Frits A De Wolf

List of Publications by Year in descending order

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75 papers

2,872 citations

30 h-index 51 g-index

77 all docs

77 docs citations

times ranked

77

3255 citing authors

#	Article	IF	CITATIONS
1	High-yield secretion of recombinant gelatins byPichia pastoris. Yeast, 1999, 15, 1087-1096.	1.7	233
2	Covalently Attached Monolayers on Crystalline Hydrogen-Terminated Silicon:Â Extremely Mild Attachment by Visible Light. Journal of the American Chemical Society, 2005, 127, 2514-2523.	13.7	224
3	Design and self-assembly of simple coat proteins for artificial viruses. Nature Nanotechnology, 2014, 9, 698-702.	31.5	146
4	Secreted production of a custom-designed, highly hydrophilic gelatin in Pichia pastoris. Protein Engineering, Design and Selection, 2001, 14, 447-454.	2.1	121
5	Fracture and Self-Healing in a Well-Defined Self-Assembled Polymer Network. Macromolecules, 2010, 43, 3542-3548.	4.8	121
6	Covalent Microcontact Printing of Proteins for Cell Patterning. Chemistry - A European Journal, 2006, 12, 6290-6297.	3.3	118
7	Transport Studies of Doxorubicin in Model Membranes Indicate a Difference in Passive Diffusion across and Binding at the Outer and Inner Leaflet of the Plasma Membrane. Biochemistry, 1994, 33, 13761-13768.	2.5	110
8	Interaction of Î ² -Lactoglobulin with Small Hydrophobic Ligands As Monitored by Fluorometry and Equilibrium Dialysis:Â Nonlinear Quenching Effects Related to Proteinâ ^{^2} Protein Association. Journal of Agricultural and Food Chemistry, 2001, 49, 2609-2618.	5.2	83
9	One-Step Photochemical Attachment of NHS-Terminated Monolayers onto Silicon Surfaces and Subsequent Functionalization. Langmuir, 2008, 24, 7931-7938.	3.5	78
10	Production of protein-based polymers in Pichia pastoris. Biotechnology Advances, 2019, 37, 642-666.	11.7	77
11	Precision Gels from Collagen-Inspired Triblock Copolymers. Biomacromolecules, 2009, 10, 1106-1113.	5.4	66
12	Comparable interaction of doxorubicin with various acidic phospholipids results in changes of lipid order and dynamics. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1990, 1096, 67-80.	3.8	65
13	Triblock Protein Copolymers Forming Supramolecular Nanotapes and pH-Responsive Gels. Macromolecules, 2009, 42, 1002-1009.	4.8	59
14	Physical gels of telechelic triblock copolymers with precisely defined junction multiplicity. Soft Matter, 2009, 5, 2057.	2.7	58
15	Nanoribbons Selfâ€Assembled from Triblock Peptide Polymers and Coordination Polymers. Angewandte Chemie - International Edition, 2008, 47, 4192-4195.	13.8	54
16	Dilute Self-Healing Hydrogels of Silk-Collagen-Like Block Copolypeptides at Neutral pH. Biomacromolecules, 2014, 15, 699-706.	5.4	54
17	Shape-Memory Effects in Biopolymer Networks with Collagen-Like Transient Nodes. Biomacromolecules, 2011, 12, 2285-2292.	5.4	51
18	Reduced Proteolysis of Secreted Gelatin and Yps1-Mediated α-Factor Leader Processing in a Pichia pastoris kex2 Disruptant. Applied and Environmental Microbiology, 2005, 71, 2310-2317.	3.1	50

