Like Fibrilâ€Forming Model Peptide. Angewandte Chemie - International Edition, 2008, 47, 5842-5845.	13.8	53
36	Evidence That Monoclonal Antibodies Directed against the Integrin Î² Subunit Plexin/Semaphorin/Integrin Domain Stimulate Function by Inducing Receptor Extension. Journal of Biological Chemistry, 2005, 280, 4238-4246.	3.4	52

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37	Electrostatic Contributions to the Stability of the GCN4 Leucine Zipper Structure. Journal of Molecular Biology, 2007, 374, 206-219.	4.2	51
38	GAS2-like proteins mediate communication between microtubules and actin through interaction with end-binding proteins. Journal of Cell Science, 2014, 127, 2672-82.	2.0	51
39	Characterization of the Matrilin Coiled-coil Domains Reveals Seven Novel Isoforms. Journal of Biological Chemistry, 2002, 277, 19071-19079.	3.4	50
40	Selective Chain Recognition in the C-terminal Î±-Helical Coiled-coil Region of Laminin. Journal of Molecular Biology, 1995, 250, 64-73.	4.2	48
41	An Intrahelical Salt Bridge within the Trigger Site Stabilizes the GCN4 Leucine Zipper. Journal of Biological Chemistry, 2001, 276, 13685-13688.	3.4	47
42	Interaction of filamin A with the integrin Î²7cytoplasmic domain: role of alternative splicing and phosphorylation. FEBS Letters, 2004, 569, 185-190.	2.8	47
43	Structural Basis of Formation of the Microtubule Minus-End-Regulating CAMSAP-Katanin Complex. Structure, 2018, 26, 375-382.e4.	3.3	47
44	A Distinct Seven-residue Trigger Sequence Is Indispensable for Proper Coiled-coil Formation of the Human Macrophage Scavenger Receptor Oligomerization Domain. Journal of Biological Chemistry, 2000, 275, 11672-11677.	3.4	46
45	Modulation of Agrin Function by Alternative Splicing and Ca2+ Binding. Structure, 2004, 12, 503-515.	3.3	45
46	The Oligomerization Domain of the Asialoglycoprotein Receptor Preferentially Forms 2:2 Heterotetramers in Vitro. Journal of Biological Chemistry, 1996, 271, 31996-32001.	3.4	44
47	The laminin-binding domain of agrin is structurally related to N-TIMP-1. Nature Structural Biology, 2001, 8, 705-709.	9.7	41
48	The Angiopoietin-like Factor Cornea-derived Transcript 6 Is a Putative Morphogen for Human Cornea. Journal of Biological Chemistry, 2002, 277, 686-693.	3.4	41
49	De novo design of a two-stranded coiled-coil switch peptide. Journal of Structural Biology, 2006, 155, 146-153.	2.8	41
50	Laminin chain assembly is regulated by specific coiled-coil interactions. Journal of Structural Biology, 2010, 170, 398-405.	2.8	41
51	Heteronuclear NMR assignments and secondary structure of the coiled coil trimerization domain from cartilage matrix protein in oxidized and reduced forms. Protein Science, 1997, 6, 1734-1745.	7.6	40
52	Role of dimerization and substrate exclusion in the regulation of bone morphogenetic protein-1 and mammalian tolloid. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8561-8566.	7.1	40
53	What are oligomerization domains good for?. Matrix Biology, 2000, 19, 283-288.	3.6	39
54	Short Linear Sequence Motif LxxPTPh Targets Diverse Proteins to Growing Microtubule Ends. Structure, 2017, 25, 924-932.e4.	3.3	37

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55	NMR structure of a parallel homotrimeric coiled coil. Nature Structural and Molecular Biology, 1998, 5, 687-691.	8.2	36
56	Interaction of mammalian end binding proteins with CAP-Gly domains of CLIP-170 and p150glued. Journal of Structural Biology, 2012, 177, 160-167.	2.8	36
57	¹⁵N backbone dynamics of the Sâ€peptide from ribonuclease A in its free and Sâ€protein bound forms: Toward a siteâ€specific analysis of entropy changes upon folding. Protein Science, 1998, 7, 389-402.	7.6	35
58	Structural Analysis of the Sixth Immunoglobulinâ€Like Domain of Mouse Neural Cell Adhesion Molecule L1 and Its Interactions with Î±vÎ²3, Î±IIbÎ²3, and Î±5Î²1 Integrins. Journal of Neurochemistry, 1998, 71, 2615-2625.	3.9	35
59	Structure of the Extracellular Domain of Tie Receptor Tyrosine Kinases and Localization of the Angiopoietin-binding Epitope. Journal of Biological Chemistry, 2006, 281, 28408-28414.	3.4	35
60	Role of the nucleotidyl cyclase helical domain in catalytically active dimer formation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9821-E9828.	7.1	35
61	Atomic Models of De Novo Designed ccÎ²-Met Amyloid-Like Fibrils. Journal of Molecular Biology, 2008, 376, 898-912.	4.2	34
62	A 35-kDa Protein Is the Basic Unit of the Core from the 2 Ã— 104-kDa Aggregation Factor Responsible for Species-specific Cell Adhesion in the Marine Sponge. Journal of Biological Chemistry, 1996, 271, 23558-23565.	3.4	33
63	Characterization of G2L3 (GAS2-like 3), a New Microtubule- and Actin-binding Protein Related to Spectraplakins. Journal of Biological Chemistry, 2011, 286, 24987-24995.	3.4	31
64	Angiopoietin-1 regulates microvascular reactivity and protects the microcirculation during acute endothelial dysfunction: Role of eNOS and VE-cadherin. Pharmacological Research, 2014, 80, 43-51.	7.1	31
65	Biophysical and Structural Characterization of the Centriolar Protein Cep104 Interaction Network. Journal of Biological Chemistry, 2016, 291, 18496-18504.	3.4	31
66	Structure and disorder in the ribonuclease S-peptide probed by NMR residual dipolar couplings. Protein Science, 2009, 12, 2132-2140.	7.6	27
67	Stabilization of the Î±-Helical Coiled-coil Domain in Laminin by C-terminal Disulfide Bonds. Journal of Molecular Biology, 1995, 250, 74-79.	4.2	26
68	Structural basis for misregulation of kinesin KIF21A autoinhibition by CFEOM1 disease mutations. Scientific Reports, 2016, 6, 30668.	3.3	26
69	Toward a High-Resolution Structure of Phospholamban:Â Design of Soluble Transmembrane Domain Mutantsâ€. Biochemistry, 2000, 39, 6825-6831.	2.5	25
70	Botulinum neurotoxins: new questions arising from structural biology. Trends in Biochemical Sciences, 2014, 39, 517-526.	7.5	25
71	The unusually stable coiled-coil domain of COMP exhibits cold and heat denaturation in 4â€“6 M guanidinium chloride. Biophysical Chemistry, 2000, 85, 179-186.	2.8	24
72	A Type IV Translocated Legionella Cysteine Phytase Counteracts Intracellular Growth Restriction by Phytate. Journal of Biological Chemistry, 2014, 289, 34175-34188.	3.4	24

