Jan Johansson

List of Publications by Citations

176 papers	8,154 citations	51 h-index	85 g-index
185 ext. papers	9,227 ext. citations	6.3 avg, IF	5.92 L-index

#	Paper	IF	Citations
176	Self-assembly of spider silk proteins is controlled by a pH-sensitive relay. *Nature*, **2010**, 465, 236-8	50.4	328
175	A molecular chaperone breaks the catalytic cycle that generates toxic A□ oligomers. *Nature Structural and Molecular Biology*, **2015**, 22, 207-213	17.6	268
174	Prediction of amyloid fibril-forming proteins. *Journal of Biological Chemistry*, **2001**, 276, 12945-50	5.4	240
173	Molecular structures and interactions of pulmonary surfactant components. *FEBS Journal*, **1997**, 244, 675-93		233
172	Toward spinning artificial spider silk. *Nature Chemical Biology*, **2015**, 11, 309-15	11.7	210
171	Hydrophobic surfactant-associated polypeptides: SP-C is a lipopeptide with two palmitoylated cysteine residues, whereas SP-B lacks covalently linked fatty acyl groups. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 2985-9	11.5	205
170	TGF-□1-induced EMT promotes targeted migration of breast cancer cells through the lymphatic system by the activation of CCR7/CCL21-mediated chemotaxis. *Oncogene*, **2016**, 35, 748-60	9.2	194
169	The NMR structure of the pulmonary surfactant-associated polypeptide SP-C in an apolar solvent contains a valyl-rich alpha-helix. *Biochemistry*, **1994**, 33, 6015-23	3.2	184
168	Kinetic analysis reveals the diversity of microscopic mechanisms through which molecular chaperones suppress amyloid formation. *Nature Communications*, **2016**, 7, 10948	17.4	153
167	The proteins of the surfactant system. *European Respiratory Journal*, **1994**, 7, 372-91	13.6	152
166	Structure and orientation of the surfactant-associated protein C in a lipid bilayer. *FEBS Journal*, **1992**, 203, 201-9		149
165	Spider silk proteins: recent advances in recombinant production, structure-function relationships and biomedical applications. *Cellular and Molecular Life Sciences*, **2011**, 68, 169-84	10.3	144
164	Macroscopic fibers self-assembled from recombinant miniature spider silk proteins. *Biomacromolecules*, **2007**, 8, 1695-701	6.9	144
163	Biomimetic spinning of artificial spider silk from a chimeric minispidroin. *Nature Chemical Biology*, **2017**, 13, 262-264	11.7	143
162	Secondary structure and orientation of the surfactant protein SP-B in a lipid environment. A Fourier transform infrared spectroscopy study. *Biochemistry*, **1992**, 31, 9169-76	3.2	136
161	Structure and properties of surfactant protein C. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **1998**, 1408, 161-72	6.9	132
160	MiR-155-mediated loss of C/EBP□ shifts the TGF-□ response from growth inhibition to epithelial-mesenchymal transition, invasion and metastasis in breast cancer. *Oncogene*, **2013**, 32, 5614-24	9.2	123

159	An amphipathic helical motif common to tumourolytic polypeptide NK-lysin and pulmonary surfactant polypeptide SP-B. *FEBS Letters*, **1995**, 362, 328-32	3.8	123
158	N-terminal nonrepetitive domain common to dragline, flagelliform, and cylindriform spider silk proteins. *Biomacromolecules*, **2006**, 7, 3120-4	6.9	122
157	Structural properties of recombinant nonrepetitive and repetitive parts of major ampullate spidroin 1 from Euprosthenops australis: implications for fiber formation. *Biochemistry*, **2008**, 47, 3407-17	3.2	113
156	Surfactant protein B: disulfide bridges, structural properties, and kringle similarities. *Biochemistry*, **1991**, 30, 6917-21	3.2	112
155	Carbonic anhydrase generates CO2 and H+ that drive spider silk formation via opposite effects on the terminal domains. *PLoS Biology*, **2014**, 12, e1001921	9.7	109
