Thomas R Scheibel

List of Publications by Year in Descending Order

234 papers	11,838 citations	56 h-index	102 g-index
248 ext. papers	13,301 ext. citations	7.6 avg, IF	6.9 L-index

#	Paper	IF	Citations
234	Supposedly identical microplastic particles substantially differ in their material properties influencing particle-cell interactions and cellular responses.. *Journal of Hazardous Materials*, **2022**, 425, 127961	12.8	4
233	Continuous Yarn Electrospinning. *Textiles*, **2022**, 2, 124-141		0
232	Bioinspirierte Klebstoffe zur Anwendung in w�srigen Fl�sigkeiten. *Adhaesion Kleben Und Dichten*, **2022**, 66, 34-39	0.1	
231	Pristine and artificially-aged polystyrene microplastic particles differ in regard to cellular response.. *Journal of Hazardous Materials*, **2022**, 435, 128955	12.8	0
230	Mimicry of silk utilizing synthetic polypeptides. *Progress in Polymer Science*, **2022**, 101557	29.6	0
229	In vitro cultivation of primary intestinal cells from Eisenia fetida as basis for ecotoxicological studies. *Ecotoxicology*, **2021**, 31, 221	2.9	0
228	Impacts of Blended Silk Fibroin and Recombinant Spider Silk Fibroin Hydrogels on Cell Growth. *Polymers*, **2021**, 13,	4.5	1
227	Crosslinked polypeptide films via RAFT mediated continuous assembly of polymers. *Angewandte Chemie - International Edition*, **2021**, e202112842	16.4	0
226	Microbial repellence properties of engineered spider silk coatings prevent biofilm formation of opportunistic bacterial strains. *MRS Communications*, **2021**, 11, 356-362	2.7	1
225	Recombinant Spider Silk Gels Derived from Aqueous-Organic Solvents as Depots for Drugs. *Angewandte Chemie - International Edition*, **2021**, 60, 11847-11851	16.4	6
224	Rekombinante Spinnenseidengele aus w�srig-organischen Mischphasen als Wirkstoffdepots. *Angewandte Chemie*, **2021**, 133, 11953-11958	3.6	0
223	Toward Activatable Collagen Mimics: Combining DEPSI "Switch" Defects and Template-Guided Self-Organization to Control Collagen Mimetic Peptides. *Macromolecular Bioscience*, **2021**, 21, e2100070	5.5	
222	Designing of spider silk proteins for human induced pluripotent stem cell-based cardiac tissue engineering. *Materials Today Bio*, **2021**, 11, 100114	9.9	5
221	Chitosan-based nanocomposites for medical applications. *Journal of Polymer Science*, **2021**, 59, 1610-1642	2.4	18
220	Enhanced vascularization andtissue formation in hydrogels made of engineered RGD-tagged spider silk proteins in the arteriovenous loop model. *Biofabrication*, **2021**, 13,	10.5	4
219	Patterning of protein-based materials. *Biopolymers*, **2021**, 112, e23412	2.2	2
218	Interplay of Different Major Ampullate Spidroins during Assembly and Implications for Fiber Mechanics. *Advanced Materials*, **2021**, 33, e2006499	24	10

