J JÂ l M Cornelissen

List of Publications by Year
in descending order

138 papers	11,355 citations	30068 54 h-index	29154 104 g-index
146 all docs	146 docs citations	146 times ranked	11308 citing authors

#	ARTICLE	IF	CITATIONS
1	Delivery of MicroRNAs by plant virus-based nanoparticles to functionally alter the osteogenic differentiation of human mesenchymal stem cells. Chinese Chemical Letters, 2023, 34, 107448.	9.0	9
2	Quantification of the Retention and Disassembly of Virus Particles by a PEI-Functionalized Microfiltration Membrane. ACS Applied Polymer Materials, 2022, 4, 5173-5179.	4.4	0
3	A6 peptide-tagged, ultra-small and reduction-sensitive polymersomal vincristine sulfate as a smart and specific treatment for CD44+ acute myeloid leukemia. Journal of Controlled Release, 2021, 329, 706-716.	9.9	13
4	Fluorescent nanodiamonds encapsulated by Cowpea Chlorotic Mottle Virus (CCMV) proteins for intracellular 3D-trajectory analysis. Journal of Materials Chemistry B, 2021, 9, 5621-5627.	5.8	11
5	Optimizing fluorophore density for single virus counting: a photophysical approach. Methods and Applications in Fluorescence, 2021, 9, 025001.	2.3	8
6	Nanotechnological Applications Based on Bacterial Encapsulins. Nanomaterials, 2021, 11, 1467.	4.1	15
7	Polymeric nanomedicines targeting hematological malignancies. Journal of Controlled Release, 2021, 337, 571-588.	9.9	15
8	Exploiting Complex Fluorophore Interactions to Monitor Virus Capsid Disassembly. Molecules, 2021, 26, 5750.	3.8	2
9	Virus removal from semen with a pinched flow fractionation microfluidic chip. Lab on A Chip, 2021, 21, 4477-4486.	6.0	8
10	Introduction of Surface Loops as a Tool for Encapsulin Functionalization. Biomacromolecules, 2021, 22, 5234-5242.	5.4	17
11	Self-Assembly of Viral Capsid Proteins Driven by Compressible Nanobubbles. Journal of Physical Chemistry Letters, 2020, 11, 10421-10424.	4.6	4
12	Highly Sensitive Protein Detection by Asymmetric Machâ€“Zehnder Interferometry for Biosensing Applications. ACS Applied Bio Materials, 2020, 3, 4566-4572.	4.6	14
13	Elucidating the Thermodynamic Driving Forces of Polyanion-Templated Virus-like Particle Assembly. Journal of Physical Chemistry B, 2019, 123, 9733-9741.	2.6	12
14	HER2-Specific Reduction-Sensitive Immunopolymersomes with High Loading of Epirubicin for Targeted Treatment of Ovarian Tumor. Biomacromolecules, 2019, 20, 3855-3863.	5.4	13
15	Polymorphic assembly of virus-capsid proteins around DNA and the cellular uptake of the resulting particles. Journal of Controlled Release, 2019, 307, 342-354.	9.9	32
16	Structural nanotechnology: three-dimensional cryo-EM and its use in the development of nanoplatforms forin vitrocatalysis. Nanoscale, 2019, 11, 4130-4146.	5.6	15
17	Oligonucleotide Lengthâ€Dependent Formation of Virusâ€Like Particles. Chemistry - A European Journal, 2018, 24, 7456-7463.	3.3	15
18	Compartmentalized supramolecular hydrogels based on viral nanocages towards sophisticated cargo administration. Nanoscale, 2018, 10, 4123-4129.	5.6	14

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19	Templated Formation of Luminescent Virus-like Particles by Tailor-Made Pt(II) Amphiphiles. Journal of the American Chemical Society, 2018, 140, 2355-2362.	13.7	42
20	Induced FÃ¶rster resonance energy transfer by encapsulation of DNA-scaffold based probes inside a plant virus based protein cage. Journal of Physics Condensed Matter, 2018, 30, 184002.	1.8	3