154	Processing of pulmonary surfactant protein B by napsin and cathepsin H. *Journal of Biological Chemistry*, **2004**, 279, 16178-84	5.4	105
153	BRICHOS domains efficiently delay fibrillation of amyloid β-peptide. *Journal of Biological Chemistry*, **2012**, 287, 31608-17	5.4	103
152	Sequential pH-driven dimerization and stabilization of the N-terminal domain enables rapid spider silk formation. *Nature Communications*, **2014**, 5, 3254	17.4	96
151	Recombinant spider silk as matrices for cell culture. *Biomaterials*, **2010**, 31, 9575-85	15.6	89
150	High-resolution structure of a BRICHOS domain and its implications for anti-amyloid chaperone activity on lung surfactant protein C. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 2325-9	11.5	87
149	Secondary structure and membrane interaction of PR-39, a Pro+Arg-rich antibacterial peptide. *FEBS Journal*, **1994**, 224, 1019-27		87
148	Amyloid fibril formation by pulmonary surfactant protein C. *FEBS Letters*, **1999**, 464, 138-42	3.8	86
147	Low-molecular-mass surfactant protein type 1. The primary structure of a hydrophobic 8-kDa polypeptide with eight half-cystine residues. *FEBS Journal*, **1988**, 172, 521-5		86
146	Secondary structure and biophysical activity of synthetic analogues of the pulmonary surfactant polypeptide SP-C. *Biochemical Journal*, **1995**, 307 (Pt 2), 535-41	3.8	85
145	Silk Spinning in Silkworms and Spiders. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	78
144	Synthetic peptide-containing surfactants--evaluation of transmembrane versus amphipathic helices and surfactant protein C poly-valyl to poly-leucyl substitution. *FEBS Journal*, **1998**, 255, 116-24		77
143	Pulmonary surfactant-associated polypeptide C in a mixed organic solvent transforms from a monomeric alpha-helical state into insoluble beta-sheet aggregates. *Protein Science*, **1998**, 7, 2533-40	6.3	76
142	Size and structure of the hydrophobic low molecular weight surfactant-associated polypeptide. *Biochemistry*, **1988**, 27, 3544-7	3.2	74

141	Mapping and analysis of the lytic and fusogenic domains of surfactant protein B. *Biochemistry*, **2005**, 44, 861-72	3.2	69
140	Tissue Response to Subcutaneously Implanted Recombinant Spider Silk: An in Vivo Study. *Materials*, **2009**, 2, 1908-1922	3.5	65
139	Current and future treatment of amyloid diseases. *Journal of Internal Medicine*, **2016**, 280, 177-202	10.8	65
138	Invited review current progress and limitations of spider silk for biomedical applications. *Biopolymers*, **2012**, 97, 468-78	2.2	64
137	BRICHOS - a superfamily of multidomain proteins with diverse functions. *BMC Research Notes*, **2009**, 2, 180	2.3	64
136	Amyloid-β induced action potential desynchronization and degradation of hippocampal gamma oscillations is prevented by interference with peptide conformation change and aggregation. *Journal of Neuroscience*, **2014**, 34, 11416-25	6.6	61
135	pH-dependent dimerization of spider silk N-terminal domain requires relocation of a wedged tryptophan side chain. *Journal of Molecular Biology*, **2012**, 422, 477-87	6.5	61
134	Full-length minor ampullate spidroin gene sequence. *PLoS ONE*, **2012**, 7, e52293	3.7	58
133	Pulmonary surfactant protein B: a structural model and a functional analogue. *Biochimica Et Biophysica Acta - Biomembranes*, **2000**, 1466, 179-86	3.8	57
132	Interaction of pulmonary surfactant protein C with CD14 and lipopolysaccharide. *Infection and Immunity*, **2003**, 71, 61-7	3.7	56