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19	Role of anionic phospholipids in the interaction of doxorubicin and plasma membrane vesicles: Drug binding and structural consequences in bacterial systems. Biochemistry, 1993, 32, 6688-6695.	2.5	48
20	Precise Coating of a Wide Range of DNA Templates by a Protein Polymer with a DNA Binding Domain. ACS Nano, 2017, 11, 144-152.	14.6	48
21	Coating of Single DNA Molecules by Genetically Engineered Protein Diblock Copolymers. Small, 2012, 8, 3491-3501.	10.0	46
22	"Clickable―elastins: elastin-like polypeptides functionalized with azide or alkyne groups. Chemical Communications, 2009, , 4022.	4.1	42
23	Biosynthesis of an Amphiphilic Silk-Like Polymer. Biomacromolecules, 2008, 9, 1705-1711.	5.4	38
24	Secreted production of an elastin-like polypeptide by Pichia pastoris. Applied Microbiology and Biotechnology, 2009, 85, 293-301.	3.6	35
25	Hydrogels of collagen-inspired telechelic triblock copolymers for the sustained release of proteins. Journal of Controlled Release, 2010, 147, 298-303.	9.9	35
26	Self-Assembly of Silk-Collagen-like Triblock Copolymers Resembles a Supramolecular Living Polymerization. ACS Nano, 2012, 6, 133-140.	14.6	34
27	From Micelles to Fibers: Balancing Self-Assembling and Random Coiling Domains in pH-Responsive Silk-Collagen-Like Protein-Based Polymers. Biomacromolecules, 2014, 15, 3349-3357.	5.4	34
28	Regiospecific effect of 1-octanol on cis - trans isomerization of unsaturated fatty acids in the solvent-tolerant strain Pseudomonas putida S12. Applied Microbiology and Biotechnology, 2001, 57, 541-547.	3.6	33
29	Genetically engineered silk–collagen-like copolymer for biomedical applications: Production, characterization and evaluation of cellular response. Acta Biomaterialia, 2014, 10, 3620-3629.	8.3	31
30	Effect of doxorubicin on the order of the acyl chains of anionic and zwitterionic phospholipids in liquid-crystalline mixed model membranes: Absence of drug-induced segregation of lipids into extended domains. Biochemistry, 1992, 31, 9252-9262.	2.5	30
31	Reversible Temperature-Switching of Hydrogel Stiffness of Coassembled, Silk-Collagen-Like Hydrogels. Biomacromolecules, 2015, 16, 2506-2513.	5.4	28
32	Dilute gels with exceptional rigidity from self-assembling silk-collagen-like block copolymers. Soft Matter, 2009, 5, 4191.	2.7	27
33	Octavolateral projections to the torus semicircularis of the trout, Salmo Gairdneri. Neuroscience Letters, 1983, 38, 209-213.	2.1	26
34	Expression and secretion of human $\hat{l}\pm 1(l)$ procollagen fragment by Hansenula polymorpha as compared to Pichia pastoris. Enzyme and Microbial Technology, 2000, 26, 640-644.	3.2	26
35	Elastin-like polypeptides of different molecular weights show independent transition temperatures when mixed. Soft Matter, 2009, 5, 4305.	2.7	26
36	Binding of doxorubicin to cardiolipin as compared to other anionic phospholipids—An evaluation of electrostatic effects. Bioscience Reports, 1991, 11, 275-284.	2.4	23

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37	Verapamil competes with doxorubicin for binding to anionic phospholipids resulting in increased internal concentrations and rates of passive transport of doxorubicin. Biochimica Et Biophysica Acta - Biomembranes, 1995, 1238, 137-146.	2.6	23
38	Fibril Formation by pH and Temperature Responsive Silk-Elastin Block Copolymers. Biomacromolecules, 2013, 14, 48-55.	5.4	23
39	Protein cross-linking tools for the construction of nanomaterials. Current Opinion in Biotechnology, 2016, 39, 61-67.	6.6	23
40	Characterization of the interaction of doxorubicin with (poly)phosphoinositides in model systems Evidence for specific interaction with phosphatidylinositol-monophosphate and -diphosphate. FEBS Letters, 1991, 288, 237-240.	2.8	22
41	Phosphatidylglycerol dependent protein translocation across the Escherichia coliinner membrane is inhibited by the anti-cancer drug doxorubicin. FEBS Letters, 1993, 324, 113-116.	2.8	22
42	Endogenous prolyl 4-hydroxylation inHansenula polymorphaand its use for the production of hydroxylated recombinant gelatin. FEMS Yeast Research, 2002, 1, 291-298.	2.3	22
43	Secretion of elastinâ€like polypeptides with different transition temperatures by <i>Pichia pastoris</i> Biotechnology Progress, 2012, 28, 242-247.	2.6	20
44	Fibrous Hydrogels for Cell Encapsulation: A Modular and Supramolecular Approach. PLoS ONE, 2016, 11, e0155625.	2.5	19
45	Polypeptide Nanoribbon Hydrogels Assembled through Multiple Supramolecular Interactions. Langmuir, 2009, 25, 12899-12908.	3.5	18
46	Chapter V Collagen and gelatin. Progress in Biotechnology, 2003, , 133-218.	0.2	17
47	Secreted production of collagenâ€nspired gelâ€forming polymers with high thermal stability in <i>Pichia pastoris</i>). Biotechnology and Bioengineering, 2011, 108, 2517-2525.	3.3	17
48	Studies on well-coupled Photosystem I-enriched subchloroplast vesicles. Neutral red as a probe for external surface charge rather than internal protonation. Biochimica Et Biophysica Acta - Bioenergetics, 1985, 809, 204-214.	1.0	16
49	Studies on well-coupled Photosystem I-enriched subchloroplast vesicles — characteristics and reinterpretation of single-turnover cyclic electron transfer. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 936, 487-503.	1.0	16
50	Influence of molecular size on gel-forming properties of telechelic collagen-inspired polymers. Soft Matter, 2010, 6, 4681.	2.7	16
51	The significance of interfacial charge and proton displacements for the mechanism of energy transduction in biomembranes. Bioelectrochemistry, 1986, 16, 273-285.	1.0	15
52	Triggered Templated Assembly of Protein Polymersomes. Angewandte Chemie - International Edition, 2010, 49, 9947-9950.	13.8	15
53	Nanofibrillar hydrogel scaffolds from recombinant proteinâ€based polymers with integrin†and proteoglycanâ€binding domains. Journal of Biomedical Materials Research - Part A, 2016, 104, 3082-3092.	4.0	15
54	Kinetics of network formation by telechelic polypeptides with trimeric nodes. Soft Matter, 2010, 6, 416-422.	2.7	14

