Cornelia G Palivan

List of Publications by Year
in descending order

109 papers	4,271 citations	87888 38 h-index	123424 61 g-index
110 all docs	110 docs citations	110 times ranked	4433 citing authors

#	Article	IF	Citations
1	Bioinspired polymer vesicles and membranes for biological and medical applications. Chemical Society Reviews, 2016, 45, 377-411.	38.1	485
2	Proteinâ€“polymer nanoreactors for medical applications. Chemical Society Reviews, 2012, 41, 2800-2823.	38.1	158
3	Aiding Natureâ€™s Organelles: Artificial Peroxisomes Play Their Role. Nano Letters, 2013, 13, 2875-2883.	9.1	149
4	Photoresponsive polymersomes as smart, triggerable nanocarriers. Soft Matter, 2011, 7, 9167.	2.7	128
5	Enzymatic Cascade Reactions inside Polymeric Nanocontainers: A Means to Combat Oxidative Stress. Chemistry - A European Journal, 2011, 17, 4552-4560.	3.3	121
6	Biomimetic artificial organelles with in vitro and in vivo activity triggered by reduction in microenvironment. Nature Communications, 2018, 9, 1127.	12.8	118
7	Mimicking the cell membrane with block copolymer membranes. Journal of Polymer Science Part A, 2012, 50, 2293-2318.	2.3	115
8	Antioxidant Nanoreactor Based on Superoxide Dismutase Encapsulated in Superoxide-Permeable Vesicles. Journal of Physical Chemistry B, 2008, 112, 8211-8217.	2.6	110
9	Polymer nanoreactors shown to produce and release antibiotics locally. Chemical Communications, 2013, 49, 128-130.	4.1	104
10	Dynamics of Membrane Proteins within Synthetic Polymer Membranes with Large Hydrophobic Mismatch. Nano Letters, 2015, 15, 3871-3878.	9.1	93
11	Nanoscienceâ€Based Strategies to Engineer Antimicrobial Surfaces. Advanced Science, 2018, 5, 1700892.	11.2	90
12	Polymersomes with engineered ion selective permeability as stimuli-responsive nanocompartments with preserved architecture. Biomaterials, 2015, 53, 406-414.	11.4	81
13	Stimuli-Triggered Activity of Nanoreactors by Biomimetic Engineering Polymer Membranes. Nano Letters, 2015, 15, 7596-7603.	9.1	77
14	Biopores/membrane proteins in synthetic polymer membranes. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 619-638.	2.6	70
15	Amphiphilic Peptide Self-Assembly: Expansion to Hybrid Materials. Biomacromolecules, 2017, 18, 3471-3480.	5.4	68
16	Can polymeric vesicles that confine enzymatic reactions act as simplified organelles?. FEBS Letters, 2011, 585, 1699-1706.	2.8	66
17	Amphiphilic Copolymer Membranes Promote NADH:Ubiquinone Oxidoreductase Activity: Towards an Electronâ€Transfer Nanodevice. Macromolecular Chemistry and Physics, 2010, 211, 229-238.	2.2	63
18	Hybrid Polymerâ€“Lipid Films as Platforms for Directed Membrane Protein Insertion. Langmuir, 2015, 31, 4868-4877.	3.5	62