217	Dichroic Fourier Transform Infrared Spectroscopy Characterization of the ▯Sheet Orientation in Spider Silk Films on Silicon Substrates. *Journal of Physical Chemistry B*, **2021**, 125, 1061-1071	3.4	0
216	Recombinant major ampullate spidroin-particles as biotemplates for manganese carbonate mineralization. *Multifunctional Materials*, **2021**, 4, 014002	5.2	0
215	Silk-Based Materials for Hard Tissue Engineering. *Materials*, **2021**, 14,	3.5	14
214	Noxic effects of polystyrene microparticles on murine macrophages and epithelial cells. *Scientific Reports*, **2021**, 11, 15702	4.9	4
213	Approaches to inhibit biofilm formation applying natural and artificial silk-based materials. *Materials Science and Engineering C*, **2021**, 131, 112458	8.3	0
212	Impact of Cell Loading of Recombinant Spider Silk Based Bioinks on Gelation and Printability. *Macromolecular Bioscience*, **2021**, e2100390	5.5	2
211	Surface Modification of Spider Silk Particles to Direct Biomolecular Corona Formation. *ACS Applied Materials & Interfaces*, **2020**, 12, 24635-24643	9.5	7
210	Recombinant spider silk protein eADF4(C16)-RGD coatings are suitable for cardiac tissue engineering. *Scientific Reports*, **2020**, 10, 8789	4.9	10
209	Sea star-inspired recombinant adhesive proteins self-assemble and adsorb on surfaces in aqueous environments to form cytocompatible coatings. *Acta Biomaterialia*, **2020**, 112, 62-74	10.8	9
208	Enhanced Antibacterial Activity of Se Nanoparticles Upon Coating with Recombinant Spider Silk Protein eADF4(▯16). *International Journal of Nanomedicine*, **2020**, 15, 4275-4288	7.3	13
207	Copolymer/Clay Nanocomposites for Biomedical Applications. *Advanced Functional Materials*, **2020**, 30, 1908101	15.6	56
206	Functionalized DNA-spider silk nanohydrogels for controlled protein binding and release. *Materials Today Bio*, **2020**, 6, 100045	9.9	12
205	Nerve guidance conduit design based on self-rolling tubes. *Materials Today Bio*, **2020**, 5, 100042	9.9	18
204	Spider Silk for Tissue Engineering Applications. *Molecules*, **2020**, 25,	4.8	53
203	Data for microbe resistant engineered recombinant spider silk protein based 2D and 3D materials. *Data in Brief*, **2020**, 32, 106305	1.2	10
202	Aqueous electrospinning of recombinant spider silk proteins. *Materials Science and Engineering C*, **2020**, 106, 110145	8.3	16
201	Recombinant Spider Silk-Silica Hybrid Scaffolds with Drug-Releasing Properties for Tissue Engineering Applications. *Macromolecular Rapid Communications*, **2020**, 41, e1900426	4.8	10
200	Free-standing spider silk webs of the thomisid Saccodomus formivorus are made of composites comprising micro- and submicron fibers. *Scientific Reports*, **2020**, 10, 17624	4.9	2

199	Engineered spider silk-based 2D and 3D materials prevent microbial infestation. *Materials Today*, **2020**, 41, 21-33	21.8	15
198	Centrifugal Electrospinning Enables the Production of Meshes of Ultrathin Polymer Fibers. *ACS Applied Polymer Materials*, **2020**, 2, 4360-4367	4.3	18
197	Designed Spider Silk-Based Drug Carrier for Redox- or pH-Triggered Drug Release. *Biomacromolecules*, **2020**, 21, 4904-4912	6.9	10
196	Roll-to-Roll Production of Spider Silk Nanofiber Nonwoven Meshes Using Centrifugal Electrospinning for Filtration Applications. *Molecules*, **2020**, 25,	4.8	10
195	Spider Silk Fusion Proteins for Controlled Collagen Binding and Biomineralization. *ACS Biomaterials Science and Engineering*, **2020**, 6, 5599-5608	5.5	4
194	Ocrepeira klamt sp. n. (Araneae: Araneidae), a novel spider species from an Andean p□amo in Colombia. *PLoS ONE*, **2020**, 15, e0237499	3.7	0
193	Proteinfasern als Hochleistungsmaterial. *Biologie in Unserer Zeit*, **2020**, 50, 434-443	0.1	
192	Multifunctional Biomaterials: Combining Material Modification Strategies for Engineering of Cell-Contacting Surfaces. *ACS Applied Materials & Interfaces*, **2020**, 12, 21342-21367	9.5	17
191	Recombinant Spider Silk and Collagen-Based Nerve Guidance Conduits Support Neuronal Cell Differentiation and Functionality in Vitro.. *ACS Applied Bio Materials*, **2019**, 2, 4872-4880	4.1	13
190	Modulating the collagen triple helix formation by switching: Positioning effects of depsi-defects on the assembly of [Gly-Pro-Pro]7 collagen mimetic peptides. *European Polymer Journal*, **2019**, 112, 301-305	5.2	5
189	A mussel polyphenol oxidase-like protein shows thiol-mediated antioxidant activity. *European Polymer Journal*, **2019**, 113, 305-312	5.2	4
188	Universal nanothin silk coatings via controlled spidroin self-assembly. *Biomaterials Science*, **2019**, 7, 683-695	7.4	11
187	Engineering of silk proteins for materials applications. *Current Opinion in Biotechnology*, **2019**, 60, 213-220	11.4	35
186	Intrinsic Vascularization of Recombinant eADF4(C16) Spider Silk Matrices in the Arteriovenous Loop Model. *Tissue Engineering - Part A*, **2019**, 25, 1504-1513	3.9	15
185	Self-Rolling Refillable Tubular Enzyme Containers Made of Recombinant Spider Silk and Chitosan. *ACS Applied Materials & Interfaces*, **2019**, 11, 15290-15297	9.5	7
184	Ultrathin Spider Silk Films: Insights into Spider Silk Assembly on Surfaces. *ACS Applied Polymer Materials*, **2019**, 1, 3366-3374	4.3	15
183	Nanostructured, Self-Assembled Spider Silk Materials for Biomedical Applications. *Advances in Experimental Medicine and Biology*, **2019**, 1174, 187-221	3.6	7
182	Nanoscale Patterning of Surfaces via DNA Directed Spider Silk Assembly. *Biomacromolecules*, **2019**, 20, 347-352	6.9	8