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55	Heparin as a Bundler in a Self-Assembled Fibrous Network of Functionalized Protein-Based Polymers. Biomacromolecules, 2016, 17, 2063-2072.	5.4	14
56	Formation of nanotapes by co-assembly of triblock peptide copolymers and polythiophenes in aqueous solution. Soft Matter, 2009, 5, 1668.	2.7	13
57	Multi-responsive physical gels formed by a biosynthetic asymmetric triblock protein polymer and a polyanion. Soft Matter, 2013, 9, 8923.	2.7	13
58	Synergistic Stiffening in Double-Fiber Networks. Biomacromolecules, 2014, 15, 1233-1239.	5.4	13
59	Temperature-controlled positioning of fusion proteins in microreactors. Soft Matter, 2009, 5, 2261.	2.7	12
60	Tuning of Collagen Triple-Helix Stability in Recombinant Telechelic Polymers. Biomacromolecules, 2012, 13, 1250-1258.	5.4	11
61	Secreted production of self-assembling peptides in Pichia pastoris by fusion to an artificial highly hydrophilic protein. Journal of Biotechnology, 2010, 146, 66-73.	3.8	10
62	Cross-Linking and Bundling of Self-Assembled Protein-Based Polymer Fibrils via Heterodimeric Coiled Coils. Biomacromolecules, 2016, 17, 3893-3901.	5.4	10
63	Enhanced rigidity and rupture strength of composite hydrogel networks of bio-inspired block copolymers. Soft Matter, 2013, 9, 6936.	2.7	9
64	Pearl-necklace complexes of flexible polyanions with neutral–cationic diblock copolymers. Soft Matter, 2013, 9, 6406.	2.7	9
65	Disulfide bond-stabilized physical gels of an asymmetric collagen-inspired telechelic protein polymer. Soft Matter, 2013, 9, 6391.	2.7	8
66	Single-turnover flash-induced ATP synthesis in photosystem I-enriched subchloroplast vesicles. FEBS Letters, 1985, 192, 271-274.	2.8	6
67	Production in Pichia pastoris of complementary protein-based polymers with heterodimer-forming WW and PPxY domains. Microbial Cell Factories, 2016, 15, 105.	4.0	5
68	Studies on well-coupled Photosystem-I-enriched subchloroplast vesicles. Kinetic aspects of flash-induced energy transduction. Biochimica Et Biophysica Acta - Bioenergetics, 1986, 851, 295-312.	1.0	4
69	Endogenous prolyl 4-hydroxylation in and its use for the production of hydroxylated recombinant gelatin. FEMS Yeast Research, 2002, 1, 291-298.	2.3	4
70	Pathway-dependent properties of a multi-stimuli sensitive biosynthetic hybrid network. Soft Matter, 2013, 9, 8737.	2.7	4
71	Production in <i>Pichia pastoris</i> of proteinâ€based polymers with small heterodimerâ€forming blocks. Biotechnology and Bioengineering, 2016, 113, 953-960.	3.3	4
72	The antimycin sensitivity of flash-induced ATP synthesis in photosystem I-enriched subchloroplast vesicles. FEBS Letters, 1988, 235, 278-282.	2.8	3

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73	Physical and mechanical properties of thermosensitive xanthan/collagen-inspired protein composite hydrogels. International Journal of Polymeric Materials and Polymeric Biomaterials, 2016, 65, 125-133.	3.4	2
74	Studies on well-coupled Photosystem I-enriched subchloroplast vesicles — energy-dependent switching between two different active states of the proton-translocation adenosine triphosphatase. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 936, 475-486.	1.0	1
75	Enhanced stiffness of silkâ€like fibers by loop formation in the corona leads to stronger gels. Biopolymers, 2016, 105, 795-801.	2.4	1