David A Tirrell

List of Publications by Year
in descending order

177 papers	19,824 citations	11608 70 h-index	11899 134 g-index
186 all docs	186 docs citations	186 times ranked	16968 citing authors

#	Article	IF	Citations
1	Incorporation of proline analogs into recombinant proteins expressed in Escherichia coli. Methods in Enzymology, 2021, 656, 545-571.	0.4	4
2	Genetically Programmable Microbial Assembly. ACS Synthetic Biology, 2021, 10, 1351-1359.	1.9	12
3	The dormancyâ€specific regulator, SutA, is intrinsically disordered and modulates transcription initiation in Pseudomonas aeruginosa. Molecular Microbiology, 2019, 112, 992-1009.	1.2	11
4	Replacement of ProB28 by pipecolic acid protects insulin against fibrillation and slows hexamer dissociation. Journal of Polymer Science Part A, 2019, 57, 264-267.	2.5	7
5	N-Myristoyl Transferase (NMT)-Catalyzed Labeling of Bacterial Proteins for Imaging in Fixed and Live Cells. Methods in Molecular Biology, 2019, 2012, 315-326.	0.4	1
6	Enzymatic Labeling of Bacterial Proteins for Super-resolution Imaging in Live Cells. ACS Central Science, 2019, 5, 1911-1919.	5.3	21
7	Glucocorticoid Signaling Enhances Expression of Glucose-Sensing Molecules in Immature Pancreatic Beta-Like Cells Derived from Murine Embryonic Stem Cells In Vitro. Stem Cells and Development, 2018, 27, 898-909.	1.1	6
8	Mechanisms of Diffusion in Associative Polymer Networks: Evidence for Chain Hopping. Journal of the American Chemical Society, 2018, 140, 14185-14194.	6.6	30
9	Incorporation of Non-Canonical Amino Acids into Proteins by Global Reassignment of Sense Codons. Methods in Molecular Biology, 2018, 1798, 173-186.	0.4	12
10	Cell-selective proteomics for biological discovery. Current Opinion in Chemical Biology, 2017, 36, 50-57.	2.8	29
11	Bioorthogonal Noncanonical Amino Acid Tagging (BONCAT) Enables Time-Resolved Analysis of Protein Synthesis in Native Plant Tissue. Plant Physiology, 2017, 173, 1543-1553.	2.3	43
12	Analysis and Control of Chain Mobility in Protein Hydrogels. Journal of the American Chemical Society, 2017, 139, 3796-3804.	6.6	33
13	A Fluorescence in Situ Hybridization Method To Quantify mRNA Translation by Visualizing Ribosomeâ€“mRNA Interactions in Single Cells. ACS Central Science, 2017, 3, 425-433.	5.3	27
14	4S-Hydroxylation of Insulin at ProB28 Accelerates Hexamer Dissociation and Delays Fibrillation. Journal of the American Chemical Society, 2017, 139, 8384-8387.	6.6	38
15	Selective Proteomic Analysis of Antibiotic-Tolerant Cellular Subpopulations in Pseudomonas aeruginosa Biofilms. MBio, 2017, 8, .	1.8	40
16	Protein-Mediated Colloidal Assembly. Journal of the American Chemical Society, 2017, 139, 14251-14256.	6.6	24
17	Cell-type-specific metabolic labeling of nascent proteomes in vivo. Nature Biotechnology, 2017, 35, 1196-1201.	9.4	153
18	Programming Molecular Association and Viscoelastic Behavior in Protein Networks. Advanced Materials, 2016, 28, 4651-4657.	11.1	95

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19	Chemoenzymatic Labeling of Proteins for Imaging in Bacterial Cells. Journal of the American Chemical Society, 2016, 138, 15098-15101.	6.6	23
20	Engineering the Dynamic Properties of Protein Networks through Sequence Variation. ACS Central Science, 2016, 2, 812-819.	5.3	53
21	In Vitro Colony Assays for Characterizing Tri-potent Progenitor Cells Isolated from the Adult Murine Pancreas. Journal of Visualized Experiments, 2016, , .	0.2	6
22	Cells with surface expression of CD133highCD71low are enriched for tripotent colony-forming progenitor cells in the adult murine pancreas. Stem Cell Research, 2016, 16, 40-53.	0.3	25
23	Grand Challenges in Chemistry for 2016 and Beyond. ACS Central Science, 2016, 2, 1-3.	5.3	13
