CÃ©sar RodrÃguez Emmenegger

List of Publications by Year
in descending order

90 papers	3,658 citations	94381 37 h-index	143943 57 g-index
93 all docs	93 docs citations	93 times ranked	3921 citing authors

#	Article	IF	Citations
1	Kill&Repel Coatings: The Marriage of Antifouling and Bactericidal Properties to Mitigate and Treat Wound Infections. Advanced Functional Materials, 2022, 32, 2106656.	7.8	24
2	Oriented immobilization of Pep19-2.5 on antifouling brushes suppresses the development of Staphylococcus aureus biofilms. Progress in Organic Coatings, 2022, 163, 106609.	1.9	3
3	Complement Activation Dramatically Accelerates Blood Plasma Fouling On Antifouling Poly(2â€hydroxyethyl methacrylate) Brush Surfaces. Macromolecular Bioscience, 2022, 22, e2100460.	2.1	4
4	Brushâ€Like Interface on Surfaceâ€Attached Hydrogels Repels Proteins and Bacteria. Macromolecular Bioscience, 2022, 22, e2200025.	2.1	13
5	Globular Hydrophilic Poly(acrylate)s by an Arborescent Grafting-from Synthesis. Macromolecules, 2022, 55, 2222-2234.	2.2	1
6	Ionic Combisomes: A New Class of Biomimetic Vesicles to Fuse with Life. Advanced Science, 2022, 9, e2200617.	5.6	6
7	Evaluation of Dibenzocyclooctyne and Bicyclononyne Click Reaction on Azidoâ€Functionalized Antifouling Polymer Brushes via Microspotting. Advanced Materials Interfaces, 2022, 9, .	1.9	4
8	Dendrimersome Synthetic Cells Harbor Cell Division Machinery of Bacteria. Advanced Materials, 2022, 34, e2202364.	11.1	7
9	Structure protects function - An enabler for the functionalization of component surfaces by biohybrid coatings. Procedia CIRP, 2022, 110, 133-138.	1.0	2
10	Interactive Hemocompatible Nanocoating to Prevent Surfaceâ€Induced Coagulation in Medical Devices. Advanced Materials Interfaces, 2022, 9, .	1.9	5
11	Unraveling topology-induced shape transformations in dendrimersomes. Soft Matter, 2021, 17, 254-267.	1.2	18
12	Controlled Surface Adhesion of Macrophages via Patterned Antifouling Polymer Brushes. Advanced NanoBiomed Research, 2021, 1, 2000029.	1.7	8
13	Enhanced Concanavalinâ€…A Binding to Preorganized Mannose Nanoarrays in Glycodendrimersomes Revealed Multivalent Interactions. Angewandte Chemie, 2021, 133, 8433-8441.	1.6	0
14	Enhanced Concanavalinâ€…A Binding to Preorganized Mannose Nanoarrays in Glycodendrimersomes Revealed Multivalent Interactions. Angewandte Chemie - International Edition, 2021, 60, 8352-8360.	7.2	31
15	An engineered coccolith-based hybrid that transforms light into swarming motion. Cell Reports Physical Science, 2021, 2, 100373.	2.8	2
16	Improving Hemocompatibility: How Can Smart Surfaces Direct Blood To Fight against Thrombi. ACS Applied Materials & Interfaces, 2021, 13, 11696-11707.	4.0	15
17	Unraveling the Mechanism and Kinetics of Binding of an LCIâ€eGFPâ€Polymer for Antifouling Coatings. Macromolecular Bioscience, 2021, 21, e2100158.	2.1	6
18	Matterâ€tag: A universal immobilization platform for enzymes on polymers, metals, and siliconâ€based materials. Biotechnology and Bioengineering, 2020, 117, 49-61.	1.7	32