21	Photoprogramming Allostery in Human Serum Albumin. Bioconjugate Chemistry, 2018, 29, 2215-2224.	3.6	3
22	Compartmentalized Thin Films with Customized Functionality via Interfacial Crossâ€linking of Protein Cages. Advanced Functional Materials, 2018, 28, 1801574.	14.9	13
23	Protecting Encapsulin Nanoparticles with Cysteine-Knot Miniproteins. Molecular Pharmaceutics, 2018, 15, 2991-2996.	4.6	13
24	Experimental and Theoretical Determination of the pH inside the Confinement of a Virusâ€Like Particle. Small, 2018, 14, e1802081.	10.0	13
25	CCMV-Based Enzymatic Nanoreactors. Methods in Molecular Biology, 2018, 1776, 237-247.	0.9	8
26	Photoresponsive, reversible immobilization of virus particles on supramolecular platforms. Chemical Communications, 2017, 53, 1896-1899.	4.1	14
27	Immobilization of catalytic virus-like particles in a flow reactor. Chemical Communications, 2017, 53, 7632-7634.	4.1	20
28	Assembling Enzymatic Cascade Pathways inside Virus-Based Nanocages Using Dual-Tasking Nucleic Acid Tags. Journal of the American Chemical Society, 2017, 139, 1512-1519.	13.7	98
29	Quantum dot encapsulation in virus-like particles with tuneable structural properties and low toxicity. RSC Advances, 2017, 7, 38110-38118.	3.6	21
30	Structural Characterization of Native and Modified Encapsulins as Nanoplatforms for in Vitro Catalysis and Cellular Uptake. ACS Nano, 2017, 11, 12796-12804.	14.6	71
31	Construction of core-shell hybrid nanoparticles templated by virus-like particles. RSC Advances, 2017, 7, 56328-56334.	3.6	6
32	Assembly and Mechanical Properties of the Cargo-Free and Cargo-Loaded Bacterial Nanocompartment Encapsulin. Biomacromolecules, 2016, 17, 2522-2529.	5.4	62
33	Metal Ion-Induced Self-Assembly of a Multi-Responsive Block Copolypeptide into Well-Defined Nanocapsules. Small, 2016, 12, 2476-2483.	10.0	37
34	Labelling Bacterial Nanocages with Photoâ€switchable Fluorophores. ChemPhysChem, 2016, 17, 1815-1818.	2.1	28
35	Nitroarene Reduction by a Virus Protein Cage Based Nanoreactor. ACS Catalysis, 2016, 6, 3084-3091.	11.2	58
36	Protein Cages as Containers for Gold Nanoparticles. Journal of Physical Chemistry B, 2016, 120, 6352-6357.	2.6	37

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37	Combining Protein Cages and Polymers: from Understanding Self-Assembly to Functional Materials. ACS Macro Letters, 2016, 5, 987-994.	4.8	22
38	Selfâ€Assembly of Proteins: Towards Supramolecular Materials. Chemistry - A European Journal, 2016, 22, 15570-15582.	3.3	54
39	Generation-Dependent Templated Self-Assembly of Biohybrid Protein Nanoparticles around Photosensitizer Dendrimers. Nano Letters, 2015, 15, 1245-1251.	9.1	52
40	Selfâ€Assembled Cageâ€Like Protein Structures. ChemPhysChem, 2015, 16, 911-918.	2.1	39
41	Supramolecular Surface Immobilization of Knottin Derivatives for Dynamic Display of High Affinity Binders. Bioconjugate Chemistry, 2015, 26, 1972-1980.	3.6	16
42	Clustered Nanocarriers: The Effect of Size on the Clustering of CCMV Virusâ€Like Particles With Soft Macromolecules. Macromolecular Bioscience, 2015, 15, 98-110.	4.1	13
43	Conversion of light into macroscopic helical motion. Nature Chemistry, 2014, 6, 229-235.	13.6	646
44	Predicting the Loading of Virus-Like Particles with Fluorescent Proteins. Biomacromolecules, 2014, 15, 558-563.	5.4	60