24	SutA is a bacterial transcription factor expressed during slow growth in Pseudomonas aeruginosa. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E597-605.	3.3	52
25	Engineered Aminoacyl-tRNA Synthetase for Cell-Selective Analysis of Mammalian Protein Synthesis. Journal of the American Chemical Society, 2016, 138, 4278-4281.	6.6	50
26	Time-resolved proteomic analysis of quorum sensing in Vibrio harveyi. Chemical Science, 2016, 7, 1797-1806.	3.7	31
27	Microbuckling of fibrin provides a mechanism for cell mechanosensing. Journal of the Royal Society Interface, 2015, 12, 20150320.	1.5	89
28	Cell-specific proteomic analysis in Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2705-2710.	3.3	99
29	A Qrr Noncoding RNA Deploys Four Different Regulatory Mechanisms to Optimize Quorum-Sensing Dynamics. Cell, 2015, 160, 228-240.	13.5	137
30	Direct visualization of newly synthesized target proteins in situ. Nature Methods, 2015, 12, 411-414.	9.0	234
31	Postnatal Pancreas of Mice Contains Tripotent Progenitors Capable of Giving Rise to Duct, Acinar, and Endocrine Cells In Vitro. Stem Cells and Development, 2015, 24, 1995-2008.	1.1	14
32	Bioorthogonal Chemoenzymatic Functionalization of Calmodulin for Bioconjugation Applications. Bioconjugate Chemistry, 2015, 26, 2153-2160.	1.8	18
33	Two-Site Internally Cooperative Mechanism for Enzyme Kinetics in a Hydrogel Forming Recombinant Protein. Biomacromolecules, 2015, 16, 3651-3656.	2.6	1
34	<scp>In situ</scp> visualization of newly synthesized proteins in environmental microbes using amino acid tagging and click chemistry. Environmental Microbiology, 2014, 16, 2568-2590.	1.8	190
35	Identification of secreted bacterial proteins by noncanonical amino acid tagging. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 433-438.	3.3	99
36	Chemical Tools for Temporally and Spatially Resolved Mass Spectrometry-Based Proteomics. Annals of Biomedical Engineering, 2014, 42, 299-311.	1.3	21

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37	Synthesis of bioactive protein hydrogels by genetically encoded SpyTag-SpyCatcher chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11269-11274.	3.3	221
38	Prometastatic GPCR CD97 Is a Direct Target of Tumor Suppressor microRNA-126. ACS Chemical Biology, 2014, 9, 334-338.	1.6	26
39	Cell Surface Display Yields Evolvable, Clickable Antibody Fragments. ChemBioChem, 2014, 15, 1777-1781.	1.3	16
40	Quantitative, Time-Resolved Proteomic Analysis by Combining Bioorthogonal Noncanonical Amino Acid Tagging and Pulsed Stable Isotope Labeling by Amino Acids in Cell Culture. Molecular and Cellular Proteomics, 2014, 13, 1352-1358.	2.5	83
41	Colony-Forming Progenitor Cells in the Postnatal Mouse Liver and Pancreas Give Rise to Morphologically Distinct Insulin-Expressing Colonies in 3D Cultures. Review of Diabetic Studies, 2014, 11, 35-50.	0.5	7
42	Controlling Macromolecular Topology with Genetically Encoded SpyTagâ€“SpyCatcher Chemistry. Journal of the American Chemical Society, 2013, 135, 13988-13997.	6.6	188
43	A Genetically Encoded AND Gate for Cell-Targeted Metabolic Labeling of Proteins. Journal of the American Chemical Society, 2013, 135, 2979-2982.	6.6	27
44	Strain propagation in artificial extracellular matrix proteins can accelerate cell spreading and polarization. Soft Matter, 2013, 9, 5602.	1.2	2
45	Self-Assembly of Elastinâ€“Mimetic Double Hydrophobic Polypeptides. Biomacromolecules, 2013, 14, 1028-1034.	2.6	57
46	Selective Functionalization of the Protein N Terminus with Nâ€Myristoyl Transferase for Bioconjugation in Cell Lysate. ChemBioChem, 2013, 14, 1958-1962.	1.3	38
47	Mutant methionyl-tRNA synthetase from bacteria enables site-selective N-terminal labeling of proteins expressed in mammalian cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4992-4997.	3.3	57