131	The 21-residue surfactant peptide (LysLeu4)4Lys(KL4) is a transmembrane alpha-helix with a mixed nonpolar/polar surface. *FEBS Letters*, **1996**, 384, 185-8	3.8	55
130	Reverse-phase HPLC of the hydrophobic pulmonary surfactant proteins: detection of a surfactant protein C isoform containing Nepsilon-palmitoyl-lysine. *Biochemical Journal*, **1997**, 326 (Pt 3), 799-806	3.8	54
129	The Brichos domain-containing C-terminal part of pro-surfactant protein C binds to an unfolded poly-val transmembrane segment. *Journal of Biological Chemistry*, **2006**, 281, 21032-21039	5.4	54
128	Molecular effects of proinsulin C-peptide. *Biochemical and Biophysical Research Communications*, **2002**, 295, 1035-40	3.4	54
127	Mitochondrial aldehyde dehydrogenase from horse liver. Correlations of the same species variants for both the cytosolic and the mitochondrial forms of an enzyme. *FEBS Journal*, **1988**, 172, 527-33		53
126	Pulmonary surfactant-associated polypeptide SP-C in lipid micelles: CD studies of intact SP-C and NMR secondary structure determination of depalmitoyl-SP-C(1-17). *FEBS Letters*, **1995**, 362, 261-5	3.8	52
125	The BRICHOS domain, amyloid fibril formation, and their relationship. *Biochemistry*, **2013**, 52, 7523-31	3.2	51
124	BRICHOS domain associated with lung fibrosis, dementia and cancer--a chaperone that prevents amyloid fibril formation?. *FEBS Journal*, **2011**, 278, 3893-904	5.7	51

123	Surfactant protein B propeptide contains a saposin-like protein domain with antimicrobial activity at low pH. *Journal of Immunology*, **2010**, 184, 975-83	5.3	51
122	A synthetic surfactant based on a poly-Leu SP-C analog and phospholipids: effects on tidal volumes and lung gas volumes in ventilated immature newborn rabbits. *Journal of Applied Physiology*, **2003**, 95, 2055-63	3.7	51
121	Hydrophobic 3.7 kDa surfactant polypeptide: structural characterization of the human and bovine forms. *FEBS Letters*, **1988**, 232, 61-4	3.8	50
120	Structural basis for interactions between lung surfactant protein C and bacterial lipopolysaccharide. *Journal of Biological Chemistry*, **2002**, 277, 23484-92	5.4	49
119	Efficient protein production inspired by how spiders make silk. *Nature Communications*, **2017**, 8, 15504	17.4	48
118	A pH-dependent dimer lock in spider silk protein. *Journal of Molecular Biology*, **2010**, 404, 328-36	6.5	47
117	Surfactant proteins B and C are both necessary for alveolar stability at end expiration in premature rabbits with respiratory distress syndrome. *Journal of Applied Physiology*, **2008**, 104, 1101-8	3.7	47
116	Recombinant spider silk genetically functionalized with affinity domains. *Biomacromolecules*, **2014**, 15, 1696-706	6.9	45
115	Mutations linked to interstitial lung disease can abrogate anti-amyloid function of prosurfactant protein C. *Biochemical Journal*, **2008**, 416, 201-9	3.8	45
114	Synthetic surfactant based on analogues of SP-B and SP-C is superior to single-peptide surfactants in ventilated premature rabbits. *Neonatology*, **2010**, 98, 91-9	4	44
113	Sterilized recombinant spider silk fibers of low pyrogenicity. *Biomacromolecules*, **2010**, 11, 953-9	6.9	43
112	The palmitoyl groups of lung surfactant protein C reduce unfolding into a fibrillogenic intermediate. *Journal of Molecular Biology*, **2001**, 310, 937-50	6.5	42
111	Canine hydrophobic surfactant polypeptide SP-C. A lipopeptide with one thioester-linked palmitoyl group. *FEBS Letters*, **1991**, 281, 119-22	3.8	42
110	The extracellular domain of Bri2 (ITM2B) binds the ABri peptide (1-23) and amyloid beta-peptide (Abeta1-40): Implications for Bri2 effects on processing of amyloid precursor protein and Abeta aggregation. *Biochemical and Biophysical Research Communications*, **2010**, 393, 356-61	3.4	40