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19	Photoinduced Upgrading of Lactic Acid-Based Solvents to Block Copolymer Surfactants. ACS Sustainable Chemistry and Engineering, 2020, 8, 1276-1284.	3.2	22
20	Nanovesicles displaying functional linear and branched oligomannose self-assembled from sequence-defined Janus glycodendrimers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11931-11939.	3.3	37
21	Efficacy of A Poly(MeOEGMA) Brush on the Prevention of Escherichia coli Biofilm Formation and Susceptibility. Antibiotics, 2020, 9, 216.	1.5	18
22	Direct Visualization of Vesicle Disassembly and Reassembly Using Photocleavable Dendrimers Elucidates Cargo Release Mechanisms. ACS Nano, 2020, 14, 7398-7411.	7.3	27
23	Surface plasmon resonance-based aptasensor for direct monitoring of thrombin in a minimally processed human blood. Sensors and Actuators B: Chemical, 2020, 320, 128380.	4.0	32
24	The potential advantages of using a poly(HPMA) brush in urinary catheters: effects on biofilm cells and architecture. Colloids and Surfaces B: Biointerfaces, 2020, 191, 110976.	2.5	32
25	Turning a Killing Mechanism into an Adhesion and Antifouling Advantage. Advanced Materials Interfaces, 2019, 6, 1900847.	1.9	16
26	Membrane-Mimetic Dendrimersomes Engulf Living Bacteria via Endocytosis. Nano Letters, 2019, 19, 5732-5738.	4.5	38
27	Encapsulation of hydrophobic components in dendrimersomes and decoration of their surface with proteins and nucleic acids. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15378-15385.	3.3	41
28	Compact Grating-Coupled Biosensor for the Analysis of Thrombin. ACS Sensors, 2019, 4, 2109-2116.	4.0	38
29	Designâ€“functionality relationships for adhesion/growth-regulatory galectins. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2837-2842.	3.3	57
30	Encoding biological recognition in a bicomponent cell-membrane mimic. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5376-5382.	3.3	51
31	Antifouling Microparticles To Scavenge Lipopolysaccharide from Human Blood Plasma. Biomacromolecules, 2019, 20, 959-968.	2.6	13
32	Zwitterionic Functionalizable Scaffolds with Gyroid Pore Architecture for Tissue Engineering. Macromolecular Bioscience, 2019, 19, e1800403.	2.1	5
33	Screening Libraries of Amphiphilic Janus Dendrimers Based on Natural Phenolic Acids to Discover Monodisperse Unilamellar Dendrimersomes. Biomacromolecules, 2019, 20, 712-727.	2.6	36
34	Improving Hemocompatibility of Membranes for Extracorporeal Membrane Oxygenators by Grafting Nonthrombogenic Polymer Brushes. Macromolecular Bioscience, 2018, 18, 1700359.	2.1	53
35	Effect of shear stress on the reduction of bacterial adhesion to antifouling polymers. Bioinspiration and Biomimetics, 2018, 13, 065001.	1.5	27
36	Polymer Brush Collapse under Shear Flow. Macromolecules, 2017, 50, 1215-1224.	2.2	18