48	Two-Strain, Cell-Selective Protein Labeling in Mixed Bacterial Cultures. Journal of the American Chemical Society, 2012, 134, 8551-8556.	6.6	37
49	State-Selective Metabolic Labeling of Cellular Proteins. ACS Chemical Biology, 2012, 7, 1326-1330.	1.6	23
50	Noncanonical Amino Acid Labeling in Vivo to Visualize and Affinity Purify Newly Synthesized Proteins in Larval Zebrafish. ACS Chemical Neuroscience, 2012, 3, 40-49.	1.7	117
51	Dopaminergic modulation of the hippocampal neuropil proteome identified by bioorthogonal noncanonical amino acid tagging (<scp>BONCAT</scp>). Proteomics, 2012, 12, 2464-2476.	1.3	58
52	Noncanonical Amino Acids in the Interrogation of Cellular Protein Synthesis. Accounts of Chemical Research, 2011, 44, 677-685.	7.6	165
53	Homoisoleucine: A Translationally Active Leucine Surrogate of Expanded Hydrophobic Surface Area. ChemBioChem, 2011, 12, 700-702.	1.3	5
54	A BODIPYâ€Cyclooctyne for Protein Imaging in Live Cells. ChemBioChem, 2011, 12, 2137-2139.	1.3	35

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55	Collective Cell Migration on Artificial Extracellular Matrix Proteins Containing Fullâ€Length Fibronectin Domains. Advanced Materials, 2010, 22, 5271-5275.	11.1	34
56	Liveâ€Cell Imaging of Cellular Proteins by a Strainâ€Promoted Azideâ€“Alkyne Cycloaddition. ChemBioChem, 2010, 11, 2092-2095.	1.3	135
57	Residue-specific incorporation of non-canonical amino acids into proteins: recent developments and applications. Current Opinion in Chemical Biology, 2010, 14, 774-780.	2.8	284
58	In situ visualization and dynamics of newly synthesized proteins in rat hippocampal neurons. Nature Neuroscience, 2010, 13, 897-905.	7.1	398
59	Boundary crossing in epithelial wound healing. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19302-19307.	3.3	60
60	Hydration dynamics at fluorinated protein surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17101-17106.	3.3	62
61	Cleavable Biotin Probes for Labeling of Biomolecules via Azideâ^'Alkyne Cycloaddition. Journal of the American Chemical Society, 2010, 132, 18351-18360.	6.6	180
62	Yielding Behavior in Injectable Hydrogels from Telechelic Proteins. Macromolecules, 2010, 43, 9094-9099.	2.2	184
63	Quantifying cellular traction forces in three dimensions. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22108-22113.	3.3	251
64	Discovery of Escherichia coli methionyl-tRNA synthetase mutants for efficient labeling of proteins with azidonorleucine in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15285-15290.	3.3	114
65	Biosynthesis and Stability of Coiledâ€Coil Peptides Containing (2S,4R)â€5,5,5â€Trifluoroleucine and (2S,4S)â€5,5,5â€Trifluoroleucine. ChemBioChem, 2009, 10, 84-86.	1.3	67
66	Introduction of an Aliphatic Ketone into Recombinant Proteins in a Bacterial Strain that Overexpresses an Editingâ€Impaired Leucylâ€tRNA Synthetase. ChemBioChem, 2009, 10, 2188-2190.	1.3	20
67	Generation of Surfaceâ€Bound Multicomponent Protein Gradients. ChemBioChem, 2009, 10, 2617-2619.	1.3	24
68	Cell-selective metabolic labeling of proteins. Nature Chemical Biology, 2009, 5, 715-717.	3.9	160
69	Switching from an Induced-Fit to a Lock-and-Key Mechanism in an Aminoacyl-tRNA Synthetase with Modified Specificity. Journal of Molecular Biology, 2009, 394, 843-851.	2.0	17
70	Processing of Nâ€Terminal Unnatural Amino Acids in Recombinant Human Interferonâ€Î² in Escherichia coli. ChemBioChem, 2008, 9, 324-330.	1.3	55
71	Enzymatic Nâ€terminal Addition of Noncanonical Amino Acids to Peptides and Proteins. ChemBioChem, 2008, 9, 366-369.	1.3	34
72	Two-color labeling of temporally defined protein populations in mammalian cells. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5995-5999.	1.0	65

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73	Unnatural Amino Acid Incorporation into Virus-Like Particles. Bioconjugate Chemistry, 2008, 19, 866-875.	1.8	164