109	A method for S- and O-palmitoylation of peptides: synthesis of pulmonary surfactant protein-C models. *Biochemical Journal*, **1999**, 343, 557-562	3.8	40
108	Major ampullate spidroins from Euprosthenops australis: multiplicity at protein, mRNA and gene levels. *Insect Molecular Biology*, **2007**, 16, 551-61	3.4	39
107	Morphology and composition of the spider major ampullate gland and dragline silk. *Biomacromolecules*, **2013**, 14, 2945-52	6.9	37
106	Peptides of postulated inhibin activity. Lack of in vitro inhibin activity of a 94-residue peptide isolated from human seminal plasma, and of a synthetic replicate of its C-terminal 28-residue segment. *FEBS Letters*, **1986**, 199, 242-8	3.8	37

105	The chaperone domain BRICHOS prevents CNS toxicity of amyloid-peptide in Drosophila melanogaster. *DMM Disease Models and Mechanisms*, **2014**, 7, 659-65	4.1	36
104	Bri2 BRICHOS client specificity and chaperone activity are governed by assembly state. *Nature Communications*, **2017**, 8, 2081	17.4	35
103	Palmitoylation of a pulmonary surfactant protein C analogue affects the surface associated lipid reservoir and film stability. *Biochimica Et Biophysica Acta - Biomembranes*, **2000**, 1466, 169-78	3.8	35
102	Spider silk for xeno-free long-term self-renewal and differentiation of human pluripotent stem cells. *Biomaterials*, **2014**, 35, 8496-502	15.6	34
101	Engineered disulfides improve mechanical properties of recombinant spider silk. *Protein Science*, **2009**, 18, 1012-22	6.3	34
100	Anti-amyloid activity of the C-terminal domain of proSP-C against amyloid beta-peptide and medin. *Biochemistry*, **2009**, 48, 3778-86	3.2	34
99	The effect of environment on the stability of an integral membrane helix: molecular dynamics simulations of surfactant protein C in chloroform, methanol and water. *Journal of Molecular Biology* , **1995**, 247, 808-22	6.5	34
98	Identification of hydrophobic fragments of alpha 1-antitrypsin and C1 protease inhibitor in human bile, plasma and spleen. *FEBS Letters*, **1992**, 299, 146-8	3.8	32
97	The Brichos domain of prosurfactant protein C can hold and fold a transmembrane segment. *Protein Science*, **2009**, 18, 1175-82	6.3	31
96	N-terminally extended surfactant protein (SP) C isolated from SP-B-deficient children has reduced surface activity and inhibited lipopolysaccharide binding. *Biochemistry*, **2004**, 43, 3891-8	3.2	31
95	Carbonic anhydrase generates a pH gradient in Bombyx mori silk glands. *Insect Biochemistry and Molecular Biology*, **2015**, 65, 100-6	4.5	30
94	Biomimicry of surfactant protein C. *Accounts of Chemical Research*, **2008**, 41, 1409-17	24.3	30
93	Diversified Structural Basis of a Conserved Molecular Mechanism for pH-Dependent Dimerization in Spider Silk N-Terminal Domains. *ChemBioChem*, **2015**, 16, 1720-4	3.8	29
92	BRICHOS domain of Bri2 inhibits islet amyloid polypeptide (IAPP) fibril formation and toxicity in human beta cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E2752-E2761	11.5	28
91	Dementia-related Bri2 BRICHOS is a versatile molecular chaperone that efficiently inhibits A42 toxicity in Drosophila. *Biochemical Journal*, **2016**, 473, 3683-3704	3.8	28
90	Determination of proteins, phosphatidylethanolamine, and phosphatidylserine in organic solvent extracts of tissue material by analysis of phenylthiocarbamyl derivatives. *Analytical Biochemistry*, **1998**, 265, 97-102	3.1	28
89	Cellular antiendotoxin activities of lung surfactant protein C in lipid vesicles. *American Journal of Respiratory and Critical Care Medicine*, **2003**, 168, 335-41	10.2	28
