Brigitte Maria StÃ¤dler

List of Publications by Year
in descending order

107 papers	5,547 citations	87723 38 h-index	82410 72 g-index
112 all docs	112 docs citations	112 times ranked	6729 citing authors

#	Article	IF	Citations
1	Polydopamineâ€"a nature-inspired polymer coating for biomedical science. Nanoscale, 2011, 3, 4916.	2.8	769
2	A Microreactor with Thousands of Subcompartments: Enzymeâ€Loaded Liposomes within Polymer Capsules. Angewandte Chemie - International Edition, 2009, 48, 4359-4362.	7.2	204
3	Liposome and Lipid Bilayer Arrays Towards Biosensing Applications. Small, 2010, 6, 2481-2497.	5.2	191
4	Recent Developments in Polydiacetylene-Based Sensors. Chemistry of Materials, 2019, 31, 1196-1222.	3.2	177
5	Polymer hydrogel capsules: en route toward synthetic cellular systems. Nanoscale, 2009, 1, 68.	2.8	171
6	Recent Advances in Nanoâ€•and Micromotors. Advanced Functional Materials, 2020, 30, 1908283.	7.8	149
7	Liposomes and lipid bilayers in biosensors. Advances in Colloid and Interface Science, 2017, 249, 88-99.	7.0	140
8	Engineering Advanced Capsosomes: Maximizing the Number of Subcompartments, Cargo Retention, and Temperature-Triggered Reaction. ACS Nano, 2010, 4, 1351-1361.	7.3	139
9	Capsosomes: Subcompartmentalizing Polyelectrolyte Capsules Using Liposomes. Langmuir, 2009, 25, 6725-6732.	1.6	127
10	Enhanced Diffusion of Glucose-Fueled Janus Particles. Chemistry of Materials, 2015, 27, 7412-7418.	3.2	120
11	Low-Fouling, Biofunctionalized, and Biodegradable Click Capsules. Biomacromolecules, 2008, 9, 3389-3396.	2.6	118
12	Assembly of Poly(dopamine) Films Mixed with a Nonionic Polymer. Langmuir, 2012, 28, 17585-17592.	1.6	117
13	A Critical Look at Multilayered Polymer Capsules in Biomedicine: Drug Carriers, Artificial Organelles, and Cell Mimics. Advanced Functional Materials, 2011, 21, 14-28.	7.8	116
14	Monitoring ion-channel function in real time through quantum decoherence. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18777-18782.	3.3	112
15	Double-Fueled Janus Swimmers with Magnetotactic Behavior. ACS Nano, 2017, 11, 3973-3983.	7.3	112
16	Capsosomes with Multilayered Subcompartments: Assembly and Loading with Hydrophobic Cargo. Advanced Functional Materials, 2010, 20, 59-66.	7.8	111
17	Cholesterol-mediated anchoring of enzyme-loaded liposomes within disulfide-stabilized polymer carrier capsules. Biomaterials, 2009, 30, 5988-5998.	5.7	103
18	Cholesterol â€" a biological compound as a building block in bionanotechnology. Nanoscale, 2013, 5, 89-109.	2.8	101