45	Using viruses as nanomedicines. British Journal of Pharmacology, 2014, 171, 4001-4009.	5.4	53
46	Self-assembly and characterization of small and monodisperse dye nanospheres in a protein cage. Chemical Science, 2014, 5, 575-581.	7.4	50
47	Versatile post-functionalization of the external shell of cowpea chlorotic mottle virus by using click chemistry. Organic and Biomolecular Chemistry, 2014, 12, 4065-4069.	2.8	19
48	Role of Electrostatics in the Assembly Pathway of a Single-Stranded RNA Virus. Journal of Virology, 2014, 88, 10472-10479.	3.4	79
49	Self-Sorting of Foreign Proteins in a Bacterial Nanocompartment. Journal of the American Chemical Society, 2014, 136, 3828-3832.	13.7	100
50	Self-assembly triggered by self-assembly: Optically active, paramagnetic micelles encapsulated in protein cage nanoparticles. Journal of Inorganic Biochemistry, 2014, 136, 140-146.	3.5	36
51	Nanoscale organization of proteins via block copolymer lithography and non-covalent bioconjugation. Journal of Materials Chemistry B, 2013, 1, 3026.	5.8	11
52	Phototriggered cargo release from virus-like assemblies. Faraday Discussions, 2013, 166, 47.	3.2	23
53	Structural Transitions and Energy Landscape for Cowpea Chlorotic Mottle Virus Capsid Mechanics from Nanomanipulation inÂVitro and in Silico. Biophysical Journal, 2013, 105, 1893-1903.	0.5	47
54	A clamp-like biohybrid catalyst for DNA oxidation. Nature Chemistry, 2013, 5, 945-951.	13.6	64

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55	Beta Sheets with a Twist: The Conformation of Helical Polyisocyanopeptides Determined by Using Vibrational Circular Dichroism. Chemistry - A European Journal, 2013, 19, 13168-13174.	3.3	15
56	Carbazole Functionalized Isocyanide Brushes in Heterojunction Photovoltaic Devices. Journal of Nanoscience and Nanotechnology, 2012, 12, 503-507.	0.9	2
57	Designing Two Self-Assembly Mechanisms into One Viral Capsid Protein. Journal of the American Chemical Society, 2012, 134, 18506-18509.	13.7	101
58	Direct Backbone Structure Determination of Polyisocyanodipeptide Using Solid-State Nuclear Magnetic Resonance. Macromolecules, 2012, 45, 2209-2218.	4.8	12
59	Packing polymers in protein cages. Nature Chemistry, 2012, 4, 775-777.	13.6	4
60	Construction of phthalocyanineâ€terminated polystyrene nanoarchitectures. Journal of Physical Organic Chemistry, 2012, 25, 586-591.	1.9	8
61	Virus-based nanocarriers for drug delivery. Advanced Drug Delivery Reviews, 2012, 64, 811-825.	13.7	374
62	Catalytic capsids: the art of confinement. Chemical Science, 2011, 2, 358-362.	7.4	147
63	Solution scattering studies on a virus capsid protein as a building block for nanoscale assemblies. Soft Matter, 2011, 7, 11380.	2.7	12
64	Electrostatic self-assembly of virusâ€“polymer complexes. Journal of Materials Chemistry, 2011, 21, 2112-2117.	6.7	57
65	Reactions inside nanoscale protein cages. Nanoscale, 2011, 3, 2376.	5.6	85
66	Thermoresponsive giant biohybrid amphiphiles. Polymer Chemistry, 2011, 2, 333-340.	3.9	61
67	Sequential Energy and Electron Transfer in Polyisocyanopeptide-Based Multichromophoric Arrays. Journal of Physical Chemistry B, 2011, 115, 1590-1600.	2.6	16
68	Hierarchical Self-Assembly and Optical Disassembly for Controlled Switching of Magnetoferritin Nanoparticle Magnetism. ACS Nano, 2011, 5, 6394-6402.	14.6	75