181	SpiderMAEn: recombinant spider silk-based hybrid materials for advanced energy technology. *Bioinspired, Biomimetic and Nanobiomaterials*, **2019**, 8, 99-108	1.3	3
180	Nanoengineered biomaterials for corneal regeneration **2019**, 379-415		3
179	Altering Silk Film Surface Properties through Lotus-Like Mechanisms. *Macromolecular Materials and Engineering*, **2018**, 303, 1700637	3.9	3
178	Recombinant Spider Silk Hydrogels for Sustained Release of Biologicals. *ACS Biomaterials Science and Engineering*, **2018**, 4, 1750-1759	5.5	12
177	Silk nanofibril self-assembly versus electrospinning. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2018**, 10, e1509	9.2	19
176	Self-Assembly of Spider Silk-Fusion Proteins Comprising Enzymatic and Fluorescence Activity. *Bioconjugate Chemistry*, **2018**, 29, 898-904	6.3	14
175	Biomedical Applications of Recombinant Silk-Based Materials. *Advanced Materials*, **2018**, 30, e1704636	24	140
174	In Vivo Coating of Bacterial Magnetic Nanoparticles by Magnetosome Expression of Spider Silk-Inspired Peptides. *Biomacromolecules*, **2018**, 19, 962-972	6.9	17
173	Engineered hybrid spider silk particles as delivery system for peptide vaccines. *Biomaterials*, **2018**, 172, 105-115	15.6	31
172	Coacervation of the Recombinant Mytilus galloprovincialis Foot Protein-3b. *Biomacromolecules*, **2018**, 19, 3612-3619	6.9	16
171	Routes towards Novel Collagen-Like Biomaterials. *Fibers*, **2018**, 6, 21	3.7	6
170	Microfluidic nozzle device for ultrafine fiber solution blow spinning with precise diameter control. *Lab on A Chip*, **2018**, 18, 2225-2234	7.2	21
169	The MyoRobot: A novel automated biomechatronics system to assess voltage/Ca biosensors and active/passive biomechanics in muscle and biomaterials. *Biosensors and Bioelectronics*, **2018**, 102, 589-599	11.8	9
168	Engineered Collagen: A Redox Switchable Framework for Tunable Assembly and Fabrication of Biocompatible Surfaces. *ACS Biomaterials Science and Engineering*, **2018**, 4, 2106-2114	5.5	12
167	Electroconductive Biohybrid Hydrogel for Enhanced Maturation and Beating Properties of Engineered Cardiac Tissues. *Advanced Functional Materials*, **2018**, 28, 1803951	15.6	75
166	Facile Photochemical Modification of Silk Protein-Based Biomaterials. *Macromolecular Bioscience*, **2018**, 18, e1800216	5.5	3
165	Recombinant Production of Mussel Byssus Inspired Proteins. *Biotechnology Journal*, **2018**, 13, e1800146	5.6	13
164	Properties of Engineered and Fabricated Silks. *Sub-Cellular Biochemistry*, **2017**, 82, 527-573	5.5	7

