Vincent P Conticello

List of Publications by Year
in descending order

78 papers	6,098 citations	61857 43 h-index	79541 73 g-index
82 all docs	82 docs citations	82 times ranked	5388 citing authors

#	Article	IF	Citations
1	Exploiting Amyloid Fibril Lamination for Nanotube Self-Assembly. Journal of the American Chemical Society, 2003, 125, 6391-6393.	6.6	356
2	Generation of Synthetic Elastin-Mimetic Small Diameter Fibers and Fiber Networks. Macromolecules, 2000, 33, 2989-2997.	2.2	339
3	Chiral Organolanthanides Designed for Asymmetric Catalysis. A Kinetic and Mechanistic Study of Enantioselective Olefin Hydroamination/Cyclization and Hydrogenation by C1-Symmetric Me2Si(Me4C5)(C5H3R*)Ln Complexes where R* = Chiral Auxiliary. Journal of the American Chemical Society, 1994, 116, 10241-10254.	6.6	325
4	Atomic-accuracy models from 4.5-Ã… cryo-electron microscopy data with density-guided iterative local refinement. Nature Methods, 2015, 12, 361-365.	9.0	313
5	Self-assembly of block copolymers derived from elastin-mimetic polypeptide sequences. Advanced Drug Delivery Reviews, 2002, 54, 1057-1073.	6.6	286
6	D-Periodic Collagen-Mimetic Microfibers. Journal of the American Chemical Society, 2007, 129, 14780-14787.	6.6	206
7	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
8	Rational Design of a Reversible pH-Responsive Switch for Peptide Self-Assembly. Journal of the American Chemical Society, 2006, 128, 6770-6771.	6.6	182
9	Stereoselection effects in the catalytic hydroamination/cyclization of amino olefins at chiral organolanthanide centers. Organometallics, 1992, 11, 2003-2005.	1.1	177
10	Chiral Organolanthanides Designed for Asymmetric Catalysis. Synthesis, Characterization, and Configurational Interconversions of Chiral, C1-Symmetric Organolanthanide Halides, Amides, and Hydrocarbyls. Journal of the American Chemical Society, 1994, 116, 10212-10240.	6.6	167
11	Thermo-Reversible Self-Assembly of Nanoparticles Derived from Elastin-Mimetic Polypeptides. Advanced Materials, 2000, 12, 1105-1110.	11.1	166
12	Thermoplastic Elastomer Hydrogels via Self-Assembly of an Elastin-Mimetic Triblock Polypeptide. Advanced Functional Materials, 2002, 12, 149-154.	7.8	149
13	Chiral organolanthanide complexes for enantioselective olefin hydrogenation. Journal of the American Chemical Society, 1992, 114, 2761-2762.	6.6	148
14	Ring-opening metathesis polymerization of substituted bicyclo[2.2.2]octadienes: a new precursor route to poly(1,4-phenylenevinylene). Journal of the American Chemical Society, 1992, 114, 9708-9710.	6.6	144
15	Design of a Selective Metal Ion Switch for Self-Assembly of Peptide-Based Fibrils. Journal of the American Chemical Society, 2008, 130, 49-51.	6.6	143
16	Synthesis and Characterization of Elastin-Mimetic Protein Gels Derived from a Well-Defined Polypeptide Precursor. Macromolecules, 2000, 33, 4809-4821.	2.2	134
17	Structurally Defined Nanoscale Sheets from Self-Assembly of Collagen-Mimetic Peptides. Journal of the American Chemical Society, 2014, 136, 4300-4308.	6.6	126
18	Photomediated Solid-State Cross-Linking of an Elastinâ˘Mimetic Recombinant Protein Polymer. Macromolecules, 2002, 35, 1730-1737.	2.2	121