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19	Nanomimics of Host Cell Membranes Block Invasion and Expose Invasive Malaria Parasites. ACS Nano, 2014, 8, 12560-12571.	14.6	60
20	Polymeric 3D nano-architectures for transport and delivery of therapeutically relevant biomacromolecules. Biomaterials Science, 2015, 3, 25-40.	5.4	58
21	Mimicking Cellular Signaling Pathways within Synthetic Multicompartment Vesicles with Triggered Enzyme Activity and Induced Ion Channel Recruitment. Advanced Functional Materials, 2019, 29, 1904267.	14.9	58
22	Organelle-specific targeting of polymersomes into the cell nucleus. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2770-2778.	7.1	58
23	Multicompartment Polymer Vesicles with Artificial Organelles for Signalâ€Triggered Cascade Reactions Including Cytoskeleton Formation. Advanced Functional Materials, 2020, 30, 2002949.	14.9	57
24	Nanoscale Enzymatic Compartments in Tandem Support Cascade Reactions in Vitro. Biomacromolecules, 2018, 19, 4023-4033.	5.4	56
25	Antioxidant functionalized polymer capsules to prevent oxidative stress. Acta Biomaterialia, 2018, 67, 21-31.	8.3	55
26	Biomimetic Strategy To Reversibly Trigger Functionality of Catalytic Nanocompartments by the Insertion of pH-Responsive Biovalves. Nano Letters, 2017, 17, 5790-5798.	9.1	54
27	Polymersomes conjugated to 83-14 monoclonal antibodies: Invitro targeting of brain capillary endothelial cells. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 88, 316-324.	4.3	52
28	Selective ion-permeable membranes by insertion of biopores into polymersomes. Physical Chemistry Chemical Physics, 2015, 17, 15538-15546.	2.8	51
29	Polymer nanocompartments in broad-spectrum medical applications. Nanomedicine, 2013, 8, 425-447.	3.3	49
30	A surprising system: polymeric nanoreactors containing a mimic with dual-enzyme activity. Soft Matter, 2011, 7, 5595.	2.7	47
31	Polymer Nanoreactors with Dual Functionality: Simultaneous Detoxification of Peroxynitrite and Oxygen Transport. Langmuir, 2012, 28, 15889-15899.	3.5	47
32	Natural channel protein inserts and functions in a completely artificial, solid-supported bilayer membrane. Scientific Reports, 2013, 3, 2196.	3.3	46
33	Light-responsive polymer nanoreactors: a source of reactive oxygen species on demand. Nanoscale, 2013, 5, 217-224.	5.6	45
34	Biomolecules Turn Self-Assembling Amphiphilic Block Co-polymer Platforms Into Biomimetic Interfaces. Frontiers in Chemistry, 2018, 6, 645.	3.6	45
35	Angiopep2-functionalized polymersomes for targeted doxorubicin delivery to glioblastoma cells. International Journal of Pharmaceutics, 2016, 511, 794-803.	5.2	42
36	Enzymatic reactions in polymeric compartments: nanotechnology meets nature. Current Opinion in Biotechnology, 2019, 60, 53-62.	6.6	41