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73	Structural basis of katanin p60:p80 complex formation. Scientific Reports, 2017, 7, 14893.	3.3	24
74	Crystal structure of the BoNT/A2 receptor-binding domain in complex with the luminal domain of its neuronal receptor SV2C. Scientific Reports, 2017, 7, 43588.	3.3	23
75	Rat GTP cyclohydrolase I is a homodecameric protein complex containing high-affinity calcium-binding sites 1 1Edited by W. Baumeister. Journal of Molecular Biology, 1998, 279, 189-199.	4.2	21
76	Collagen VI, Conformation of A-domain Arrays and Microfibril Architecture. Journal of Biological Chemistry, 2011, 286, 40266-40275.	3.4	21
77	Contributions of the ionization states of acidic residues to the stability of the coiled coil domain of matrilin-1. FEBS Letters, 1999, 446, 75-80.	2.8	18
78	Angiopoietin-1 enhances neutrophil chemotaxis in vitro and migration in vivo through interaction with CD18 and release of CCL4. Scientific Reports, 2017, 7, 2332.	3.3	13
79	Highâ€Level Production of Phenylacetaldehyde using Fusionâ€Tagged Styrene Oxide Isomerase. Advanced Synthesis and Catalysis, 2021, 363, 1714-1721.	4.3	12
80	Crystal Structure of a Heterotetrameric Katanin p60:p80 Complex. Structure, 2019, 27, 1375-1383.e3.	3.3	11
81	The nuclear protein Waharan is required for endosomal-lysosomal trafficking inDrosophila. Journal of Cell Science, 2010, 123, 2369-2374.	2.0	10
82	The role of the N-terminal amphipathic helix in bacterial YidC: Insights from functional studies, the crystal structure and molecular dynamics simulations. Biochimica Et Biophysica Acta - Biomembranes, 2022, 1864, 183825.	2.6	10
83	Thermodynamic and Structural Studies of Carbohydrate Binding by the Agrin-G3 Domain. Biochemistry, 2007, 46, 9541-9550.	2.5	9
84	Crystallization and Preliminary X-Ray Diffraction Analysis of the 190-Ã…-Long Coiled-Coil Dimerization Domain of the Actin-Bundling Protein Cortexillin I fromDictyostelium discoideum. Journal of Structural Biology, 1998, 122, 293-296.	2.8	7
85	Structure of the BoNT/A1 â€“ receptor complex. Toxicon, 2015, 107, 25-31.	1.6	6
86	Nuclear Magnetic Resonance Structures of GCN4p Are Largely Conserved When Ion Pairs Are Disrupted at Acidic pH but Show a Relaxation of the Coiled Coil Superhelix. Biochemistry, 2017, 56, 1604-1619.	2.5	6
87	Design of a Coiled-Coil-based Model Peptide System to Explore the Fundamentals of Amyloid Fibril Formation. International Journal of Peptide Research and Therapeutics, 2005, 11, 43-52.	1.9	5
88	Synthesis and Evaluation of Biphenyl Compounds as Kinesin Spindle Protein Inhibitors. Chemistry and Biodiversity, 2013, 10, 538-555.	2.1	5
89	1H, 13C and 15N backbone assignments for the C-terminal globular domain of agrin. Journal of Biomolecular NMR, 2001, 20, 295-296.	2.8	4
90	Crystal structure of the catalytic domain of botulinum neurotoxin subtype A3. Journal of Biological Chemistry, 2021, 296, 100684.	3.4	4

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91	Structural insights into the interaction of botulinum neurotoxin a with its neuronal receptor SV2C. Toxicon, 2020, 175, 36-43.	1.6	3
92	Structural Basis for the Oligomerization-State Switch from a Dimer to a Trimer of an Engineered Cortexillin-1 Coiled-Coil Variant. PLoS ONE, 2013, 8, e63370.	2.5	2
93	Mutations in HPSE2 Cause Urofacial Syndrome. American Journal of Human Genetics, 2010, 87, 309.	6.2	1
94	Homodimerization of coronin A through the Câ€terminal coiledâ€coil domain is essential for multicellular differentiation of DictyosteliumÂdiscoideum. FEBS Letters, 2020, 594, 2116-2127.	2.8	1