163	Recombinant Production, Characterization, and Fiber Spinning of an Engineered Short Major Ampullate Spidroin (MaSp1s). *Biomacromolecules*, **2017**, 18, 1365-1372	6.9	25
162	Conformational Stability and Interplay of Helical N- and C-Terminal Domains with Implications on Major Ampullate Spidroin Assembly. *Biomacromolecules*, **2017**, 18, 835-845	6.9	21
161	Mechanical Testing of Engineered Spider Silk Filaments Provides Insights into Molecular Features on a Mesoscale. *ACS Applied Materials & Interfaces*, **2017**, 9, 892-900	9.5	26
160	Probing the adhesion properties of alginate hydrogels: a new approach towards the preparation of soft colloidal probes for direct force measurements. *Soft Matter*, **2017**, 13, 578-589	3.6	13
159	Recombinant spider silk-based bioinks. *Biofabrication*, **2017**, 9, 044104	10.5	40
158	Foundation of the Outstanding Toughness in Biomimetic and Natural Spider Silk. *Biomacromolecules*, **2017**, 18, 3954-3962	6.9	27
157	Biotechnological production of the mussel byssus derived collagen preColD. *RSC Advances*, **2017**, 7, 38273-38278	3.7	8
156	Spider silk foam coating of fabric. *Pure and Applied Chemistry*, **2017**, 89, 1769-1776	2.1	4
155	Applicability of biotechnologically produced insect silks. *Zeitschrift Fur Naturforschung - Section C Journal of Biosciences*, **2017**, 72, 365-385	1.7	10
154	Surface Features of Recombinant Spider Silk Protein eADF4(□16)-Made Materials are Well-Suited for Cardiac Tissue Engineering. *Advanced Functional Materials*, **2017**, 27, 1701427	15.6	36
153	Characterization of Hydrogels Made of a Novel Spider Silk Protein eMaSp1s and Evaluation for 3D Printing. *Macromolecular Bioscience*, **2017**, 17, 1700141	5.5	5
152	Dimerization of the Conserved N-Terminal Domain of a Spider Silk Protein Controls the Self-Assembly of the Repetitive Core Domain. *Biomacromolecules*, **2017**, 18, 2521-2528	6.9	13
151	Surface Modification of Polymeric Biomaterials Using Recombinant Spider Silk Proteins. *ACS Biomaterials Science and Engineering*, **2017**, 3, 767-775	5.5	28
150	Sequence Identification, Recombinant Production, and Analysis of the Self-Assembly of Egg Stalk Silk Proteins from Lacewing Chrysoperla carnea. *Biomolecules*, **2017**, 7,	5.9	5
149	Silk-Based Fine Dust Filters for Air Filtration. *Advanced Sustainable Systems*, **2017**, 1, 1700079	5.9	11
148	Cations influence the cross-linking of hydrogels made of recombinant, polyanionic spider silk proteins. *Materials Letters*, **2016**, 183, 101-104	3.3	15
147	Silk **2016**, 1-15		2
146	Acidic Residues Control the Dimerization of the N-terminal Domain of Black Widow SpidersTMajor Ampullate Spidroin 1. *Scientific Reports*, **2016**, 6, 34442	4.9	20

145	Resonance assignment of an engineered amino-terminal domain of a major ampullate spider silk with neutralized charge cluster. *Biomolecular NMR Assignments*, **2016**, 10, 199-202	0.7	2
144	Foams Made of Engineered Recombinant Spider Silk Proteins as 3D Scaffolds for Cell Growth. *ACS Biomaterials Science and Engineering*, **2016**, 2, 517-525	5.5	34
143	Strategies and Molecular Design Criteria for 3D Printable Hydrogels. *Chemical Reviews*, **2016**, 116, 1496-1539	51.1	461
142	Biomineralization of Engineered Spider Silk Protein-Based Composite Materials for Bone Tissue Engineering. *Materials*, **2016**, 9,	3.5	22
141	Colloidal Properties of Recombinant Spider Silk Protein Particles. *Journal of Physical Chemistry C*, **2016**, 120, 18015-18027	3.8	19
140	Cellular uptake of drug loaded spider silk particles. *Biomaterials Science*, **2016**, 4, 1515-1523	7.4	19
139	Structural Insights into Water-Based Spider Silk Protein-Nanoclay Composites with Excellent Gas and Water Vapor Barrier Properties. *ACS Applied Materials & Interfaces*, **2016**, 8, 25535-43	9.5	35
138	Microfluidics-Produced Collagen Fibers Show Extraordinary Mechanical Properties. *Nano Letters*, **2016**, 16, 5917-22	11.5	72
137	Two-in-One Composite Fibers With Side-by-Side Arrangement of Silk Fibroin and Poly(l-lactide) by Electrospinning. *Macromolecular Materials and Engineering*, **2016**, 301, 48-55	3.9	36
136	Ion and seed dependent fibril assembly of a spidroin core domain. *Journal of Structural Biology*, **2015**, 191, 130-8	3.4	14
135	Data for ion and seed dependent fibril assembly of a spidroin core domain. *Data in Brief*, **2015**, 4, 571-6	1.2	8
134	Biofabrication of 3D constructs: fabrication technologies and spider silk proteins as bioinks. *Pure and Applied Chemistry*, **2015**, 87, 737-749	2.1	42
133	Enzymatic Degradation of Films, Particles, and Nonwoven Meshes Made of a Recombinant Spider Silk Protein. *ACS Biomaterials Science and Engineering*, **2015**, 1, 247-259	5.5	42
132	To spin or not to spin: spider silk fibers and more. *Applied Microbiology and Biotechnology*, **2015**, 99, 9361-80	5.7	38
131	Enhanced cellular uptake of engineered spider silk particles. *Biomaterials Science*, **2015**, 3, 543-51	7.4	35
130	Life cycle assessment of spider silk nonwoven meshes in an air filtration device. *Green Materials*, **2015**, 3, 15-24	3.2	2
129	Engineering of recombinant spider silk proteins allows defined uptake and release of substances. *Journal of Pharmaceutical Sciences*, **2015**, 104, 988-94	3.9	37
128	Biomimetic fibers made of recombinant spidroins with the same toughness as natural spider silk. *Advanced Materials*, **2015**, 27, 2189-94	24	148