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19	Rational Design of Helical Nanotubes from Self-Assembly of Coiled-Coil Lock Washers. Journal of the American Chemical Society, 2013, 135, 15565-15578.	6.6	112
20	Structural Plasticity of Helical Nanotubes Based on Coiled-Coil Assemblies. Structure, 2015, 23, 280-289.	1.6	107
21	Protein-Based Thermoplastic Elastomers. Macromolecules, 2005, 38, 345-354.	2.2	101
22	Elastin-mimetic protein polymers capable of physical and chemical crosslinking. Biomaterials, 2009, 30, 409-422.	5.7	96
23	Micelle Density Regulated by a Reversible Switch of Protein Secondary Structure. Journal of the American Chemical Society, 2006, 128, 12014-12019.	6.6	92
24	Rational design of a nanoscale helical scaffold derived from self-assembly of a dimeric coiled coil motif. Tetrahedron, 2004, 60, 7237-7246.	1.0	84
25	A Stereoelectronic Effect on Turn Formation Due to Proline Substitution in Elastin-Mimetic Polypeptides. Journal of the American Chemical Society, 2005, 127, 18121-18132.	6.6	82
26	Rapid Assembly of Synthetic Genes Encoding Protein Polymers. Macromolecules, 1999, 32, 3643-3648.	2.2	80
27	A Supramolecular Vaccine Platform Based on Î±-Helical Peptide Nanofibers. ACS Biomaterials Science and Engineering, 2017, 3, 3128-3132.	2.6	74
28	Fluoroproline Flip-Flop: Regiochemical Reversal of a Stereoelectronic Effect on Peptide and Protein Structures. Angewandte Chemie - International Edition, 2006, 45, 8141-8145.	7.2	73
29	Genetically Directed Synthesis and Spectroscopic Analysis of a Protein Polymer Derived from a Flagelliform Silk Sequence. Biomacromolecules, 2001, 2, 111-125.	2.6	72
30	Structurally Homogeneous Nanosheets from Selfâ€Assembly of a Collagenâ€Mimetic Peptide. Angewandte Chemie - International Edition, 2014, 53, 8367-8371.	7.2	68
31	Cotranslational Incorporation of a Structurally Diverse Series of Proline Analogues in an Escherichia coli Expression System. ChemBioChem, 2004, 5, 928-936.	1.3	66
32	Transition-metal-catalyzed polymerization of heteroatom-functionalized cyclohexadienes: stereoregular precursors to poly(p-phenylene). Journal of the American Chemical Society, 1992, 114, 3167-3169.	6.6	63
33	Efficient synthesis, redox characteristics, and electronic structure of a tetravalent tris(cyclopentadienyl)cerium alkoxide complex. Organometallics, 1988, 7, 2360-2364.	1.1	62
34	Self-Assembly of a Polypeptide Multi-Block Copolymer Modeled on Dragline Silk Proteins. Journal of the American Chemical Society, 2000, 122, 5014-5015.	6.6	59
35	Structurally Ordered Nanowire Formation from Co-Assembly of DNA Origami and Collagen-Mimetic Peptides. Journal of the American Chemical Society, 2017, 139, 14025-14028.	6.6	59
36	Macroscale assembly of peptide nanotubes. Chemical Communications, 2007, , 2729.	2.2	57

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37	Stereoregular Precursors to Poly(p-phenylene) via Transition-Metal-Catalyzed Polymerization. 1. Precursor Design and Synthesis. Journal of the American Chemical Society, 1994, 116, 10507-10519.	6.6	55
38	Alterations in Physical Cross-Linking Modulate Mechanical Properties of Two-Phase Protein Polymer Networks. Biomacromolecules, 2005, 6, 3037-3044.	2.6	55
39	Controlling Self-Assembly of a Peptide-Based Material via Metal-Ion Induced Registry Shift. Journal of the American Chemical Society, 2013, 135, 10278-10281.	6.6	54
40	Stereoregular Precursors to Poly(p-phenylene) via Transition-Metal-Catalyzed Polymerization. 2. The Effects of Polymer Stereochemistry and Acid Catalysts on Precursor Aromatization: A Characterization Study. Journal of the American Chemical Society, 1994, 116, 10934-10947.	6.6	53
41	Self-Assembly of an Î±-Helical Peptide into a Crystalline Two-Dimensional Nanoporous Framework. Journal of the American Chemical Society, 2016, 138, 16274-16282.	6.6	53
42	High-Resolution Topographic Imaging of Environmentally Responsive, Elastin-Mimetic Hydrogels. Macromolecules, 1999, 32, 9067-9070.	2.2	50
43	Expression of a recombinant elastinâ€like protein in <i>pichia pastoris</i>. Biotechnology Progress, 2009, 25, 1810-1818.	1.3	45
44	Deformation Responses of a Physically Cross-Linked High Molecular Weight Elastin-Like Protein Polymer. Biomacromolecules, 2008, 9, 1787-1794.	2.6	43
45	Seeded Heteroepitaxial Growth of Crystallizable Collagen Triple Helices: Engineering Multifunctional Two-Dimensional Coreâ€“Shell Nanostructures. Journal of the American Chemical Society, 2019, 141, 20107-20117.	6.6	42
46	Rational Design of Multilayer Collagen Nanosheets with Compositional and Structural Control. Journal of the American Chemical Society, 2015, 137, 7793-7802.	6.6	40
47	Multiple Siteâ€Selective Insertions of Noncanonical Amino Acids into Sequenceâ€Repetitive Polypeptides. ChemBioChem, 2013, 14, 968-978.	1.3	39
48	2D Crystal Engineering of Nanosheets Assembled from Helical Peptide Building Blocks. Angewandte Chemie - International Edition, 2019, 58, 13507-13512.	7.2	39
49	Deterministic chaos in the self-assembly of Î² sheet nanotubes from an amphipathic oligopeptide. Matter, 2021, 4, 3217-3231.	5.0	36
50	Improved Assembly of Multimeric Genes for the Biosynthetic Production of Protein Polymers. Biomacromolecules, 2002, 3, 874-879.	2.6	35
51	Structural analysis of cross Î±-helical nanotubes provides insight into the designability of filamentous peptide nanomaterials. Nature Communications, 2021, 12, 407.	5.8	35
52	Cryo-EM of Helical Polymers. Chemical Reviews, 2022, 122, 14055-14065.	23.0	33
53	Ambidextrous helical nanotubes from self-assembly of designed helical hairpin motifs. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14456-14464.	3.3	32
54	In-Lens Cryo-High Resolution Scanning Electron Microscopy: Methodologies for Molecular Imaging of Self-Assembled Organic Hydrogels. Microscopy and Microanalysis, 2003, 9, 286-295.	0.2	30