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37	Effect of Molecular Parameters on the Architecture and Membrane Properties of 3D Assemblies of Amphiphilic Copolymers. Macromolecules, 2014, 47, 5060-5069.	4.8	40
38	Functional surface engineering by nucleotide-modulated potassium channel insertion into polymer membranes attached to solid supports. Biomaterials, 2014, 35, 7286-7294.	11.4	40
39	DNA-Mediated Self-Organization of Polymeric Nanocompartments Leads to Interconnected Artificial Organelles. Nano Letters, 2016, 16, 7128-7136.	9.1	39
40	Planar Biomimetic Membranes Based on Amphiphilic Block Copolymers. ACS Macro Letters, 2014, 3, 59-63.	4.8	38
41	Stimuli-Responsive Codelivery of Oligonucleotides and Drugs by Self-Assembled Peptide Nanoparticles. Biomacromolecules, 2016, 17, 935-945.	5.4	38
42	Active surfaces engineered by immobilizing protein-polymer nanoreactors for selectively detecting sugar alcohols. Biomaterials, 2016, 89, 79-88.	11.4	36
43	Peptide-Based Nanoassemblies in Gene Therapy and Diagnosis: Paving the Way for Clinical Application. Molecules, 2020, 25, 3482.	3.8	35
44	Charge Transfer Pathways in Three Isomers of Naphthalene-Bridged Organic Mixed Valence Compounds. Journal of Organic Chemistry, 2016, 81, 595-602.	3.2	34
45	Combinatorial Strategy for Studying Biochemical Pathways in Double Emulsion Templated Cellâ€sized Compartments. Advanced Materials, 2020, 32, e2004804.	21.0	34
46	An amphiphilic graft copolymer-based nanoparticle platform for reduction-responsive anticancer and antimalarial drug delivery. Nanoscale, 2016, 8, 14858-14869.	5.6	33
47	Live Follow-Up of Enzymatic Reactions Inside the Cavities of Synthetic Giant Unilamellar Vesicles Equipped with Membrane Proteins Mimicking Cell Architecture. ACS Synthetic Biology, 2018, 7, 2116-2125.	3.8	32
48	How Do the Properties of Amphiphilic Polymer Membranes Influence the Functional Insertion of Peptide Pores?. Biomacromolecules, 2020, 21, 701-715.	5.4	32
49	A general strategy for creating self-defending surfaces for controlled drug production for long periods of time. Journal of Materials Chemistry B, 2014, 2, 4684.	5.8	30
50	â€œActive Surfacesâ€•Formed by Immobilization of Enzymes on Solid-Supported Polymer Membranes. Langmuir, 2014, 30, 11660-11669.	3.5	29
51	Protein decorated membranes by specific molecular interactions. Soft Matter, 2010, 6, 2815.	2.7	28
52	Bio-Decorated Polymer Membranes: A New Approach in Diagnostics and Therapeutics. Polymers, 2011, 3, 173-192.	4.5	28
53	Ceria loaded nanoreactors: a nontoxic superantioxidant system with high stability and efficacy. Nanoscale, 2015, 7, 1411-1423.	5.6	27
54	Bioinspired Molecular Factories with Architecture and In Vivo Functionalities as Cell Mimics. Advanced Science, 2020, 7, 1901923.	11.2	26

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55	Cellular Trojan Horse Based Polymer Nanoreactors with Light-Sensitive Activity. Journal of Physical Chemistry B, 2014, 118, 9361-9370.	2.6	25
56	Porphyrin-polymer nanocompartments: singlet oxygen generation and antimicrobial activity. Journal of Biological Inorganic Chemistry, 2018, 23, 109-122.	2.6	24
57	Biomoleculeâ€“polymer hybrid compartments: combining the best of both worlds. Physical Chemistry Chemical Physics, 2020, 22, 11197-11218.	2.8	24
58	Segregated Nanocompartments Containing Therapeutic Enzymes and Imaging Compounds within DNAâ€Zipped Polymersome Clusters for Advanced Nanotheranostic Platform. Small, 2020, 16, e1906492.	10.0	22
59	Clustering of catalytic nanocompartments for enhancing an extracellular non-native cascade reaction. Chemical Science, 2021, 12, 12274-12285.	7.4	22
60	Recent Advances in Hybrid Biomimetic Polymer-Based Films: from Assembly to Applications. Polymers, 2020, 12, 1003.	4.5	20
61	Decorating Nanostructured Surfaces with Antimicrobial Peptides to Efficiently Fight Bacteria. ACS Applied Bio Materials, 2020, 3, 1533-1543.	4.6	20
62	Engineered non-toxic cationic nanocarriers with photo-triggered slow-release properties. Polymer Chemistry, 2016, 7, 3451-3464.	3.9	19
63	Selfâ€Assembled Polymeric Membranes and Nanoassemblies on Surfaces: Preparation, Characterization, and Current Applications. Macromolecular Bioscience, 2020, 20, e1900257.	4.1	19
64	Bio-catalytic nanocompartments for in situ production of glucose-6-phosphate. Chemical Communications, 2017, 53, 10148-10151.	4.1	17
65	Design of Bio-Conjugated Hydrogels for Regenerative Medicine Applications: From Polymer Scaffold to Biomolecule Choice. Molecules, 2020, 25, 4090.	3.8	17
66	Does Membrane Thickness Affect the Transport of Selective Ions Mediated by Ionophores in Synthetic Membranes?. Macromolecular Rapid Communications, 2015, 36, 1929-1934.	3.9	16
67	Surfaces with Dual Functionality through Specific Coimmobilization of Self-Assembled Polymeric Nanostructures. Langmuir, 2019, 35, 4557-4565.	3.5	15
68	A self-assembling amphiphilic peptide nanoparticle for the efficient entrapment of DNA cargoes up to 100 nucleotides in length. Soft Matter, 2020, 16, 1678-1691.	2.7	15
69	Incorporation of phosphatidylserine improves efficiency of lipid based gene delivery systems. European Journal of Pharmaceutics and Biopharmaceutics, 2022, 172, 134-143.	4.3	15
70	Brushing the surface: cascade reactions between immobilized nanoreactors. Nanoscale, 2020, 12, 1551-1562.	5.6	14
71	Polymerâ€“Lipid Hybrid Membranes as a Model Platform to Drive Membraneâ€“Cytochrome c Interaction and Peroxidase-like Activity. Journal of Physical Chemistry B, 2020, 124, 4454-4465.	2.6	14
72	Analysis of Molecular Parameters Determining the Antimalarial Activity of Polymerâ€Based Nanomimics. Macromolecular Rapid Communications, 2015, 36, 1923-1928.	3.9	13