127	Dreidimensional gedruckte, zellbeladene Konstrukte aus Spinnenseide. *Angewandte Chemie*, **2015**, 127, 2858-2862	3.6	5
126	Biofabrication of cell-loaded 3D spider silk constructs. *Angewandte Chemie - International Edition*, **2015**, 54, 2816-20	16.4	169
125	Processing of recombinant spider silk proteins into tailor-made materials for biomaterials applications. *Current Opinion in Biotechnology*, **2014**, 29, 62-9	11.4	71
124	Spider Silk Coatings as a Bioshield to Reduce Periprosthetic Fibrous Capsule Formation. *Advanced Functional Materials*, **2014**, 24, 2658-2666	15.6	77
123	Structural and functional features of a collagen-binding matrix protein from the mussel byssus. *Nature Communications*, **2014**, 5, 3392	17.4	48
122	Nanomaterial building blocks based on spider silk-oligonucleotide conjugates. *ACS Nano*, **2014**, 8, 1342-9	16.7	57
121	Coatings and films made of silk proteins. *ACS Applied Materials & Interfaces*, **2014**, 6, 15611-25	9.5	72
120	Bioinspired Materials Engineering **2014**, 1-22		2
119	Nature as a blueprint for polymer material concepts: Protein fiber-reinforced composites as holdfasts of mussels. *Progress in Polymer Science*, **2014**, 39, 1564-1583	29.6	47
118	Influence of repeat numbers on self-assembly rates of repetitive recombinant spider silk proteins. *Journal of Structural Biology*, **2014**, 186, 431-7	3.4	49
117	Structure and post-translational modifications of the web silk protein spidroin-1 from Nephila spiders. *Journal of Proteomics*, **2014**, 105, 174-85	3.9	30
116	Controlled hierarchical assembly of spider silk-DNA chimeras into ribbons and raft-like morphologies. *Nano Letters*, **2014**, 14, 3999-4004	11.5	27
115	Rheological characterization of silk solutions. *Green Materials*, **2014**, 2, 11-23	3.2	2
114	Self-assembly of nucleic acids, silk and hybrid materials thereof. *Journal of Physics Condensed Matter*, **2014**, 26, 503102	1.8	6
113	Glycopolymer functionalization of engineered spider silk protein-based materials for improved cell adhesion. *Macromolecular Bioscience*, **2014**, 14, 936-42	5.5	30
112	Spider Silk Capsules as Protective Reaction Containers for Enzymes. *Advanced Functional Materials*, **2014**, 24, 763-768	15.6	31
111	Crystallization and preliminary X-ray diffraction analysis of proximal thread matrix protein 1 (PTMP1) from Mytilus galloprovincialis. *Acta Crystallographica Section F, Structural Biology Communications*, **2014**, 70, 769-72	1.1	5
110	Structural diversity of a collagen-binding matrix protein from the byssus of blue mussels upon refolding. *Journal of Structural Biology*, **2014**, 186, 75-85	3.4	11