74	Mechanically Tunable Thin Films of Photosensitive Artificial Proteins:â€‰ Preparation and Characterization by Nanoindentation. Macromolecules, 2008, 41, 1839-1845.	2.2	40
75	Concluding remarks: The importance of polymer science for biological systems. Faraday Discussions, 2008, 139, 419.	1.6	69
76	Cell Response to RGD Density in Cross-Linked Artificial Extracellular Matrix Protein Films. Biomacromolecules, 2008, 9, 2984-2988.	2.6	103
77	Scientific Exchange and Communication: Some Personal Views and Experiences. Kobunshi, 2008, 57, 25-25.	0.0	0
78	Reinterpreting the Genetic Code: Implications for Macromolecular Design, Evolution and Analysis. , 2008, , 165-187.		1
79	Nonâ€Canonical Amino Acids in Protein Polymer Design. Polymer Reviews, 2007, 47, 9-28.	5.3	99
80	Evolution of a fluorinated green fluorescent protein. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13887-13890.	3.3	97
81	Lithographic Patterning of Photoreactive Cell-Adhesive Proteins. Journal of the American Chemical Society, 2007, 129, 4874-4875.	6.6	108
82	Structure and mechanical properties of artificial protein hydrogels assembled through aggregation of leucine zipper peptide domains. Soft Matter, 2007, 3, 99-107.	1.2	80
83	Site-Specific Incorporation of Tryptophan Analogues into Recombinant Proteins in Bacterial Cells. Journal of the American Chemical Society, 2007, 129, 10431-10437.	6.6	60
84	Dynamic Properties of Artificial Protein Hydrogels Assembled through Aggregation of Leucine Zipper Peptide Domains. Macromolecules, 2007, 40, 689-692.	2.2	57
85	High-Throughput Screening for Methionyl-tRNA Synthetases That Enable Residue-Specific Incorporation of Noncanonical Amino Acids into Recombinant Proteins in Bacterial Cells. Angewandte Chemie - International Edition, 2007, 46, 5340-5343.	7.2	48
86	Preparation of the functionalizable methionine surrogate azidohomoalanine via copper-catalyzed diazo transfer. Nature Protocols, 2007, 2, 1879-1883.	5.5	37
87	Labeling, detection and identification of newly synthesized proteomes with bioorthogonal non-canonical amino-acid tagging. Nature Protocols, 2007, 2, 532-540.	5.5	291
88	Design of a Bacterial Host for Site-Specific Incorporation ofp-Bromophenylalanine into Recombinant Proteins. Journal of the American Chemical Society, 2006, 128, 11778-11783.	6.6	50
89	Tuning the erosion rate of artificial protein hydrogels through control of network topology. Nature Materials, 2006, 5, 153-158.	13.3	274
90	Stereoselective Incorporation of an Unsaturated Isoleucine Analogue into a Protein Expressed in E. coli. ChemBioChem, 2006, 7, 83-87.	1.3	20

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91	Stabilization of bzip Peptides through Incorporation of Fluorinated Aliphatic Residues. ChemBioChem, 2006, 7, 1251-1257.	1.3	64
92	Evolving Proteins of Novel Composition. Angewandte Chemie - International Edition, 2006, 45, 4518-4521.	7.2	65
93	Fluorescence Visualization of Newly Synthesized Proteins in Mammalian Cells. Angewandte Chemie - International Edition, 2006, 45, 7364-7367.	7.2	277
94	Discovery of aminoacyl-tRNA synthetase activity through cell-surface display of noncanonical amino acids. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10180-10185.	3.3	167
95	Selective identification of newly synthesized proteins in mammalian cells using bioorthogonal noncanonical amino acid tagging (BONCAT). Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9482-9487.	3.3	716
96	Protein engineering approaches to biomaterials design. Current Opinion in Biotechnology, 2005, 16, 422-426.	3.3	171
97	Cell-Binding Domain Context Affects Cell Behavior on Engineered Proteins. Biomacromolecules, 2005, 6, 318-323.	2.6	109
98	Controlled Structure in Artificial Protein Hydrogels. Macromolecules, 2005, 38, 7470-7475.	2.2	28