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55	Shape-Shifting Peptide Nanomaterials: Surface Asymmetry Enables pH-Dependent Formation and Interconversion of Collagen Tubes and Sheets. Journal of the American Chemical Society, 2020, 142, 19956-19968.	6.6	27
56	Protein Engineering Methods for Investigation of Structure-Function Relationships in Protein-Based Elastomeric Materials. Polymer Reviews, 2007, 47, 93-119.	5.3	26
57	Morphological Characterization of Elastin-Mimetic Block Copolymers Utilizing Cryo- and Cryoetch-HRSEM. Microscopy and Microanalysis, 2003, 9, 171-182.	0.2	21
58	One-Pot Glyco-Affinity Precipitation Purification for Enhanced Proteomics:Â The Flexible Alignment of Solution-Phase Capture/Release and Solid-Phase Separation. Journal of Proteome Research, 2005, 4, 2355-2359.	1.8	19
59	Engineering responsive mechanisms to control the assembly of peptide-based nanostructures. Biochemical Society Transactions, 2009, 37, 653-659.	1.6	16
60	Phenol-soluble modulins PSMÎ±3 and PSMÎ²2 form nanotubes that are cross-Î± amyloids. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2121586119.	3.3	16
61	Measurement of conformational constraints in an elastin-mimetic protein by residue-pair selected solid-state NMR. Journal of Biomolecular NMR, 2002, 22, 175-179.	1.6	13
62	Biomaterials Made from Coiled-Coil Peptides. Sub-Cellular Biochemistry, 2017, 82, 575-600.	1.0	12
63	2D Crystal Engineering of Nanosheets Assembled from Helical Peptide Building Blocks. Angewandte Chemie, 2019, 131, 13641-13646.	1.6	11
64	Flagellin outer domain dimerization modulates motility in pathogenic and soil bacteria from viscous environments. Nature Communications, 2022, 13, 1422.	5.8	10
65	A Permanent Change in Protein Mechanical Responses Can be Produced by Thermally-Induced Microdomain Mixing. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 1629-1644.	1.9	9
66	Two-Dimensional Peptide and Protein Assemblies. Advances in Experimental Medicine and Biology, 2016, 940, 29-60.	0.8	9
67	Geometrical frustration as a potential design principle for peptide-based assemblies. Interface Focus, 2017, 7, 20160141.	1.5	8
68	Structures of synthetic helical filaments and tubes based on peptide and peptido-mimetic polymers. Quarterly Reviews of Biophysics, 2022, 55, 1-103.	2.4	8
69	Programmable Fabrication of Multilayer Collagen Nanosheets of Defined Composition. Methods in Molecular Biology, 2018, 1777, 221-232.	0.4	1
70	Self-Assembly of Hydrogels From Elastin-Mimetic Block Copolymers. Materials Research Society Symposia Proceedings, 2002, 724, N8.1.1.	0.1	1
71	Force Spectroscopy of Biopolymers:Correlating Molecular Structure with Single Molecule Elasticity. Microscopy and Microanalysis, 2004, 10, 204-205.	0.2	0
72	Single Molecule Mechanical Testing of Mimetic-Elastin Molecules. Microscopy and Microanalysis, 2004, 10, 1096-1097.	0.2	0

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73	In-Lens Cryo-HRSEM of a Freeze-Dried Coiled-Coil Protein Assembly. Microscopy and Microanalysis, 2006, 12, 1118-1119.	0.2	0
74	Cryo-EM Methods for the Structural Analysis of Biomimetic Materials based on Peptides and Proteins. Microscopy and Microanalysis, 2015, 21, 375-376.	0.2	0
75	Structural Studies of the T- and RP4-Pili using Cryo-EM. Biophysical Journal, 2019, 116, 573a.	0.2	0
76	Cross Î±-Helical Nanotubes: Mining the Designability Landscape for Filamentous Peptide Nanomaterials. Biophysical Journal, 2021, 120, 174a.	0.2	0
77	Self-Assembly of a Modular Polypeptide based on Blocks of Silk-Mimetic and ElastinMimetic Sequences. Materials Research Society Symposia Proceedings, 2002, 724, N3.8.1.	0.1	0
78	Elastomeric Materials, Protein-Based: Structureâ€"Function Relationships. , 0, , 3017-3034.		0