#	Article	IF	Citations
19	Recent developments in poly(dopamine)-based coatings for biomedical applications. Nanomedicine, 2015, 10, 2725-2742.	1.7	101
20	Nanopatterns with Biological Functions. Journal of Nanoscience and Nanotechnology, 2006, 6, 2237-2264.	0.9	100
21	Stabilization of Polymerâ€Hydrogel Capsules via Thiolâ€“Disulfide Exchange. Small, 2009, 5, 2601-2610.	5.2	90
22	Micropatterning of DNA-Tagged Vesicles. Langmuir, 2004, 20, 11348-11354.	1.6	89
23	Capsosomes with â€œFreeâ€Floatingâ€•Liposomal Subcompartments. Advanced Materials, 2011, 23, 4082-4087.	11.1	84
24	Polydopamine/Liposome Coatings and Their Interaction with Myoblast Cells. ACS Applied Materials & Interfaces, 2011, 3, 2142-2147.	4.0	83
25	Triggered Cargo Release by Encapsulated Enzymatic Catalysis in Capsosomes. Nano Letters, 2011, 11, 4958-4963.	4.5	82
26	Confined Multiple Enzymatic (Cascade) Reactions within Poly(dopamine)-based Capsosomes. ACS Applied Materials & Interfaces, 2014, 6, 12771-12779.	4.0	73
27	A Polymer Chemistry Point of View on Mucoadhesion and Mucopenetration. Macromolecular Bioscience, 2017, 17, 1700060.	2.1	65
28	Noncovalent Liposome Linkage and Miniaturization of Capsosomes for Drug Delivery. Biomacromolecules, 2010, 11, 3548-3555.	2.6	63
29	Microswimmers with Heat Delivery Capacity for 3D Cell Spheroid Penetration. ACS Nano, 2019, 13, 12192-12205.	7.3	59
30	Poly(Methacrylic Acid) Polymer Hydrogel Capsules: Drug Carriers, Subâ€compartmentalized Microreactors, Artificial Organelles. Small, 2010, 6, 2201-2207.	5.2	53
31	Subcompartmentalized Polymer Hydrogel Capsules with Selectively Degradable Carriers and Subunits. Small, 2010, 6, 1558-1564.	5.2	51
32	Advanced Subcompartmentalized Microreactors: Polymer Hydrogel Carriers Encapsulating Polymer Capsules and Liposomes. Small, 2013, 9, 3573-3583.	5.2	50
33	Subcompartmentalized Nanoreactors as Artificial Organelle with Intracellular Activity. Small, 2016, 12, 1806-1814.	5.2	44
34	Poly(vinyl alcohol) Physical Hydrogels: Noncryogenic Stabilization Allows Nano- and Microscale Materials Design. Langmuir, 2011, 27, 10216-10223.	1.6	43
35	Myoblast Cell Interaction with Polydopamine Coated Liposomes. Biointerphases, 2012, 7, 8.	0.6	43
36	Liposomes as Drug Deposits in Multilayered Polymer Films. ACS Applied Materials & Interfaces, 2013, 5, 2967-2975.	4.0	43

#	Article	IF	Citations
37	Poly(l-lysine)-grafted-poly(ethylene glycol)-based surface-chemical gradients. Preparation, characterization, and first applications. Biointerphases, 2006, 1, 156-165.	0.6	42
38	Nanopatterning of gold colloids for label-free biosensing. Nanotechnology, 2007, 18, 155306.	1.3	41
39	Assembly of Poly(dopamine)/Poly(N-isopropylacrylamide) Mixed Films and Their Temperature-Dependent Interaction with Proteins, Liposomes, and Cells. Langmuir, 2013, 29, 10213-10222.	1.6	39
40	Shear Stress and Its Effect on the Interaction of Myoblast Cells with Nanosized Drug Delivery Vehicles. Molecular Pharmaceutics, 2013, 10, 2707-2712.	2.3	39
41	Cell response to PEGylated poly(dopamine) coated liposomes considering shear stress. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4838-4847.	1.1	38
42	Highly-Branched Poly(N-isopropylacrylamide) as a Component in Poly(dopamine) Films. Journal of Physical Chemistry B, 2013, 117, 10504-10512.	1.2	37
43	Surfaceâ€Adhered Composite Poly(Vinyl Alcohol) Physical Hydrogels: Polymersomeâ€Aided Delivery of Therapeutic Small Molecules. Advanced Healthcare Materials, 2012, 1, 791-795.	3.9	36
44	Enzymes as key features in therapeutic cell mimicry. Advanced Drug Delivery Reviews, 2017, 118, 94-108.	6.6	36
45	A novel crossed microfluidic device for the precise positioning of proteins and vesicles. Lab on A Chip, 2005, 5, 1387.	3.1	35
46	Extracellular Microreactor for the Depletion of Phenylalanine Toward Phenylketonuria Treatment. Advanced Functional Materials, 2015, 25, 3860-3869.	7.8	32
47	Lipogels: surface-adherent composite hydrogels assembled from poly(vinyl alcohol) and liposomes. Nanoscale, 2013, 5, 6758.	2.8	31
48	Liposome-containing polymer films and colloidal assemblies towards biomedical applications. Nanoscale, 2014, 6, 6426.	2.8	31
49	Janus subcompartmentalized microreactors. Soft Matter, 2015, 11, 5327-5335.	1.2	29
50	Recent progress of liposomes in nanomedicine. Journal of Materials Chemistry B, 2014, 2, 6686-6691.	2.9	28
51	Matrix Vesicles-Containing Microreactors as Support for Bonelike Osteoblasts to Enhance Biomineralization. ACS Applied Materials & Interfaces, 2018, 10, 30180-30190.	4.0	28
52	Recent Advancements in Using Polymers for Intestinal Mucoadhesion and Mucopenetration. Macromolecular Bioscience, 2020, 20, e1900342.	2.1	28
53	Degradation of liposomal subcompartments in PEGylated capsosomes. Soft Matter, 2011, 7, 9638.	1.2	26
54	Surface adhered poly(vinyl alcohol) physical hydrogels as tools for rational design of intelligent biointerfaces. Soft Matter, 2012, 8, 4625.	1.2	25