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73	Biomimetic Planar Polymer Membranes Decorated with Enzymes as Functional Surfaces. Langmuir, 2018, 34, 9015-9024.	3.5	13
74	Catalytic polymersomes to produce strong and long-lasting bioluminescence. Nanoscale, 2021, 13, 66-70.	5.6	13
75	Expanding the potential of MRI contrast agents through multifunctional polymeric nanocarriers. Nanomedicine, 2017, 12, 811-817.	3.3	12
76	Bioinspired, nanoscale approaches in contemporary bioanalytics (Review). Biointerphases, 2018, 13, 040801.	1.6	12
77	Bioactive Catalytic Nanocompartments Integrated into Cell Physiology and Their Amplification of a Native Signaling Cascade. ACS Nano, 2020, 14, 12101-12112.	14.6	12
78	The rise of bio-inspired polymer compartments responding to pathology-related signals. Journal of Materials Chemistry B, 2020, 8, 6252-6270.	5.8	11
79	DNA-directed arrangement of soft synthetic compartments and their behavior in vitro and in vivo. Nanoscale, 2020, 12, 9786-9799.	5.6	11
80	Peptide-Assisted Nucleic Acid Delivery Systems on the Rise. International Journal of Molecular Sciences, 2021, 22, 9092.	4.1	11
81	Surfaces Decorated with Polymeric Nanocompartments for <scp>pH</scp> Reporting. Helvetica Chimica Acta, 2018, 101, e1700290.	1.6	10
82	Nanoparticle-based highly sensitive MRI contrast agents with enhanced relaxivity in reductive milieu. Chemical Communications, 2016, 52, 9937-9940.	4.1	9
83	Giant Host Red Blood Cell Membrane Mimicking Polymersomes Bind Parasite Proteins and Malaria Parasites. Chimia, 2016, 70, 288.	0.6	9
84	Mixedâ€Valent Molecular Triple Deckers. Angewandte Chemie - International Edition, 2018, 57, 11688-11691.	13.8	9
85	How Can Giant Plasma Membrane Vesicles Serve as a Cellular Model for Controlled Transfer of Nanoparticles?. Biomacromolecules, 2021, 22, 106-115.	5.4	9
86	Inverting glucuronidation of hymecromone in situ by catalytic nanocompartments. Journal of Materials Chemistry B, 2022, 10, 3916-3926.	5.8	9
87	Asymmetric Triblock Copolymer Nanocarriers for Controlled Localization and pH-Sensitive Release of Proteins. Langmuir, 2016, 32, 10235-10243.	3.5	8
88	Artificial Organelles: Reactions inside Proteinâ€“Polymer Supramolecular Assemblies. Chimia, 2016, 70, 424.	0.6	8
89	Expanding the Potential of the Solvent-Assisted Method to Create Bio-Interfaces from Amphiphilic Block Copolymers. Biomacromolecules, 2021, 22, 3005-3016.	5.4	8
90	Artificial Melanogenesis by Confining Melanin/Polydopamine Production inside Polymersomes. Macromolecular Bioscience, 2021, 21, e2100249.	4.1	8