109	The Power of Recombinant Spider Silk Proteins. *Biologically-inspired Systems*, **2014**, 179-201	0.7	3
108	Engineered spider silk protein-based composites for drug delivery. *Macromolecular Bioscience*, **2013** , 13, 1431-7	5.5	31
107	Controllable cell adhesion, growth and orientation on layered silk protein films. *Biomaterials Science*, **2013**, 1, 1244-1249	7.4	27
106	Micromechanical characterization of spider silk particles. *Biomaterials Science*, **2013**, 1, 1160-1165	7.4	22
105	Protein gradient films of fibroin and gelatine. *Macromolecular Bioscience*, **2013**, 13, 1396-403	5.5	18
104	Surface properties of spider silk particles in solution. *Biomaterials Science*, **2013**, 1, 1166-1171	7.4	16
103	Recombinant production of spider silk proteins. *Advances in Applied Microbiology*, **2013**, 82, 115-53	4.9	79
102	CHAPTER 12:Hierarchical Protein Assemblies as a Basis for Materials. *RSC Smart Materials*, **2013**, 256-281	0.6	1
101	Lipid-specific [illegible]sheet formation in a mussel byssus protein domain. *Biomacromolecules*, **2013**, 14, 3238-45	6.9	7
100	Air filter devices including nonwoven meshes of electrospun recombinant spider silk proteins. *Journal of Visualized Experiments*, **2013**, e50492	1.6	22
99	Cell-to-cell propagation of infectious cytosolic protein aggregates. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 5951-6	11.5	38
98	Dragline, Egg Stalk and Byssus: A Comparison of Outstanding Protein Fibers and Their Potential for Developing New Materials. *Advanced Functional Materials*, **2013**, 23, 4467-4482	15.6	33
97	Cell adhesion and proliferation on RGD-modified recombinant spider silk proteins. *Biomaterials*, **2012**, 33, 6650-9	15.6	157
96	Learning from nature: synthesis and characterization of longitudinal polymer gradient materials inspired by mussel byssus threads. *Macromolecular Rapid Communications*, **2012**, 33, 206-11	4.8	26
95	Review the role of terminal domains during storage and assembly of spider silk proteins. *Biopolymers*, **2012**, 97, 355-61	2.2	61
94	Dependence of mechanical properties of lacewing egg stalks on relative humidity. *Biomacromolecules*, **2012**, 13, 3730-5	6.9	21
93	Utilizing conformational changes for patterning thin films of recombinant spider silk proteins. *Biomacromolecules*, **2012**, 13, 3189-99	6.9	27
92	Characterization of natural and biomimetic spider silk fibers. *Bioinspired, Biomimetic and Nanobiomaterials*, **2012**, 1, 83-94	1.3	11

91	Varying surface hydrophobicities of coatings made of recombinant spider silk proteins. *Journal of Materials Chemistry*, **2012**, 22, 22050		37
90	Interactions of cells with silk surfaces. *Journal of Materials Chemistry*, **2012**, 22, 14330		59
89	Production and Processing of Spider Silk Proteins. Biopolymers with Application Potential for the Future. *International Polymer Science and Technology*, **2012**, 39, 1-3		1
88	Polymer Gradient Materials: Can Nature Teach Us New Tricks?. *Macromolecular Materials and Engineering*, **2012**, 297, 938-957	3.9	61
87	Interactions of Fibroblasts with Different Morphologies Made of an Engineered Spider Silk Protein. *Advanced Engineering Materials*, **2012**, 14, B67-B75	3.5	61
86	Artifizielle Eierstiele, hergestellt aus rekombinant produziertem Florfliegenseidenprotein. *Angewandte Chemie*, **2012**, 124, 6627-6630	3.6	0
85	Artificial egg stalks made of a recombinantly produced lacewing silk protein. *Angewandte Chemie - International Edition*, **2012**, 51, 6521-4	16.4	19
84	Control of Drug Loading and Release Properties of Spider Silk Sub-Microparticles. *BioNanoScience*, **2012**, 2, 67-74	3.4	25
83	Controlled hydrogel formation of a recombinant spider silk protein. *Biomacromolecules*, **2011**, 12, 2488-95	6.9	101
82	Mussel collagen molecules with silk-like domains as load-bearing elements in distal byssal threads. *Journal of Structural Biology*, **2011**, 175, 339-47	3.4	43
81	Spider silk: understanding the structure-function relationship of a natural fiber. *Progress in Molecular Biology and Translational Science*, **2011**, 103, 131-85	4	33
80	Recombinant Spider SilksBiopolymers with Potential for Future Applications. *Polymers*, **2011**, 3, 640-661	4.5	66
79	Decoding the secrets of spider silk. *Materials Today*, **2011**, 14, 80-86	21.8	224
78	pH-abhgige Dimerisierung und salzabhgige Stabilisierung der N-terminalen Dome von Abseilfaden-Spinnenseide Details zur Initiation des Assemblierungsprozesses. *Angewandte Chemie*, **2011**, 123, 324-328	3.6	8
77	pH-dependent dimerization and salt-dependent stabilization of the N-terminal domain of spider dragline silk--implications for fiber formation. *Angewandte Chemie - International Edition*, **2011**, 50, 310-3	16.4	107
76	Impact of initial solvent on thermal stability and mechanical properties of recombinant spider silk films. *Journal of Materials Chemistry*, **2011**, 21, 13594		55
75	Recombinant spider silk particles as drug delivery vehicles. *Biomaterials*, **2011**, 32, 2233-40	15.6	121
74	A conserved spider silk domain acts as a molecular switch that controls fibre assembly. *Nature*, **2010**, 465, 239-42	50.4	309