#	Article	IF	Citations
55	Creation of a functional heterogeneous vesicle array via DNA controlled surface sorting onto a spotted microarray. Biointerphases, 2006, 1, 142-145.	0.6	24
56	Cargo delivery to adhering myoblast cells from liposome-containing poly(dopamine) composite coatings. Biomaterials Science, 2013, 1, 1181.	2.6	24
57	Mucopenetrating micelles with a PEG corona. Nanoscale, 2017, 9, 18438-18448.	2.8	23
58	Polydiacetyleneâ€Based Biosensors for the Detection of Viruses and Related Biomolecules. Advanced Functional Materials, 2020, 30, 2004605.	7.8	22
59	Mitochondria Encapsulation in Hydrogelâ€Based Artificial Cells as ATP Producing Subunits. Small, 2021, 17, e2007959.	5.2	21
60	Platinum Nanoparticle-Based Microreactors as Support for Neuroblastoma Cells. ACS Applied Materials & Interfaces, 2018, 10, 7581-7592.	4.0	20
61	Phospholipidâ€“Block Copolymer Hybrid Vesicles with Lysosomal Escape Ability. Langmuir, 2018, 34, 6874-6886.	1.6	20
62	Small Organic Catalase Mimic Encapsulated in Micellar Artificial Organelles as Reactive Oxygen Species Scavengers. ACS Applied Polymer Materials, 2019, 1, 1532-1539.	2.0	20
63	Mucopenetrating polymer â€“ Lipid hybrid nanovesicles as subunits in alginate beads as an oral formulation. Journal of Controlled Release, 2020, 322, 470-485.	4.8	20
64	Enzyme prodrug therapies and therapeutic enzymes. Advanced Drug Delivery Reviews, 2017, 118, 1.	6.6	19
65	Biocatalytic Polymer Coatings: Onâ€Demand Drug Synthesis and Localized Therapeutic Effect under Dynamic Cell Culture Conditions. Small, 2014, 10, 1314-1324.	5.2	18
66	Phospholipidâ€”polymer amphiphile hybrid assemblies and their interaction with macrophages. Biomicrofluidics, 2015, 9, 052610.	1.2	18
67	Planar and Cell Aggregate-Like Assemblies Consisting of Microreactors and HepG2 Cells. ACS Omega, 2017, 2, 7085-7095.	1.6	18
68	Hybrid vesicles as intracellular reactive oxygen species and nitric oxide generators. Nanoscale, 2019, 11, 11530-11541.	2.8	18
69	Cell Membrane Coated Particles. Advanced Biology, 2020, 4, e2000174.	3.0	18
70	Cell mimicry as a bottomâ€up strategy for hierarchical engineering of<scp>natureâ€inspired</scp>entities. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2021, 13, e1683.	3.3	18
71	Mixed poly(dopamine)/poly(<scp>l</scp>-lysine) (composite) coatings: from assembly to interaction with endothelial cells. Biomaterials Science, 2015, 3, 1188-1196.	2.6	17
72	Poly(N-isopropylacrylamide)/Poly(dopamine) Capsules. Langmuir, 2014, 30, 5592-5598.	1.6	16