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37	Plasmonic Hepatitis B Biosensor for the Analysis of Clinical Saliva. Analytical Chemistry, 2017, 89, 2972-2977.	3.2	42
38	Polymer Brush-Functionalized Chitosan Hydrogels as Antifouling Implant Coatings. Biomacromolecules, 2017, 18, 1983-1992.	2.6	61
39	Catalyst-free â€œclickâ€•functionalization of polymer brushes preserves antifouling properties enabling detection in blood plasma. Analytica Chimica Acta, 2017, 971, 78-87.	2.6	27
40	Clickable Antifouling Polymer Brushes for Polymer Pen Lithography. ACS Applied Materials & Interfaces, 2017, 9, 12109-12117.	4.0	33
41	Ultrathin Monomolecular Films and Robust Assemblies Based on Cyclic Catechols. Langmuir, 2017, 33, 670-679.	1.6	9
42	Hepatitis B plasmonic biosensor for the analysis of clinical serum samples. Biosensors and Bioelectronics, 2016, 85, 272-279.	5.3	63
43	Total removal of intact blood plasma proteins deposited on surface-grafted polymer brushes. Analytical Methods, 2016, 8, 6415-6419.	1.3	5
44	Nonâ€Fouling Biodegradable Poly(Ïµâ€caprolactone) Nanofibers for Tissue Engineering. Macromolecular Bioscience, 2016, 16, 83-94.	2.1	21
45	Non-Fouling Biodegradable Poly(Ïµ-caprolactone) Nanofi bers for Tissue Engineering. Macromolecular Bioscience, 2016, 16, 82-82.	2.1	0
46	Grafting of functional methacrylate polymer brushes by photoinduced SET-LRP. Polymer Chemistry, 2016, 7, 6934-6945.	1.9	34
47	Catalyst-free site-specific surface modifications of nanocrystalline diamond films via microchannel cantilever spotting. RSC Advances, 2016, 6, 57820-57827.	1.7	14
48	Antifouling Polymer Brushes Displaying Antithrombogenic Surface Properties. Biomacromolecules, 2016, 17, 1179-1185.	2.6	68
49	Sensitive and rapid detection of aflatoxin M1 in milk utilizing enhanced SPR and p(HEMA) brushes. Biosensors and Bioelectronics, 2016, 81, 159-165.	5.3	66
50	Designing Molecular Printboards: A Photolithographic Platform for Recodable Surfaces. Chemistry - A European Journal, 2015, 21, 13186-13190.	1.7	21
51	Rapid Thiolâ€Yneâ€Mediated Fabrication and Dual Postfunctionalization of Microâ€Resolved 3D Mesostructures. Advanced Functional Materials, 2015, 25, 3735-3744.	7.8	31
52	Macromol. Rapid Commun. 18/2015. Macromolecular Rapid Communications, 2015, 36, 1696-1696.	2.0	0
53	Surface Grafting via Photoâ€Induced Copperâ€Mediated Radical Polymerization at Extremely Low Catalyst Concentrations. Macromolecular Rapid Communications, 2015, 36, 1681-1686.	2.0	50
54	Phototriggered Functionalization of Hierarchically Structured Polymer Brushes. Langmuir, 2015, 31, 5899-5907.	1.6	43

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55	Polymer Brushes Interfacing Blood as a Route Toward High Performance Blood Contacting Devices. Macromolecular Bioscience, 2015, 15, 636-646.	2.1	56
56	Nanoparticles of the poly([N-(2-hydroxypropyl)]methacrylamide)-b-poly[2-(diisopropylamino)ethyl methacrylate] diblock copolymer for pH-triggered release of paclitaxel. Polymer Chemistry, 2015, 6, 4946-4954.	1.9	31
57	Synthesis of non-fouling poly[N-(2-hydroxypropyl)methacrylamide] brushes by photoinduced SET-LRP. Polymer Chemistry, 2015, 6, 4210-4220.	1.9	59
58	Quantifying bacterial adhesion on antifouling polymer brushes via single-cell force spectroscopy. Polymer Chemistry, 2015, 6, 5740-5751.	1.9	70
59	Macromolecular Surface Design: Photopatterning of Functional Stable Nitrile Oxides. Angewandte Chemie - International Edition, 2015, 54, 5777-5783.	7.2	37
60	Suppressing Pseudomonas aeruginosa adhesion via non-fouling polymer brushes. RSC Advances, 2014, 4, 64781-64790.	1.7	28
61	Surface plasmon resonance: advances of label-free approaches in the analysis of biological samples. Bioanalysis, 2014, 6, 3325-3336.	0.6	17
62	Photoâ€Patterning of Nonâ€Fouling Polymers and Biomolecules on Paper. Advanced Materials, 2014, 26, 4087-4092.	11.1	79
63	A bioinspired light induced avenue for the design of patterned functional interfaces. Journal of Materials Chemistry B, 2014, 2, 36-40.	2.9	30
64	Use of pooled blood plasmas in the assessment of fouling resistance. RSC Advances, 2014, 4, 2318-2321.	1.7	48
65	Diagnosis of Epsteinâ€“Barr virus infection in clinical serum samples by an SPR biosensor assay. Biosensors and Bioelectronics, 2014, 55, 278-284.	5.3	67
66	Fusing Catechol-Driven Surface Anchoring with Rapid Hetero Dielsâ€“Alder Ligation. ACS Macro Letters, 2014, 3, 1169-1173.	2.3	17
67	Exploiting end group functionalization for the design of antifouling bioactive brushes. Polymer Chemistry, 2014, 5, 4124-4131.	1.9	51
68	Photoâ€Induced Functionalization of Spherical and Planar Surfaces via Caged Thioaldehyde Endâ€Functional Polymers. Advanced Functional Materials, 2014, 24, 5649-5661.	7.8	25
69	Hierarchical antifouling brushes for biosensing applications. Sensors and Actuators B: Chemical, 2014, 202, 1313-1321.	4.0	44
70	Light-induced modification of silver nanoparticles with functional polymers. Chemical Communications, 2014, 50, 4430-4433.	2.2	18
71	Functionalized ultra-low fouling carboxy- and hydroxy-functional surface platforms: functionalization capacity, biorecognition capability and resistance to fouling from undiluted biological media. Biosensors and Bioelectronics, 2014, 51, 150-157.	5.3	78
72	A facile avenue to conductive polymer brushes via cyclopentadieneâ€“maleimide Dielsâ€“Alder ligation. Chemical Communications, 2013, 49, 8623.	2.2	33