69	Hydrogen bonding and chemical shift assignments in carbazole functionalized isocyanides from solid-state NMR and first-principles calculations. Physical Chemistry Chemical Physics, 2011, 13, 13082.	2.8	28
70	Encapsulation of Phthalocyanine Supramolecular Stacks into Virus-like Particles. Journal of the American Chemical Society, 2011, 133, 6878-6881.	13.7	122
71	Metalâ€ionâ€Induced Formation and Stabilization of Protein Cages Based on the Cowpea Chlorotic Mottle Virus. Small, 2011, 7, 911-919.	10.0	24
72	Amineâ€Reactive PEGylated Nanoparticles for Potential Bioconjugation. Macromolecular Rapid Communications, 2011, 32, 19-24.	3.9	9

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73	Temperatureâ€Switchable Assembly of Supramolecular Virusâ€“Polymer Complexes. Advanced Functional Materials, 2011, 21, 2012-2019.	14.9	49
74	Cysteineâ€Containing Polyisocyanides as Versatile Nanoplatforms for Chromophoric and Bioscaffolding. Chemistry - A European Journal, 2010, 16, 6176-6186.	3.3	22
75	Encapsulation of DNAâ€Templated Chromophore Assemblies within Virus Protein Nanotubes. Angewandte Chemie - International Edition, 2010, 49, 5335-5338.	13.8	46
76	Complex Assembly Behavior During the Encapsulation of Green Fluorescent Protein Analogs in Virus Derived Protein Capsules. Macromolecular Bioscience, 2010, 10, 539-545.	4.1	26
77	Self-assembly and optically triggered disassembly of hierarchical dendronâ€“virus complexes. Nature Chemistry, 2010, 2, 394-399.	13.6	178
78	Virus-like Particles Templated by DNA Micelles: A General Method for Loading Virus Nanocarriers. Journal of the American Chemical Society, 2010, 132, 7834-7835.	13.7	130
79	Synthesis, Characterization, and Surface Initiated Polymerization of Carbazole Functionalized Isocyanides. Chemistry of Materials, 2010, 22, 2597-2607.	6.7	27
80	Direct Access to Polyisocyanide Screw Sense Using Vibrational Circular Dichroism. Macromolecules, 2010, 43, 7931-7935.	4.8	37
81	Polymersome Stomatocytes: Controlled Shape Transformation in Polymer Vesicles. Journal of the American Chemical Society, 2010, 132, 12522-12524.	13.7	199
82	Macromolecular multi-chromophoric scaffolding. Chemical Society Reviews, 2010, 39, 1576.	38.1	113
83	A hydrogel-based enzyme-loaded polymersome reactor. Nanoscale, 2010, 2, 709.	5.6	34
84	A Polymersome Nanoreactor with Controllable Permeability Induced by Stimuliâ€Responsive Block Copolymers. Advanced Materials, 2009, 21, 2787-2791.	21.0	320
85	â€œHelterâ€Skelterâ€Likeâ€•Perylene Polyisocyanopeptides. Chemistry - A European Journal, 2009, 15, 2536-2547.	3.3	64
86	A Threeâ€Enzyme Cascade Reaction through Positional Assembly of Enzymes in a Polymersome Nanoreactor. Chemistry - A European Journal, 2009, 15, 1107-1114.	3.3	319
87	Cascade Reactions in an Allâ€Enzyme Nanoreactor. Chemistry - A European Journal, 2009, 15, 12600-12603.	3.3	65
88	Sorting Catalytically Active Polymersome Nanoreactors by Flow Cytometry. Small, 2009, 5, 1138-1143.	10.0	9
89	Water soluble azido polyisocyanopeptides as functional Î²â€sheet mimics. Journal of Polymer Science Part A, 2009, 47, 4150-4164.	2.3	13
90	Controlled Integration of Polymers into Viral Capsids. Biomacromolecules, 2009, 10, 3141-3147.	5.4	66

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91	Synthesis of Polymerâ˜Biohybrids: From Small to Giant Surfactants. Accounts of Chemical Research, 2009, 42, 681-692.	15.6	119
