Seraphine Wegner

List of Publications by Year
in descending order

58	2,505	218592	206029
papers	citations	26 h-index	48 g-index

62	62	62	3424
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design of an Emission Ratiometric Biosensor from MerR Family Proteins:Â A Sensitive and Selective Sensor for Hg2+. Journal of the American Chemical Society, 2007, 129, 3474-3475.	6.6	263
2	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. Angewandte Chemie - International Edition, 2018, 57, 13382-13392.	7.2	234
3	The rise of intelligent matter. Nature, 2021, 594, 345-355.	13.7	228
4	Controlled division of cell-sized vesicles by low densities of membrane-bound proteins. Nature Communications, 2020, 11, 905.	5.8	143
5	Dynamic Copper(I) Imaging in Mammalian Cells with a Genetically Encoded Fluorescent Copper(I) Sensor. Journal of the American Chemical Society, 2010, 132, 2567-2569.	6.6	123
6	Molecular mechanism and structure of the Saccharomyces cerevisiae iron regulator Aft2. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4043-4048.	3.3	109
7	Cobalt(III) as a Stable and Inert Mediator Ion between NTA and His6â€Tagged Proteins. Angewandte Chemie - International Edition, 2013, 52, 7593-7596.	7.2	90
8	Engineering A Uranylâ€Specific Binding Protein from NikR. Angewandte Chemie - International Edition, 2009, 48, 2339-2341.	7.2	76
9	The tightly regulated copper window in yeast. Chemical Communications, 2011, 47, 2571-2573.	2.2	70
10	The effect of molar mass and degree of hydroxyethylation on the controlled shielding and deshielding of hydroxyethyl starch-coated polyplexes. Biomaterials, 2013, 34, 2530-2538.	5.7	68
11	A Genetically Encoded FRET Sensor for Intracellular Heme. ACS Chemical Biology, 2015, 10, 1610-1615.	1.6	65
12	Cobalt Cross-Linked Redox-Responsive PEG Hydrogels: From Viscoelastic Liquids to Elastic Solids. Macromolecules, 2016, 49, 4229-4235.	2.2	63
13	Conformational Dynamics of a Single Protein Monitored for 24 h at Video Rate. Nano Letters, 2018, 18, 6633-6637.	4.5	53
14	Light-Guided Motility of a Minimal Synthetic Cell. Nano Letters, 2018, 18, 7268-7274.	4.5	47
15	Blue Light Switchable Bacterial Adhesion as a Key Step toward the Design of Biofilms. ACS Synthetic Biology, 2017, 6, 2170-2174.	1.9	45
16	Photocleavable linker for the patterning of bioactive molecules. Scientific Reports, 2016, 5, 18309.	1.6	44
17	Cell to Cell Signaling through Light in Artificial Cell Communities: Glowing Predator Lures Prey. ACS Nano, 2021, 15, 9434-9444.	7.3	44
18	Genetically Encoded Copper(I) Reporters with Improved Response for Use in Imaging. Journal of the American Chemical Society, 2013, 135, 3144-3149.	6.6	42

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19	Engineering Proteins at Interfaces: From Complementary Characterization to Material Surfaces with Designed Functions. Angewandte Chemie - International Edition, 2018, 57, 12626-12648.	7.2	40
20	Cobalt(III)â€Mediated Permanent and Stable Immobilization of Histidineâ€Tagged Proteins on NTAâ€Functionalized Surfaces. Chemistry - A European Journal, 2016, 22, 3156-3162.	1.7	39
21	Dual-Functionalized Nanostructured Biointerfaces by Click Chemistry. Langmuir, 2014, 30, 6897-6905.	1.6	36
22	Blue-Light-Switchable Bacterial Cellâ€“Cell Adhesions Enable the Control of Multicellular Bacterial Communities. ACS Synthetic Biology, 2020, 9, 1169-1180.	1.9	32
23	Light controlled cell-to-cell adhesion and chemical communication in minimal synthetic cells. Chemical Communications, 2019, 55, 9448-9451.	2.2	31
24	Red/Farâ€Red Light Switchable Cargo Attachment and Release in Bacteriaâ€Driven Microswimmers. Advanced Healthcare Materials, 2020, 9, e1900956.	3.9	30
25	The Importance of Cellâ€“Cell Interaction Dynamics in Bottom-Up Tissue Engineering: Concepts of Colloidal Self-Assembly in the Fabrication of Multicellular Architectures. Nano Letters, 2020, 20, 2257-2263.	4.5	30
26	Dynamic blue light-switchable protein patterns on giant unilamellar vesicles. Chemical Communications, 2018, 54, 948-951.	2.2	27
27	MaxSynBio: Wege zur Synthese einer Zelle aus nicht lebenden Komponenten. Angewandte Chemie, 2018, 130, 13566-13577.	1.6	27
28	Plasmonic Nanosensors Reveal a Height Dependence of MinDE Protein Oscillations on Membrane Features. Journal of the American Chemical Society, 2018, 140, 17901-17906.	6.6	26
29	Enhanced Biological Activity of BMPâ€2 Bound to Surfaceâ€Grafted Heparan Sulfate. Advanced Biology, 2017, 1, e1600041.	3.0	24
30	Independent Control over Multiple Cell Types in Space and Time Using Orthogonal Blue and Red Light Switchable Cell Interactions. Advanced Science, 2018, 5, 1800446.	5.6	21
31	Blue Light Switchable Cellâ€“Cell Interactions Provide Reversible and Spatiotemporal Control Towards Bottomâ€Up Tissue Engineering. Advanced Biology, 2019, 3, e1800310.	3.0	21
32	Bioluminescence-Triggered Photoswitchable Bacterial Adhesions Enable Higher Sensitivity and Dual-Readout Bacterial Biosensors for Mercury. ACS Sensors, 2020, 5, 2205-2210.	4.0	21
33	Cobalt-Cross-Linked, Redox-Responsive Spy Network Protein Hydrogels. ACS Macro Letters, 2019, 8, 773-778.	2.3	20
34	Selective Recognition of Americium by Peptide-Based Reagents. Inorganic Chemistry, 2011, 50, 7937-7939.	1.9	19
35	Toward Controlling the Formation, Degradation Behavior, and Properties of Hydrogels Synthesized by Azaâ€Michael Reactions. Macromolecular Chemistry and Physics, 2013, 214, 1865-1873.	1.1	18
36	Reversible Social Self-Sorting of Colloidal Cell-Mimics with Blue Light Switchable Proteins. ACS Synthetic Biology, 2018, 7, 1817-1824.	1.9	18