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91	Current Perspectives on Synthetic Compartments for Biomedical Applications. International Journal of Molecular Sciences, 2022, 23, 5718.	4.1	8
92	Challenges in Malaria Management and a Glimpse at Some Nanotechnological Approaches. Advances in Experimental Medicine and Biology, 2018, 1052, 103-112.	1.6	7
93	From spherical compartments to polymer films: exploiting vesicle fusion to generate solid supported thin polymer membranes. Nanoscale, 2021, 13, 6944-6952.	5.6	7
94	Membrane protein channels equipped with a cleavable linker for inducing catalysis inside nanocompartments. Journal of Materials Chemistry B, 2021, 9, 9012-9022.	5.8	7
95	Tailoring a Solvent-Assisted Method for Solid-Supported Hybrid Lipidâ€“Polymer Membranes. Langmuir, 2022, 38, 6561-6570.	3.5	7
96	Giant Polymer Compartments for Confined Reactions. Chemistry, 2020, 2, 470-489.	2.2	6
97	Global Structureâ€“Activity Analysis in Drug Development Illustrated for Active Cu/Zn Superoxide Dismutase Mimics. European Journal of Inorganic Chemistry, 2009, 2009, 4634-4639.	2.0	5
98	Porphyrin Containing Polymersomes with Enhanced ROS Generation Efficiency: In Vitro Evaluation. Macromolecular Bioscience, 2020, 20, e1900291.	4.1	5
99	Immobilization of arrestin-3 on different biosensor platforms for evaluating GPCR binding. Physical Chemistry Chemical Physics, 2020, 22, 24086-24096.	2.8	5
100	Multicomponent Copolymer Planar Membranes with Nanoscale Domain Separation. Nano Letters, 2022, 22, 5077-5085.	9.1	5
101	Delivery of <scp>ROS</scp> Generating Anthraquinones Using Reductionâ€Responsive Peptideâ€Based Nanoparticles. Helvetica Chimica Acta, 2018, 101, e1800064.	1.6	4
102	Mixedâ€Valent Molecular Triple Deckers. Angewandte Chemie, 2018, 130, 11862-11865.	2.0	4
103	pH-Triggered Reversible Multiple Proteinâ€“Polymer Conjugation Based on Molecular Recognition. Journal of Physical Chemistry B, 2015, 119, 12066-12073.	2.6	3
104	A self-assembling peptidic platform to boost the cellular uptake and nuclear delivery of oligonucleotides. Biomaterials Science, 2022, 10, 4309-4323.	5.4	3
105	Proteinâ€“Polymer Supramolecular Assemblies: A Key Combination for Multifunctionality. Chimia, 2013, 67, 791-795.	0.6	1
106	'Active Surfaces' as Possible Functional Systems in Detection and Chemical (Bio) Reactivity. Chimia, 2016, 70, 402.	0.6	1
107	Interfacing Functional Systems. Chimia, 2016, 70, 418.	0.6	1
108	DNA-tethered Polymersome Clusters as Nanotheranostic Platform. Chimia, 2021, 75, 296-299.	0.6	1

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109	Battling Bacteria with Free and Surface-Immobilized Polymeric Nanostructures. , 2020, , 385-408.		0