88	Biophysical activity of an artificial surfactant containing an analogue of surfactant protein (SP)-C and native SP-B. *Biochemical Journal*, **1999**, 339, 381-386	3.8	28

87	Specific chaperones and regulatory domains in control of amyloid formation. *Journal of Biological Chemistry*, **2015**, 290, 26430-6	5.4	27
86	Different effects of surfactant proteins B and C - implications for development of synthetic surfactants. *Neonatology*, **2010**, 97, 367-72	4	27
85	Human surfactant polypeptide SP-B. Disulfide bridges, C-terminal end, and peptide analysis of the airway form. *FEBS Letters*, **1992**, 301, 165-7	3.8	27
84	Synthetic surfactants with SP-B and SP-C analogues to enable worldwide treatment of neonatal respiratory distress syndrome and other lung diseases. *Journal of Internal Medicine*, **2019**, 285, 165-186	10.8	27
83	Characterisation of variant forms of prophenin: mechanistic aspects of the fragmentation of proline-rich peptides. *Rapid Communications in Mass Spectrometry*, **2000**, 14, 2182-202	2.2	25
82	Isolation and characterization of hydrophobic polypeptides in human bile. *FEBS Journal*, **1999**, 266, 209-14		25
81	Amino acid sequence determinants and molecular chaperones in amyloid fibril formation. *Biochemical and Biophysical Research Communications*, **2010**, 396, 2-6	3.4	24
80	Preventing amyloid formation by catching unfolded transmembrane segments. *Journal of Molecular Biology*, **2009**, 389, 227-9	6.5	24
79	Membrane properties and amyloid fibril formation of lung surfactant protein C. *Biochemical Society Transactions*, **2001**, 29, 601-6	5.1	24
78	Hydrogen/deuterium exchange and aggregation of a polyvaline and a polyleucine alpha-helix investigated by matrix-assisted laser desorption ionization mass spectrometry. *Molecular and Cellular Proteomics*, **2002**, 1, 592-7	7.6	24
77	Structural and Functional Importance of the C-Terminal Part of the Pulmonary Surfactant Polypeptide SP-C. *FEBS Journal*, **1995**, 229, 465-472		24
76	A spidroin-derived solubility tag enables controlled aggregation of a designed amyloid protein. *FEBS Journal*, **2018**, 285, 1873-1885	5.7	22
75	Conformational preferences of non-polar amino acid residues: an additional factor in amyloid formation. *Biochemical and Biophysical Research Communications*, **2010**, 402, 515-8	3.4	21
74	Secondary structure and limited proteolysis give experimental evidence that the precursor of pulmonary surfactant protein B contains three saposin-like domains. *FEBS Letters*, **1998**, 423, 1-4	3.8	19
73	C-terminal, endoplasmic reticulum-lumenal domain of prosurfactant protein C - structural features and membrane interactions. *FEBS Journal*, **2008**, 275, 536-47	5.7	19
72	Porcine pulmonary surfactant preparations contain the antibacterial peptide prophenin and a C-terminal 18-residue fragment thereof. *FEBS Letters*, **1999**, 460, 257-62	3.8	19
71	Transthyretin and BRICHOS: The Paradox of Amyloidogenic Proteins with Anti-Amyloidogenic Activity for A□n the Central Nervous System. *Frontiers in Neuroscience*, **2017**, 11, 119	5.1	18
70	Functionalisation of recombinant spider silk with conjugated polyelectrolytes. *Journal of Materials Chemistry*, **2011**, 21, 2909		18

69	Novel expression of a functional trimeric fragment of human SP-A with efficacy in neutralisation of RSV. *Immunobiology*, **2017**, 222, 111-118	3.4	16
68	Structure-Function Relationship of Artificial Spider Silk Fibers Produced by Straining Flow Spinning. *Biomacromolecules*, **2020**, 21, 2116-2124	6.9	16
