

# Jan K Rainey

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7560744/jan-k-rainey-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

73  
papers

1,641  
citations

22  
h-index

38  
g-index

82  
ext. papers

1,841  
ext. citations

4.3  
avg, IF

4.75  
L-index

#	Paper	IF	Citations
73	Structural and functional analysis of the Na <sup>+</sup> /H <sup>+</sup> exchanger. <i>Biochemical Journal</i> , <b>2007</b> , 401, 623-33	3.8	195
72	The apelin receptor: physiology, pathology, cell signalling, and ligand modulation of a peptide-activated class A GPCR. <i>Biochemistry and Cell Biology</i> , <b>2014</b> , 92, 431-40	3.6	111
71	An interactive triple-helical collagen builder. <i>Bioinformatics</i> , <b>2004</b> , 20, 2458-9	7.2	78
70	Structural insight into G-protein coupled receptor binding by apelin. <i>Biochemistry</i> , <b>2009</b> , 48, 537-48	3.2	77
69	Structural and functional characterization of transmembrane segment IV of the NHE1 isoform of the Na <sup>+</sup> /H <sup>+</sup> exchanger. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 17863-72	5.4	74
68	Current strategies for protein production and purification enabling membrane protein structural biology. <i>Biochemistry and Cell Biology</i> , <b>2016</b> , 94, 507-527	3.6	65
67	Structural and functional characterization of transmembrane segment VII of the Na <sup>+</sup> /H <sup>+</sup> exchanger isoform 1. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 29817-29	5.4	60
66	Fibrous long spacing collagen ultrastructure elucidated by atomic force microscopy. <i>Biophysical Journal</i> , <b>1998</b> , 74, 3211-6	2.9	58
65	A statistically derived parameterization for the collagen triple-helix. <i>Protein Science</i> , <b>2002</b> , 11, 2748-54	6.3	53
64	Improved helix and kink characterization in membrane proteins allows evaluation of kink sequence predictors. <i>Journal of Chemical Information and Modeling</i> , <b>2010</b> , 50, 2213-20	6.1	52
63	Recombinant minimalist spider wrapping silk proteins capable of native-like fiber formation. <i>PLoS ONE</i> , <b>2012</b> , 7, e50227	3.7	51
62	Preferential apelin-13 production by the proprotein convertase PCSK3 is implicated in obesity. <i>FEBS Open Bio</i> , <b>2013</b> , 3, 328-33	2.7	49
61	A study of fibrous long spacing collagen ultrastructure and assembly by atomic force microscopy. <i>Micron</i> , <b>2001</b> , 32, 341-53	2.3	44
60	Apelinergic System Structure and Function. <i>Comprehensive Physiology</i> , <b>2017</b> , 8, 407-450	7.7	36
59	Headgroup-dependent membrane catalysis of apelin-receptor interactions is likely. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 10465-71	3.4	32
58	Structural and functional characterization of transmembrane segment IX of the NHE1 isoform of the Na <sup>+</sup> /H <sup>+</sup> exchanger. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 22018-30	5.4	32
57	Hierarchical assembly and the onset of banding in fibrous long spacing collagen revealed by atomic force microscopy. <i>Matrix Biology</i> , <b>2002</b> , 21, 647-60	11.4	32