73	Towards the Recombinant Production of Mussel Byssal Collagens **2010**, 86, 10-24		10
72	Characterization of recombinantly produced spider flagelliform silk domains. *Journal of Structural Biology*, **2010**, 170, 420-5	3.4	33
71	The role of salt and shear on the storage and assembly of spider silk proteins. *Journal of Structural Biology*, **2010**, 170, 413-9	3.4	68
70	Hierarchical structures made of proteins. The complex architecture of spider webs and their constituent silk proteins. *Chemical Society Reviews*, **2010**, 39, 156-64	58.5	114
69	Structural characterization and functionalization of engineered spider silk films. *Soft Matter*, **2010**, 6, 4168	3.6	54
68	Silk-based materials for biomedical applications. *Biotechnology and Applied Biochemistry*, **2010**, 55, 155-67	2.8	169
67	Functional Amyloids Used by Organisms: A Lesson in Controlling Assembly. *Macromolecular Chemistry and Physics*, **2010**, 211, 127-135	2.6	19
66	Recombinant spider silk proteins for applications in biomaterials. *Macromolecular Bioscience*, **2010**, 10, 998-1007	5.5	146
65	Composite materials based on silk proteins. *Progress in Polymer Science*, **2010**, 35, 1093-1115	29.6	243
64	Controlling silk fibroin particle features for drug delivery. *Biomaterials*, **2010**, 31, 4583-91	15.6	356
63	Mimicking biopolymers on a molecular scale: nano(bio)technology based on engineered proteins. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 1727-47	3	37
62	Biomimetic Spinning of Recombinant Silk Proteins. *Materials Research Society Symposia Proceedings*, **2009**, 1239, 1		
61	The yeast Sup35NM domain propagates as a prion in mammalian cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 462-7	11.5	54
60	Single molecule force measurements delineate salt, pH and surface effects on biopolymer adhesion. *Physical Biology*, **2009**, 6, 025004	3	33
59	Spinnenseide: vom l�lichen Protein zur au�rgew�nlichen Faser. *Angewandte Chemie*, **2009**, 121, 3638-3650	5.6	25
58	Structural analysis of proteinaceous components in Byssal threads of the mussel Mytilus galloprovincialis. *Macromolecular Bioscience*, **2009**, 9, 162-8	5.5	36
57	Spider silk: from soluble protein to extraordinary fiber. *Angewandte Chemie - International Edition*, **2009**, 48, 3584-96	16.4	381
56	Production and processing of spider silk proteins. *Journal of Polymer Science Part A*, **2009**, 47, 3957-3963	2.5	35

55	Influence of divalent copper, manganese and zinc ions on fibril nucleation and elongation of the amyloid-like yeast prion determinant Sup35p-NM. *Journal of Inorganic Biochemistry*, **2009**, 103, 1711-20	4.2	9
54	Interfacial rheological properties of recombinant spider-silk proteins. *Biointerphases*, **2009**, 4, 43-6	1.8	13
53	Silk-inspired polymers and proteins. *Biochemical Society Transactions*, **2009**, 37, 677-81	5.1	83
52	Hydrophobic and Hofmeister effects on the adhesion of spider silk proteins onto solid substrates: an AFM-based single-molecule study. *Langmuir*, **2008**, 24, 1350-5	4	51
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