99	Artificial Polypeptide Scaffold for Protein Immobilization. Journal of the American Chemical Society, 2005, 127, 10136-10137.	6.6	145
100	Reassignment of sense codons in vivo. Methods, 2005, 36, 291-298.	1.9	101
101	Selective Dye-Labeling of Newly Synthesized Proteins in Bacterial Cells. Journal of the American Chemical Society, 2005, 127, 14150-14151.	6.6	235
102	Assembly of an Artificial Protein Hydrogel through Leucine Zipper Aggregation and Disulfide Bond Formation. Macromolecules, 2005, 38, 3909-3916.	2.2	116
103	Designing materials for biology and medicine. Nature, 2004, 428, 487-492.	13.7	2,876
104	Physical properties of artificial extracellular matrix protein films prepared by isocyanate crosslinking. Biomaterials, 2004, 25, 1261-1267.	5.7	135
105	Otto Vogl from '74 to 75. Journal of Polymer Science Part A, 2004, 42, 389-390.	2.5	0
106	Alternative Translations of a Single RNA Message: An Identity Switch of (2S,3R)-4,4,4-Trifluorovaline between Valine and Isoleucine Codons. Angewandte Chemie - International Edition, 2004, 43, 3664-3666.	7.2	50
107	Comparative Cell Response to Artificial Extracellular Matrix Proteins Containing the RGD and CS5 Cell-Binding Domains. Biomacromolecules, 2004, 5, 497-504.	2.6	180
108	Presentation and Detection of Azide Functionality in Bacterial Cell Surface Proteins. Journal of the American Chemical Society, 2004, 126, 10598-10602.	6.6	290

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109	Incorporation of Trifluoroisoleucine into Proteins in Vivo. Journal of the American Chemical Society, 2003, 125, 6900-6906.	6.6	121
110	Global incorporation of norleucine in place of methionine in cytochrome P450 BM-3 heme domain increases peroxygenase activity. Biotechnology and Bioengineering, 2003, 83, 729-734.	1.7	84
111	Non-canonical amino acids in protein engineering. Current Opinion in Biotechnology, 2003, 14, 603-609.	3.3	367
112	Endothelial cell adhesion to the fibronectin CS5 domain in artificial extracellular matrix proteins. Biomaterials, 2003, 24, 4245-4252.	5.7	170
113	Breaking the Degeneracy of the Genetic Code. Journal of the American Chemical Society, 2003, 125, 7512-7513.	6.6	119
114	Cell Surface Labeling ofEscherichia colivia Copper(I)-Catalyzed [3+2] Cycloaddition. Journal of the American Chemical Society, 2003, 125, 11164-11165.	6.6	564
115	Mechanical Properties of Artificial Protein Matrices Engineered for Control of Cell and Tissue Behavior. Macromolecules, 2003, 36, 1553-1558.	2.2	146
116	Internal segregation and side chain ordering in hairy-rod polypeptide monolayers at the gas/water interface: An x-ray scattering study. Journal of Chemical Physics, 2003, 119, 6253-6270.	1.2	14
117	Incorporation of azides into recombinant proteins for chemoselective modification by the Staudinger ligation. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 19-24.	3.3	855
118	Virtual Screening for Binding of Phenylalanine Analogues to Phenylalanyl-tRNA Synthetase. Journal of the American Chemical Society, 2002, 124, 14442-14449.	6.6	32
119	A Designed Phenylalanyl-tRNA Synthetase Variant Allows Efficient in Vivo Incorporation of Aryl Ketone Functionality into Proteins. Journal of the American Chemical Society, 2002, 124, 5652-5653.	6.6	132
120	Attenuation of the Editing Activity of the Escherichia coli Leucyl-tRNA Synthetase Allows Incorporation of Novel Amino Acids into Proteins in Vivo. Biochemistry, 2002, 41, 10635-10645.	1.2	93
121	Biosynthesis of Proteins Incorporating a Versatile Set of Phenylalanine Analogues. ChemBioChem, 2002, 3, 235-237.	1.3	154
122	Stabilization of Coiled-Coil Peptide Domains by Introduction of Trifluoroleucineâ€. Biochemistry, 2001, 40, 2790-2796.	1.2	166
123	Biosynthesis of a Highly Stable Coiled-Coil Protein Containing Hexafluoroleucine in an Engineered Bacterial Host. Journal of the American Chemical Society, 2001, 123, 11089-11090.	6.6	161