92	Controlled Encapsulation of Multiple Proteins in Virus Capsids. Journal of the American Chemical Society, 2009, 131, 17771-17773.	13.7	191
93	Single-Step Azide Introduction in Proteins via an Aqueous Diazo Transfer. Bioconjugate Chemistry, 2009, 20, 20-23.	3.6	97
94	Monitoring Proteinâ˜Polymer Conjugation by a Fluorogenic Cu(I)-Catalyzed Azideâ˜Alkyne 1,3-Dipolar Cycloaddition. Bioconjugate Chemistry, 2009, 20, 1129-1138.	3.6	46
95	Polymeric Monosaccharide Receptors Responsive at Neutral pH. Journal of the American Chemical Society, 2009, 131, 13908-13909.	13.7	143
96	Viruses and protein cages as nanocontainers and nanoreactors. Journal of Materials Chemistry, 2009, 19, 2274.	6.7	115
97	Synthesis and aggregation behavior of biohybrid amphiphiles composed of a tripeptidic head group and a polystyrene tail. Soft Matter, 2009, 5, 1692.	2.7	14
98	CCMV capsid formation induced by a functional negatively charged polymer. Organic and Biomolecular Chemistry, 2009, 7, 4685.	2.8	41
99	Biocatalytic oxidation by chloroperoxidase from Caldariomyces fumago in polymersome nanoreactors. Organic and Biomolecular Chemistry, 2009, 7, 4604.	2.8	39
100	A Block Copolymer for Functionalisation of Polymersome Surfaces. Macromolecular Rapid Communications, 2008, 29, 321-325.	3.9	81
101	Application of Metalâ€Free Triazole Formation in the Synthesis of Cyclic RGDâ€“DTPA Conjugates. ChemBioChem, 2008, 9, 1805-1815.	2.6	87
102	Electronic Transport Properties of Ensembles of Peryleneâ€Substituted Polyâ€isocyanopeptide Arrays. Advanced Functional Materials, 2008, 18, 3947-3955.	14.9	70
103	Proteinâ€“Polymer Hybrid Amphiphiles. Advanced Materials, 2008, 20, 3953-3957.	21.0	79
104	Post-modification of helical dipeptido polyisocyanides using the â€˜clickâ€™ reaction. Journal of Materials Chemistry, 2008, 18, 5615.	6.7	46
105	Tuning the properties of PSâ€“PIAT block copolymers and their assembly into polymersomes. Soft Matter, 2008, 4, 1003.	2.7	15
106	The Relationship between Nanoscale Architecture and Function in Photovoltaic Multichromophoric Arrays as Visualized by Kelvin Probe Force Microscopy. Journal of the American Chemical Society, 2008, 130, 14605-14614.	13.7	85
107	Enzymes containing porous polymersomes as nano reaction vessels for cascade reactions. Organic and Biomolecular Chemistry, 2008, 6, 4315.	2.8	126
108	Viral capsids as templates for the production of monodisperse Prussian blue nanoparticles. Chemical Communications, 2008, , 1542.	4.1	67

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109	Synthesis and Characterization of Surface-Initiated Helical Polyisocyanopeptide Brushes. Macromolecules, 2008, 41, 1945-1951.	4.8	25
110	Synthesis, characterisation and chiroptical properties of â€˜clickâ€™able polyisocyanopeptides. Journal of Materials Chemistry, 2007, 17, 1876-1884.	6.7	41
111	Polymersome Nanoreactors for Enzymatic Ring-Opening Polymerization. Biomacromolecules, 2007, 8, 3723-3728.	5.4	88
112	Self-Assembled Architectures from Biohybrid Triblock Copolymers. Journal of the American Chemical Society, 2007, 129, 2327-2332.	13.7	170
113	Metalâ€Free Triazole Formation as a Tool for Bioconjugation. ChemBioChem, 2007, 8, 1504-1508.	2.6	185
114	Polyisocyanides Derived from Tripeptides of Alanine. Chemistry - A European Journal, 2007, 13, 950-960.	3.3	38