#	Article	IF	Citations
73	Distinguishing Commercial Beers Using a Solution-Based Sensor Array Derived from Nanoscale Polydiacetylene Vesicles. ACS Applied Nano Materials, 2020, 3, 3439-3448.	2.4	16
74	Effect of Osteopontin on the Initial Adhesion of Dental Bacteria. Journal of Natural Products, 2012, 75, 2108-2112.	1.5	15
75	Droplet-microfluidics towards the assembly of advanced building blocks in cell mimicry. Nanoscale, 2016, 8, 19510-19522.	2.8	15
76	Multicompartmentalized Microreactors Containing Nuclei and Catalase-Loaded Liposomes. Biomacromolecules, 2018, 19, 4379-4385.	2.6	15
77	Polymerâ€“Lipid Hybrid Vesicles and Their Interaction with HepG2 Cells. Small, 2020, 16, e1906493.	5.2	15
78	Enzyme Mimic Facilitated Artificial Cell to Mammalian Cell Signal Transfer. Angewandte Chemie - International Edition, 2021, 60, 18704-18711.	7.2	15
79	Liposomes equipped with poly(N-isopropyl acryl amide)-containing coatings as potential drug carriers. RSC Advances, 2014, 4, 44769-44776.	1.7	14
80	Small Subcompartmentalized Microreactors as Support for Hepatocytes. Advanced Healthcare Materials, 2017, 6, .	3.9	14
81	On the Assembly of Microreactors with Parallel Enzymatic Pathways. Advanced Biology, 2018, 2, e1700244.	3.0	14
82	Mucopenetrating Zwitterionic Micelles. ChemNanoMat, 2020, 6, 744-750.	1.5	13
83	Disintegrating polymer multilayers to jump-start colloidal micromotors. Nanoscale, 2019, 11, 733-741.	2.8	12
84	Evaluation of Hybrid Vesicles in an Intestinal Cell Model Based on Structured Paper Chips. Biomacromolecules, 2021, 22, 3860-3872.	2.6	12
85	Locomotion of micromotors in paper chips. Nanoscale, 2021, 13, 17900-17911.	2.8	10
86	Tannic acid and cholesterolâ€“dopamine as building blocks in composite coatings for substrateâ€mediated drug delivery. Polymer International, 2016, 65, 1306-1314.	1.6	8
87	Locomotion of Micromotors Due to Liposome Disintegration. Langmuir, 2020, 36, 7056-7065.	1.6	8
88	Interaction of pH-responsive polyanions with phospholipid membranes. Polymer Chemistry, 2019, 10, 5992-5997.	1.9	7
89	Liposomal Templating, Association with Mammalian Cells, and Cytotoxicity of Poly(vinyl alcohol) Physical Hydrogel Nanoparticles. Particle and Particle Systems Characterization, 2013, 30, 514-522.	1.2	6
90	Interaction of cells with patterned reactors. Biomaterials Science, 2018, 6, 793-802.	2.6	6

#	Article	IF	Citations
91	Poly(ethylene glycol) Grafting of Nanoparticles Prevents Uptake by Cells and Transport Through Cell Barrier Layers Regardless of Shear Flow and Particle Size. ACS Biomaterials Science and Engineering, 2019, 5, 4355-4365.	2.6	6
92	Multicompartment Microreactors Prevent Excitotoxic Dysfunctions In Rat Primary Cortical Neurons. Advanced Biology, 2020, 4, e2000139.	3.0	6
93	Manganese dioxide nanosheet-containing reactors as antioxidant support for neuroblastoma cells. Journal of Materials Chemistry B, 2022, 10, 4672-4683.	2.9	6
94	Membrane composition of polymer-lipid hybrid vesicles. Applied Materials Today, 2022, 29, 101549.	2.3	6
95	Surface polymerization induced locomotion. Nanoscale, 2021, 13, 10035-10043.	2.8	5
96	Liposomal Drug Deposits in Poly(Dopamine) Coatings: Effect of Their Composition, Cell Type, Uptake Pathway Considerations, and Shear Stress. Macromolecular Bioscience, 2014, 14, 1677-1687.	2.1	4
97	Nitric oxide producing artificial enzymes based on metalloporphyrins. Materials Today Chemistry, 2022, 23, 100743.	1.7	4
98	Micromotorâ€Assisted Keratinocytes Migration in a Floating Paper Chip. Small, 2023, 19, .	5.2	4
99	Polymer Micelles vs Polymerâ€“Lipid Hybrid Vesicles: A Comparison Using RAW 264.7 Cells. Biomacromolecules, 2022, 23, 1052-1064.	2.6	3
100	Subcompartmentalized Systems Towards Therapeutic Cell Mimics. Regenerative Medicine, Artificial Cells and Nanomedicine, 2013, , 281-299.	0.7	2
101	Photobleaching induced damage of biomolecules: Streptavidin as â€˜bioâ€™-photoresist. Surface Science, 2010, 604, 898-905.	0.8	1
102	Motion analysis of optically trapped particles and cells using 2D Fourier analysis. Optics Express, 2012, 20, 1953.	1.7	1
103	Patterned Liposomeâ€“Polymer Composite Coatings. ChemNanoMat, 2016, 2, 822-829.	1.5	1
104	Microreactor equipped with naturally acid-resistant histidine ammonia lyase from an extremophile. Materials Advances, 2022, 3, 3649-3662.	2.6	1
105	Hydrogels: Liposomal Templating, Association with Mammalian Cells, and Cytotoxicity of Poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overl Systems Characterization, 2013, 30, 566-566.	1.2	0
106	Microreactors: Multicompartment Microreactors Prevent Excitotoxic Dysfunctions In Rat Primary Cortical Neurons (Adv. Biosys. 10/2020). Advanced Biology, 2020, 4, 2070102.	3.0	0
107	Enzyme Mimic Facilitated Artificial Cell to Mammalian Cell Signal Transfer. Angewandte Chemie, 2021, 133, 18852-18859.	1.6	0