67	High-yield Production of Amyloid-β Peptide Enabled by a Customized Spider Silk Domain. *Scientific Reports*, **2020**, 10, 235	4.9	16
66	Mass Spectrometry Reveals the Direct Action of a Chemical Chaperone. *Journal of Physical Chemistry Letters*, **2018**, 9, 4082-4086	6.4	16
65	Separate molecular determinants in amyloidogenic and antimicrobial peptides. *Journal of Molecular Biology*, **2014**, 426, 2159-66	6.5	16
64	Transmissible amyloid. *Journal of Internal Medicine*, **2016**, 280, 153-63	10.8	16
63	Doing What Spiders Cannot-A Road Map to Supreme Artificial Silk Fibers. *ACS Nano*, **2021**, 15, 1952-1959	16.7	16
62	Dissociation of a BRICHOS trimer into monomers leads to increased inhibitory effect on Aβ42 fibril formation. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2015**, 1854, 835-43	4	15
61	Degree of Biomimicry of Artificial Spider Silk Spinning Assessed by NMR Spectroscopy. *Angewandte Chemie - International Edition*, **2017**, 56, 12571-12575	16.4	15
60	Peptide-binding specificity of the prosurfactant protein C Brichos domain analyzed by electrospray ionization mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2009**, 23, 3591-8	2.2	15
59	The N-terminal propeptide of lung surfactant protein C is necessary for biosynthesis and prevents unfolding of a metastable alpha-helix. *Journal of Molecular Biology*, **2004**, 338, 857-62	6.5	15
58	Production and Properties of Triple Chimeric Spidroins. *Biomacromolecules*, **2018**, 19, 2825-2833	6.9	14
57	BRICHOS binds to a designed amyloid-forming β protein and reduces proteasomal inhibition and aggresome formation. *Biochemical Journal*, **2016**, 473, 167-78	3.8	14
56	Control of amyloid assembly by autoregulation. *Biochemical Journal*, **2012**, 447, 185-92	3.8	13
55	Synthetic protein analogues in artificial surfactants. *Acta Paediatrica, International Journal of Paediatrics*, **1996**, 85, 642-6	3.1	13
54	Mass spectrometry captures structural intermediates in protein fiber self-assembly. *Chemical Communications*, **2017**, 53, 3319-3322	5.8	12
53	C/EBPβ expression is an independent predictor of overall survival in breast cancer patients by MHCII/CD4-dependent mechanism of metastasis formation. *Oncogenesis*, **2014**, 3, e125	6.6	12
52	Tensile properties of synthetic pyriform spider silk fibers depend on the number of repetitive units as well as the presence of N- and C-terminal domains. *International Journal of Biological Macromolecules*, **2020**, 154, 765-772	7.9	11

51	Augmentation of Bri2 molecular chaperone activity against amyloid-β reduces neurotoxicity in mouse hippocampus in vitro. *Communications Biology*, **2020**, 3, 32	6.7	11
50	Phospholipid Composition in Synthetic Surfactants Is Important for Tidal Volumes and Alveolar Stability in Surfactant-Treated Preterm Newborn Rabbits. *Neonatology*, **2016**, 109, 177-85	4	11
49	Analysis of variant forms of porcine surfactant polypeptide-C by nano-electrospray mass spectrometry. *Rapid Communications in Mass Spectrometry*, **1998**, 12, 1104-14	2.2	11
48	Alcohol dehydrogenases and aldehyde dehydrogenases. *Biochemical Society Transactions*, **1988**, 16, 223-7	3.1	11
47	The Bri2 and Bri3 BRICHOS Domains Interact Differently with Aβ and Alzheimer Amyloid Plaques. *Journal of Alzheimer's Disease Reports*, **2018**, 2, 27-39	3.3	11
46	Synthetic surfactant with a recombinant surfactant protein C analogue improves lung function and attenuates inflammation in a model of acute respiratory distress syndrome in adult rabbits. *Respiratory Research*, **2019**, 20, 245	7.3	10
45	Amyloid fibrils. *FEBS Journal*, **2005**, 272, 5941	5.7	10