115	Xâ€Ray Spectroscopic and Diffraction Study of the Structure of the Active Species in the Ni^{II}â€Catalyzed Polymerization of Isocyanides. ChemPhysChem, 2007, 8, 1850-1856.	2.1	15
116	Lyotropic liquid-crystalline behavior of polyisocyanodipeptides. Journal of Polymer Science Part A, 2007, 45, 981-988.	2.3	16
117	A virus-based single-enzyme nanoreactor. Nature Nanotechnology, 2007, 2, 635-639.	31.5	406
118	Monodisperse polymerâ€“virus hybrid nanoparticles. Organic and Biomolecular Chemistry, 2007, 5, 54-57.	2.8	109
119	Diastereopure Fe(II) and Zn(II) Complexes Derived from a TridentateN,Nâ€™,N-Bis(methyl-l-prolinate)-Substituted Pyridine Ligand. Inorganic Chemistry, 2006, 45, 4214-4227.	4.0	34
120	Synthesis, Characterization, and Folding Behavior of Î²-Amino Acid Derived Polyisocyanides. Chemistry - A European Journal, 2006, 12, 2778-2786.	3.3	28
121	Synthesis and Self-Assembly of Rod-Rod Hybrid Poly(Î³-benzylL-glutamate)-block-Polyisocyanide Copolymers. Angewandte Chemie - International Edition, 2005, 44, 4349-4352.	13.8	78
122	Design and Synthesis ofN-Maleimido-Functionalized Hydrophilic Polymers via Copper-Mediated Living Radical Polymerization:Â A Suitable Alternative to PEGylation Chemistry. Journal of the American Chemical Society, 2005, 127, 2966-2973.	13.7	385
123	Self-Assembled Nanoreactors. Chemical Reviews, 2005, 105, 1445-1490.	47.7	1,395
124	Block copolymer vesicles. Pure and Applied Chemistry, 2004, 76, 1309-1319.	1.9	93
125	Synthesis, characterization and aggregation behavior of block copolymers containing a polyisocyanopeptide segment. Polymer, 2004, 45, 7417-7430.	3.8	16
126	Electroformed Giant Vesicles from Thiophene-Containing Rodâ^'Coil Diblock Copolymers. Macromolecules, 2004, 37, 4736-4739.	4.8	67

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127	Helical Polymer-Anchored Porphyrin Nanorods. Chemistry - A European Journal, 2003, 9, 1775-1781.	3.3	103
128	Conformational analysis of dipeptide-derived polyisocyanides. Journal of Polymer Science Part A, 2003, 41, 1725-1736.	2.3	44
129	High Shape Persistence in Single Polymer Chains Rigidified with Lateral Hydrogen Bonded Networks. Macromolecules, 2002, 35, 5290-5294.	4.8	104
130	Hierarchical transfer of stereochemical information in synthetic macromolecules. Pure and Applied Chemistry, 2002, 74, 2021-2030.	1.9	10
131	Determination of the helical sense in alanine based polyisocyanides. Macromolecular Chemistry and Physics, 2002, 203, 1625-1630.	2.2	23
132	Silver Nanoarrays Templated by Block Copolymers of Carbosilane Dendrimers and Polyisocyanopeptides. Advanced Materials, 2002, 14, 489-492.	21.0	54
133	Silver Nanoarrays Templated by Block Copolymers of Carbosilane Dendrimers and Polyisocyanopeptides. Advanced Materials, 2002, 14, 489.	21.0	1
134	Chiral Architectures from Macromolecular Building Blocks. Chemical Reviews, 2001, 101, 4039-4070.	47.7	857
135	Synthesis and characterization of polyisocyanides derived from alanine and glycine dipeptides. Journal of Polymer Science Part A, 2001, 39, 4255-4264.	2.3	54
136	Protein-Polymer Hybrid Amphiphiles. Angewandte Chemie - International Edition, 2001, 40, 4732-4734.	13.8	82
137	beta -Helical Polymers from Isocyanopeptides. Science, 2001, 293, 676-680.	12.6	290
138	Chiroptical properties of a chiral-substituted poly(thienylene vinylene). Acta Polymerica, 1998, 49, 471-476.	0.9	22