56	Nanoparticle self-assembly by a highly stable recombinant spider wrapping silk protein subunit. <i>FEBS Letters</i> , <b>2013</b> , 587, 3273-80	3.8	29
55	Structural features of the apelin receptor N-terminal tail and first transmembrane segment implicated in ligand binding and receptor trafficking. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2013</b> , 1828, 1471-83	3.8	29
54	Spider wrapping silk fibre architecture arising from its modular soluble protein precursor. <i>Scientific Reports</i> , <b>2015</b> , 5, 11502	4.9	25
53	The predictive accuracy of secondary chemical shifts is more affected by protein secondary structure than solvent environment. <i>Journal of Biomolecular NMR</i> , <b>2010</b> , 46, 257-70	3	24
52	Membrane catalysis of peptide-receptor binding. <i>Biochemistry and Cell Biology</i> , <b>2010</b> , 88, 203-10	3.6	23
51	Multifaceted substrate capture scheme of a rhomboid protease. <i>Journal of Physical Chemistry B</i> , <b>2012</b> , 116, 8942-54	3.4	22
50	Inhibition of Transient Receptor Potential Channel Mucolipin-1 (TRPML1) by Lysosomal Adenosine Involved in Severe Combined Immunodeficiency Diseases. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 3445-3455	5.4	20
49	Apela exhibits isoform- and headgroup-dependent modulation of micelle binding, peptide conformation and dynamics. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2017</b> , 1859, 767-778	3.8	20
48	Optimizing oriented planar-supported lipid samples for solid-state protein NMR. <i>Biophysical Journal</i> , <b>2005</b> , 89, 2792-805	2.9	19
47	Identification of Wet-Spinning and Post-Spin Stretching Methods Amenable to Recombinant Spider Aciniform Silk. <i>Biomacromolecules</i> , <b>2016</b> , 17, 2737-46	6.9	18
46	Bioactivity of the putative apelin proprotein expands the repertoire of apelin receptor ligands. <i>Biochimica Et Biophysica Acta - General Subjects</i> , <b>2017</b> , 1861, 1901-1912	4	17
45	NOS1AP Functionally Associates with YAP To Regulate Hippo Signaling. <i>Molecular and Cellular Biology</i> , <b>2015</b> , 35, 2265-77	4.8	17
44	Interpretation of biomolecular NMR spin relaxation parameters. <i>Biochemistry and Cell Biology</i> , <b>2010</b> , 88, 131-42	3.6	17
43	<sup>1</sup> H, <sup>13</sup> C and <sup>15</sup> N NMR assignments of the aciniform spidroin (AcSp1) repetitive domain of <i>Argiope trifasciata</i> wrapping silk. <i>Biomolecular NMR Assignments</i> , <b>2012</b> , 6, 147-51	0.7	15
42	A novel C-terminal region within the multicargo type III secretion chaperone CesT contributes to effector secretion. <i>Journal of Bacteriology</i> , <b>2013</b> , 195, 740-56	3.5	15
41	Strategies for dealing with conformational sampling in structural calculations of flexible or kinked transmembrane peptides. <i>Biochemistry and Cell Biology</i> , <b>2006</b> , 84, 918-29	3.6	15
40	Differential Contribution of Transmembrane Domains IV, V, VI, and VII to Human Angiotensin II Type 1 Receptor Homomer Formation. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 3341-3350	5.4	14
39	Tracking Transitions in Spider Wrapping Silk Conformation and Dynamics by ( <sup>19</sup> F) Nuclear Magnetic Resonance Spectroscopy. <i>Biochemistry</i> , <b>2016</b> , 55, 3048-59	3.2	14

38	Biophysical characterization of G-protein coupled receptor-peptide ligand binding. <i>Biochemistry and Cell Biology</i> , <b>2011</b> , 89, 98-105	3.6	12
37	Recombinant Silk Fiber Properties Correlate to Prefibrillar Self-Assembly. <i>Small</i> , <b>2019</b> , 15, e1805294	11	12
36	The p10 FAST protein fusion peptide functions as a cystine noose to induce cholesterol-dependent liposome fusion without liposome tubulation. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2015</b> , 1848, 408-16	3.8	11
35	Reovirus FAST Proteins Drive Pore Formation and Syncytiogenesis Using a Novel Helix-Loop-Helix Fusion-Inducing Lipid Packing Sensor. <i>PLoS Pathogens</i> , <b>2015</b> , 11, e1004962	7.6	11
34	Effect of a remote substituent on regioselectivity in oxymercuration of unsymmetrically substituted norbornenes. <i>Tetrahedron Letters</i> , <b>1999</b> , 40, 7727-7730	2	10
33	Tyrosine Phosphorylation as a Widespread Regulatory Mechanism in Prokaryotes. <i>Journal of Bacteriology</i> , <b>2019</b> , 201,	3.5	9
32	Structural and Mechanical Roles for the C-Terminal Nonrepetitive Domain Become Apparent in Recombinant Spider Aciniform Silk. <i>Biomacromolecules</i> , <b>2017</b> , 18, 3678-3686	6.9	8
31	Correlating structure, dynamics, and function in transmembrane segment VII of the Na <sup>+</sup> /H <sup>+</sup> exchanger isoform 1. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2010</b> , 1798, 94-104	3.8	8
30	Estimation and measurement of flat or solenoidal coil inductance for radiofrequency NMR coil design. <i>Journal of Magnetic Resonance</i> , <b>2007</b> , 187, 27-37	3	8
29	Pyrene-Apelin Conjugation Modulates Fluorophore- and Peptide-Micelle Interactions. <i>Journal of Physical Chemistry B</i> , <b>2017</b> , 121, 4768-4777	3.4	7
28	Mixed Fluorotryptophan Substitutions at the Same Residue Expand the Versatility of F Protein NMR Spectroscopy. <i>Chemistry - A European Journal</i> , <b>2018</b> , 24, 3391-3396	4.8	7
27	Apelin conformational and binding equilibria upon micelle interaction primarily depend on membrane-mimetic headgroup. <i>Scientific Reports</i> , <b>2017</b> , 7, 15433	4.9	7
26	Recombinant Pyriform Silk Fiber Mechanics Are Modulated by Wet-Spinning Conditions. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 4985-4993	5.5	6
25	Small expression tags enhance bacterial expression of the first three transmembrane segments of the apelin receptor. <i>Biochemistry and Cell Biology</i> , <b>2014</b> , 92, 269-78	3.6	6
24	Statistically based reduced representation of amino acid side chains. <i>Journal of Chemical Information and Computer Sciences</i> , <b>2004</b> , 44, 817-30		5
23	A rotatable flat coil for static solid-state nuclear magnetic resonance spectroscopy. <i>Review of Scientific Instruments</i> , <b>2005</b> , 76, 086102	1.7	5
22	A network map of apelin-mediated signaling. <i>Journal of Cell Communication and Signaling</i> , <b>2021</b> , 1	5.2	5
21	Characterization of Variant Soft Nanoparticle Structure and Morphology in Solution by NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 7461-7471	3.8	4