44	Artificial surfactants based on analogues of SP-B and SP-C. *Fetal and Pediatric Pathology*, **2001**, 20, 501-18		10
43	BRI2 ectodomain affects Aβ42 fibrillation and tau truncation in human neuroblastoma cells. *Cellular and Molecular Life Sciences*, **2015**, 72, 1599-611	10.3	9
42	Free energy barrier estimation of unfolding the alpha-helical surfactant-associated polypeptide C. *Proteins: Structure, Function and Bioinformatics*, **2001**, 43, 395-402	4.2	9
41	Folding and Intramembraneous BRICHOS Binding of the Prosurfactant Protein C Transmembrane Segment. *Journal of Biological Chemistry*, **2015**, 290, 17628-41	5.4	7
40	Recombinant BRICHOS chaperone domains delivered to mouse brain parenchyma by focused ultrasound and microbubbles are internalized by hippocampal and cortical neurons. *Molecular and Cellular Neurosciences*, **2020**, 105, 103498	4.8	7
39	Structure and influence on stability and activity of the N-terminal propeptide part of lung surfactant protein C. *FEBS Journal*, **2006**, 273, 926-35	5.7	7
38	Modulation of Kv3.1/Kv3.2 promotes gamma oscillations by rescuing Aβ-induced desynchronization of fast-spiking interneuron firing in an AD mouse model in vitro. *Journal of Physiology*, **2020**, 598, 3711-3725	3.9	7
37	Blood-brain and blood-cerebrospinal fluid passage of BRICHOS domains from two molecular chaperones in mice. *Journal of Biological Chemistry*, **2019**, 294, 2606-2615	5.4	6
36	Evaluation of Functionalized Spider Silk Matrices: Choice of Cell Types and Controls are Important for Detecting Specific Effects. *Frontiers in Bioengineering and Biotechnology*, **2014**, 2, 50	5.8	6
35	Alterations of the C-terminal end do not affect in vitro or in vivo activity of surfactant protein C analogs. *Biochimica Et Biophysica Acta - Biomembranes*, **2012**, 1818, 27-32	3.8	6
34	Cysteine reactivity in sorbitol and aldehyde dehydrogenases. Differences towards the pattern in alcohol dehydrogenase. *FEBS Letters*, **1992**, 303, 1-3	3.8	6

33	Tyrosine residues mediate supercontraction in biomimetic spider silk. *Communications Materials*, **2021**, 2,	6	6
32	Impact of synthetic surfactant CHF5633 with SP-B and SP-C analogues on lung function and inflammation in rabbit model of acute respiratory distress syndrome. *Physiological Reports*, **2021**, 9, e14700	2.6	6
31	Closely related isozymes of alcohol dehydrogenase. Carboxymethylation: gamma 1 gamma 1 differs widely from both beta 1 beta 1 and its equine equivalence EE. *FEBS Letters*, **1991**, 279, 119-22	3.8	5
30	Functionalization of amyloid fibrils via the Bri2 BRICHOS domain. *Scientific Reports*, **2020**, 10, 21765	4.9	5
29	High-yield production of a super-soluble miniature spidroin for biomimetic high-performance materials. *Materials Today*, **2021**,	21.8	5
28	BRICHOS: a chaperone with different activities depending on quaternary structure and cellular location?. *Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis*, **2019**, 26, 152-153	2.7	4
27	High intracellular stability of the spidroin N-terminal domain in spite of abundant amyloidogenic segments revealed by in-cell hydrogen/deuterium exchange mass spectrometry. *FEBS Journal*, **2020**, 287, 2823-2833	5.7	4
26	Native-like Flow Properties of an Artificial Spider Silk Dope. *ACS Biomaterials Science and Engineering*, **2021**, 7, 462-471	5.5	4
25	Degree of Biomimicry of Artificial Spider Silk Spinning Assessed by NMR Spectroscopy. *Angewandte Chemie*, **2017**, 129, 12745-12749	3.6	3
24	Ablation of p75 signaling strengthens gamma-theta rhythm interaction and counteracts A□nduced degradation of neuronal dynamics in mouse hippocampus in vitro. *Translational Psychiatry*, **2021**, 11, 212	8.6	3