124	Protein-based materials, toward a new level of structural control. Chemical Communications, 2001, , 1897-1904.	2.2	368
125	Self-Association and Membrane-Binding Behavior of Melittins Containing Trifluoroleucine. Journal of the American Chemical Society, 2001, 123, 7407-7413.	6.6	88
126	Fluorinated Coiled-Coil Proteins Prepared In Vivo Display Enhanced Thermal and Chemical Stability. Angewandte Chemie - International Edition, 2001, 40, 1494-1496.	7.2	184

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127	Expanding the Scope of Protein Biosynthesis by Altering the Methionyl-tRNA Synthetase Activity of a Bacterial Expression Host. Angewandte Chemie - International Edition, 2000, 39, 2148-2152.	7.2	105
128	Protein Engineering by In Vivo Incorporation of Non-Natural Amino Acids: Control of Incorporation of Methionine Analogues by Methionyl-tRNA Synthetase. Tetrahedron, 2000, 56, 9487-9493.	1.0	82
129	Efficient introduction of aryl bromide functionality into proteins in vivo. FEBS Letters, 2000, 467, 37-40.	1.3	88
130	Two-Dimensional Order in Î²-Sheet Peptide Monolayers. Journal of the American Chemical Society, 2000, 122, 12523-12529.	6.6	148
131	Engineering the Extracellular Matrix:Â A Novel Approach to Polymeric Biomaterials. I. Control of the Physical Properties of Artificial Protein Matrices Designed to Support Adhesion of Vascular Endothelial Cells. Biomacromolecules, 2000, 1, 23-30.	2.6	202
132	Efficient Incorporation of Unsaturated Methionine Analogues into Proteins in Vivo. Journal of the American Chemical Society, 2000, 122, 1282-1288.	6.6	265
133	Structure of poly(Î³-benzyl-L-glutamate) monolayers at the gasâ€“water interface: A Brewster angle microscopy and x-ray scattering study. Journal of Chemical Physics, 1999, 111, 9761-9777.	1.2	41
134	Synthesis of Well-Defined Poly(2-ethylacrylic acid). Macromolecules, 1999, 32, 945-948.	2.2	32
135	Design and Biosynthesis of Elastin-like Artificial Extracellular Matrix Proteins Containing Periodically Spaced Fibronectin CS5 Domains. Macromolecules, 1999, 32, 1701-1703.	2.2	167
136	Synthesis of alkoxyamine initiators for controlled radical polymerization. Journal of Polymer Science Part A, 1998, 36, 2667-2668.	2.5	2
137	Controlling absorbency in gelatin networks: Preparation and characterization of alkylated, crosslinked gelatin. Journal of Applied Polymer Science, 1998, 68, 281-292.	1.3	9
138	Efficient introduction of alkene functionality into proteins in vivo. FEBS Letters, 1998, 428, 68-70.	1.3	82
139	Self-Assembled Polyelectrolyteâ^'Surfactant Complexes in Nonaqueous Solvents and in the Solid State. Accounts of Chemical Research, 1998, 31, 781-788.	7.6	171
140	Reversible Hydrogels from Self-Assembling Artificial Proteins. , 1998, 281, 389-392.		990
141	Biosynthetic Incorporation and Chemical Modification of Alkene Functionality in Genetically Engineered Polymers. Journal of Macromolecular Science - Pure and Applied Chemistry, 1997, 34, 2143-2150.	1.2	25
142	Crystal Structures of Chain-Folded Antiparallel Î²-Sheet Assemblies from Sequence-Designed Periodic Polypeptides. Macromolecules, 1997, 30, 5012-5024.	2.2	72
143	For the living there is hope. Nature, 1997, 390, 337-339.	13.7	7
144	Smectic ordering in solutions and films of a rod-like polymer owing to monodispersity of chain length. Nature, 1997, 389, 167-170.	13.7	205

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145	Peptide-derived self-assembled monolayers: Assorption of N-stearoylL-systeine methyl ester on gold. , 1997, 10, 18-25.		9
146	Structure and Properties of Stoichiometric Complexes Formed by Sodium Poly(Î±,l-glutamate) and Oppositely Charged Surfactants. Langmuir, 1996, 12, 2169-2172.	1.6	68