20	Transmembrane Segment XI of the Na/H Antiporter of <i>S. pombe</i> is a Critical Part of the Ion Translocation Pore. <i>Scientific Reports</i> , <b>2017</b> , 7, 12793	4.9	4
19	Characterizing Aciniform Silk Repetitive Domain Backbone Dynamics and Hydrodynamic Modularity. <i>International Journal of Molecular Sciences</i> , <b>2016</b> , 17,	6.3	4
18	Proapelin is processed extracellularly in a cell line-dependent manner with clear modulation by proprotein convertases. <i>Amino Acids</i> , <b>2019</b> , 51, 395-405	3.5	4
17	Preserved Transmembrane Segment Topology, Structure, and Dynamics in Disparate Micellar Environments. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 2381-2386	6.4	3
16	Concentration-dependent changes to diffusion and chemical shift of internal standard molecules in aqueous and micellar solutions. <i>Journal of Biomolecular NMR</i> , <b>2018</b> , 71, 79-89	3	3
15	The effect of perfluorooctadecanoic acid on a model phosphatidylcholine-peptide pulmonary lung surfactant mixture. <i>Journal of Fluorine Chemistry</i> , <b>2015</b> , 177, 55-61	2.1	3
14	Preliminary investigation of the dissolution behavior, cytocompatibility, effects of fibrinogen conformation and platelet adhesion for radiopaque embolic particles. <i>Journal of Functional Biomaterials</i> , <b>2013</b> , 4, 89-113	4.8	3
13	Nuclear magnetic resonance studies of CXC chemokine receptor 4 allosteric peptide agonists in solution. <i>Chemical Biology and Drug Design</i> , <b>2006</b> , 66, 12-21		3
12	Parallel Atomic Force Microscopy and NMR Spectroscopy To Investigate Self-Assembled Protein-Nucleotide Aggregates. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 5553-5560	3.4	3
11	Material properties of disulfide-crosslinked hyaluronic acid hydrogels influence prostate cancer cell growth and metabolism. <i>Journal of Materials Chemistry B</i> , <b>2020</b> , 8, 9718-9733	7.3	3
10	Structure, amphipathy, and topology of the membrane-proximal helix 8 influence apelin receptor plasma membrane localization. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2019</b> , 1861, 183036	3.8	2
9	Simultaneous Ligand and Receptor Tracking through NMR Spectroscopy Enabled by Distinct F Labels. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	2
8	Multi-pin contact drawing enables production of anisotropic collagen fiber substrates for alignment of fibroblasts and monocytes.. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2022</b> , 215, 112525	6	2
7	Bicelle composition-dependent modulation of phospholipid dynamics by apelin peptides. <i>Biochemistry and Cell Biology</i> , <b>2019</b> , 97, 325-332	3.6	1
6	Antibacterial activities of physiologically stable, self-assembled peptide nanoparticles. <i>Journal of Materials Chemistry B</i> , <b>2021</b> , 9, 9041-9054	7.3	1
5	The network map of Elabela signaling pathway in physiological and pathological conditions. <i>Journal of Cell Communication and Signaling</i> , <b>2021</b> , 1	5.2	1
4	H, N and C backbone resonance assignments of the acidic domain of the human MDMX protein.. <i>Biomolecular NMR Assignments</i> , <b>2022</b> , 1	0.7	0
3	Biomaterials: Recombinant Silk Fiber Properties Correlate to Prefibrillar Self-Assembly (Small 12/2019). <i>Small</i> , <b>2019</b> , 15, 1970065	11	

- 2 Construction with Collagen – Insight through Atomic Force Microscopy. *Microscopy and Microanalysis*, **2002**, 8, 776-777 0.5
- 1 On-cell nuclear magnetic resonance spectroscopy to probe cell surface interactions. *Biochemistry and Cell Biology*, **2021**, 99, 683-692 3.6