23	Smallest Secondary Nucleation Competent A□Aggregates Probed by an ATP-Independent Molecular Chaperone Domain. *Biochemistry*, **2021**, 60, 678-688	3.2	3
22	Recombinant Bri3 BRICHOS domain is a molecular chaperone with effect against amyloid formation and non-fibrillar protein aggregation. *Scientific Reports*, **2020**, 10, 9817	4.9	2
21	Systemic AA amyloidosis in the red fox (Vulpes vulpes). *Protein Science*, **2017**, 26, 2312-2318	6.3	2
20	Pulmonary surfactant: emerging protein analogues. *BioDrugs*, **1999**, 11, 71-7	7.9	2
19	Superoxide dismutase in human testis preparations. *Bioscience Reports*, **1986**, 6, 535-41	4.1	2
18	AA amyloid in human food chain is a possible biohazard. *Scientific Reports*, **2021**, 11, 21069	4.9	2
17	In Vitro Study of Human Immune Responses to Hyaluronic Acid Hydrogels, Recombinant Spidroins and Human Neural Progenitor Cells of Relevance to Spinal Cord Injury Repair. *Cells*, **2021**, 10,	7.9	2
16	Expression of the human molecular chaperone domain Bri2 BRICHOS on a gram per liter scale with an E. coli fed-batch culture. *Microbial Cell Factories*, **2021**, 20, 150	6.4	2

List of Publications

15	Amyloid: a multifaceted player in human health and disease. *Journal of Internal Medicine*, **2016**, 280, 136-8	10.8	2
14	Harnessing the Self-Assembling Properties of Proteins in Spider Silk and Lung Surfactant **2013**, 455-470		1
13	A Novel Approach for the Production of Aggregation-Prone Proteins Using the Spidroin-Derived NT* Tag.. *Methods in Molecular Biology*, **2022**, 2406, 113-130	1.4	1
12	Artificial spider silk supports and guides neurite extension in vitro. *FASEB Journal*, **2021**, 35, e21896	0.9	1
11	Ion mobility-mass spectrometry shows stepwise protein unfolding under alkaline conditions. *Chemical Communications*, **2021**, 57, 1450-1453	5.8	1
10	A "spindle and thread" mechanism unblocks p53 translation by modulating N-terminal disorder.. *Structure*, **2022**,	5.2	1
9	The dimerization mechanism of the N-terminal domain of spider silk proteins is conserved despite extensive sequence divergence.. *Journal of Biological Chemistry*, **2022**, 101913	5.4	1
8	BRICHOS - an anti-amyloid chaperone: evaluation of blood-brain barrier permeability of Bri2 BRICHOS. *Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis*, **2017**, 24, 7-8	2.7	0
7	The synthesis and characterization of Bri2 BRICHOS coated magnetic particles and their application to protein fishing: Identification of novel binding proteins. *Journal of Pharmaceutical and Biomedical Analysis*, **2021**, 198, 113996	3.5	0
6	Efficient delipidation of a recombinant lung surfactant lipopeptide analogue by liquid-gel chromatography. *PLoS ONE*, **2019**, 14, e0226072	3.7	0
5	Disulphide Bridges in Surfactant Protein B Analogues Affect Their Activity in Synthetic Surfactant Preparations. *Neonatology*, **2019**, 115, 134-141	4	0
4	Bri2 BRICHOS chaperone rescues impaired fast-spiking interneuron behavior and neuronal network dynamics in an AD mouse model in vitro. *Neurobiology of Disease*, **2021**, 159, 105514	7.5	0
3	Engineered Spider Silk Proteins for Biomimetic Spinning of Fibers with Toughness Equal to Dragline Silks. *Advanced Functional Materials*,2200986	15.6	0
2	Membrane properties and amyloid fibril formation of lung surfactant protein C. *Biochemical Society Transactions*, **2001**, 29, A56-A56	5.1	
1	Citrullination Alters the Antibacterial and Anti-Inflammatory Functions of the Host Defense Peptide Canine Cathelicidin K9CATH In Vitro. *Journal of Immunology*, **2021**, 207, 974-984	5.3	