147	Structural Modification of a Periodic Polypeptide through Biosynthetic Replacement of Proline with Azetidine-2-carboxylic Acid. Macromolecules, 1996, 29, 1442-1444.	2.2	45
148	Modulation of Mobilities of Fluorescent Membrane Probes by Adsorption of a Hydrophobic Polyelectrolyte. Macromolecules, 1996, 29, 2570-2576.	2.2	16
149	Molecular Recognition at a Monolayer Interface. ACS Symposium Series, 1996, , 187-196.	0.5	0
150	Observation of a Silk-Like Crystal Structure in a Genetically Engineered Periodic Polypeptide. Journal of Macromolecular Science - Pure and Applied Chemistry, 1996, 33, 1389-1398.	1.2	14
151	Templated biological synthesis of polymers of abiological monomers. Macromolecular Symposia, 1995, 98, 573-583.	0.4	6
152	A simple assay for screening translational activity of non-natural amino acids. Implications for polymer synthesis on messenger RNA templates. Journal of Polymer Science Part A, 1995, 33, 1267-1274.	2.5	4
153	Biosynthesis of a Periodic Protein Containing 3-Thienylalanine: A Step Toward Genetically Engineered Conducting Polymers. Journal of the American Chemical Society, 1995, 117, 536-537.	6.6	72
154	Genetically Engineered Fluoropolymers. Synthesis of Repetitive Polypeptides Containing p-Fluorophenylalanine residues. Macromolecules, 1994, 27, 5471-5475.	2.2	106
155	Group Transfer Polymerization of N-Substituted Maleimides. Polymer Journal, 1994, 26, 169-177.	1.3	7
156	Synthesis of a genetically engineered repetitive polypeptide containing periodic selenomethionine residues. Macromolecules, 1993, 26, 1779-1781.	2.2	41
157	In Vivo Synthesis and Structural Analysis of Alanylglycine-Rich Artificial Proteins. ACS Symposium Series, 1993, , 98-103.	0.5	0
158	Interaction of poly(Nâ€isopropylacrylamide) with perfluorooctanoic acid in aqueous solution. Makromolekulare Chemie Macromolecular Symposia, 1992, 64, 159-165.	0.6	3
159	Synthesis and Characterization of Periodic Polypeptides Containing Repeating â€"(AlaGly)xGluGlyâ€" Sequences. Materials Research Society Symposia Proceedings, 1992, 292, 205.	0.1	0
160	Genetically directed syntheses of new polymeric materials. Expression of artificial genes encoding proteins with repeating -(AlaGly)3ProGluGly- elements. Journal of the American Chemical Society, 1992, 114, 727-733.	6.6	183
161	Structural Effects and Reactivity of Polymer-Bound Functional Groups. ACS Symposium Series, 1992, , 136-148.	0.5	3
162	Genetically directed syntheses of new polymeric materials: efficient expression of a monodisperse copolypeptide containing fourteen tandemly repeated -(AlaGly)4ProGluGly- elements. Macromolecules, 1991, 24, 1213-1214.	2.2	58

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163	Signal-Sensitive Release of Contents from Liposomes Bearing Surface-Grafted Polyelectrolyte Chains. Annals of the New York Academy of Sciences, 1991, 618, 362-366.	1.8	4
164	Toward Monodisperse Poly(Î³â€“benzyl Î±,L-glutamate): Uniform, Polar, Molecular Rods. Materials Research Society Symposia Proceedings, 1991, 255, 405.	0.1	2
165	Comments on the Role of Molecular Genetics in Polymer Materials Science. Materials Research Society Symposia Proceedings, 1990, 218, 45.	0.1	0
166	Chemical and biosynthetic approaches to the production of novel polypeptide materials. Biotechnology Progress, 1990, 6, 188-192.	1.3	71
167	Preparation and polymerization of the two isomeric (chloromethyl)oxetanes. Journal of Polymer Science Part A, 1990, 28, 573-583.	2.5	4
168	Radical copolymerization of 2-ethylacrylic acid and methacrylic acid. Journal of Polymer Science Part A, 1990, 28, 3155-3163.	2.5	7
169	Synthesis of a cleavable heterobifunctional photolabelling reagent: Ring-labelled 3-[(4-azidophenyl)dithio]propionic acid-14C. Journal of Labelled Compounds and Radiopharmaceuticals, 1989, 27, 889-899.	0.5	3
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