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73	Controlled Cell Adhesion on Poly(dopamine) Interfaces Photopatterned with Nonâ€Fouling Brushes. Advanced Materials, 2013, 25, 6123-6127.	11.1	180
74	Controlled growth of protein resistant PHEMA brushes via S-RAFT polymerization. Journal of Materials Chemistry B, 2013, 1, 6027.	2.9	51
75	Novel antifouling self-healing poly(carboxybetaine methacrylamide-co-HEMA) nanocomposite hydrogels with superior mechanical properties. Journal of Materials Chemistry B, 2013, 1, 5644.	2.9	69
76	Spatially Controlled Photochemical Peptide and Polymer Conjugation on Biosurfaces. Biomacromolecules, 2013, 14, 4340-4350.	2.6	46
77	SET-LRP of N-(2-hydroxypropyl)methacrylamide in H2O. Polymer Chemistry, 2013, 4, 2424.	1.9	62
78	Complete Identification of Proteins Responsible for Human Blood Plasma Fouling on Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.6	121
79	Biomimetic non-fouling surfaces: extending the concepts. Journal of Materials Chemistry B, 2013, 1, 2859.	2.9	76
80	A facile one-pot route to poly(carboxybetaine acrylamide) functionalized SWCNTs. Chemical Communications, 2013, 49, 6734.	2.2	17
81	Non-fouling Hydrogels of 2-Hydroxyethyl Methacrylate and Zwitterionic Carboxybetaine (Meth)acrylamides. Biomacromolecules, 2012, 13, 4164-4170.	2.6	63
82	Surfaces Resistant to Fouling from Biological Fluids: Towards Bioactive Surfaces for Real Applications. Macromolecular Bioscience, 2012, 12, 1413-1422.	2.1	85
83	Self-assembling zwitterionic carboxybetaine copolymers via aqueous SET-LRP from hemicellulose multi-site initiators. Polymer Chemistry, 2012, 3, 2920.	1.9	33
84	Controlled/Living Surfaceâ€Initiated ATRP of Antifouling Polymer Brushes from Gold in PBS and Blood Sera as a Model Study for Polymer Modifications in Complex Biological Media. Macromolecular Bioscience, 2012, 12, 525-532.	2.1	52
85	Substrate-Independent Approach for the Generation of Functional Protein Resistant Surfaces. Biomacromolecules, 2011, 12, 1058-1066.	2.6	73
86	Low Temperature Aqueous Living/Controlled (RAFT) Polymerization of Carboxybetaine Methacrylamide up to High Molecular Weights. Macromolecular Rapid Communications, 2011, 32, 958-965.	2.0	52
87	Polymer Brushes Showing Nonâ€Fouling in Blood Plasma Challenge the Currently Accepted Design of Protein Resistant Surfaces. Macromolecular Rapid Communications, 2011, 32, 952-957.	2.0	184
88	Poly(HEMA) brushes emerging as a new platform for direct detection of food pathogen in milk samples. Biosensors and Bioelectronics, 2011, 26, 4545-4551.	5.3	74
89	Polymeric nanocapsules ultra stable in complex biological media. Colloids and Surfaces B: Biointerfaces, 2011, 83, 376-381.	2.5	39
90	Interaction of Blood Plasma with Antifouling Surfaces. Langmuir, 2009, 25, 6328-6333.	1.6	242