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37	Independent Blue and Red Light Triggered Narcissistic Selfâ€Sorting Selfâ€Assembly of Colloidal Particles. Small, 2019, 15, e1901801.	5.2	18
38	Mimicking Adhesion in Minimal Synthetic Cells. Advanced Biology, 2019, 3, e1800333.	3.0	17
39	Green light lithography: a general strategy to create active protein and cell micropatterns. Materials Horizons, 2019, 6, 1222-1229.	6.4	15
40	Orthogonal Blue and Red Light Controlled Cellâ€“Cell Adhesions Enable Sorting-out in Multicellular Structures. ACS Synthetic Biology, 2020, 9, 2076-2086.	1.9	15
41	Turning Cell Adhesions ON or OFF with High Spatiotemporal Precision Using the Green Light Responsive Protein CarH. Chemistry - A European Journal, 2020, 26, 9859-9863.	1.7	14
42	Metal-binding properties of Hpn from Helicobacter pylori and implications for the therapeutic activity of bismuth. Chemical Science, 2011, 2, 451-456.	3.7	13
43	Desmosine-Inspired Cross-Linkers for Hyaluronan Hydrogels. Scientific Reports, 2013, 3, 2043.	1.6	13
44	Special Issue on Bottomâ€Up Synthetic Biology. ChemBioChem, 2019, 20, 2533-2534.	1.3	13
45	Responsive Ionogel Surface with Renewable Antibiofouling Properties. Macromolecular Rapid Communications, 2019, 40, e1900395.	2.0	13
46	The spatial molecular pattern of integrin recognition sites and their immobilization to colloidal nanobeads determine Î±2Î²1 integrin-dependent platelet activation. Biomaterials, 2018, 167, 107-120.	5.7	12
47	Multifunctional streptavidinâ€“biotin conjugates with precise stoichiometries. Chemical Science, 2020, 11, 4422-4429.	3.7	12
48	Bacterial Photolithography: Patterning Escherichia coli Biofilms with High Spatial Control Using Photocleavable Adhesion Molecules. Advanced Biology, 2019, 3, e1800269.	3.0	11
49	Photoâ€ECM: A Blue Light Photoswitchable Synthetic Extracellular Matrix Protein for Reversible Control over Cellâ€“Matrix Adhesion. Advanced Biology, 2019, 3, 1800302.	3.0	9
50	Synthesis of Pyridine Acrylates and Acrylamides and Their Corresponding Pyridinium Ions as Versatile Cross-Linkers for Tunable Hydrogels. Synthesis, 2014, 46, 1243-1253.	1.2	8
51	Spatiotemporal Control Over Multicellular Migration Using Green Light Reversible Cellâ€“Cell Interactions. Advanced Biology, 2021, 5, e2000199.	1.4	7
52	Multistimuli Sensing Adhesion Unit for the Selfâ€Positioning of Minimal Synthetic Cells. Small, 2020, 16, 2002440.	5.2	5
53	Precise tetrafunctional streptavidin bioconjugates towards multifaceted drug delivery systems. Chemical Communications, 2020, 56, 9858-9861.	2.2	5
54	Engineering von Proteinen an OberflÃchen: Von komplementÃrer Charakterisierung zu MaterialoberflÃchen mit maÃŸgeschneiderten Funktionen. Angewandte Chemie, 2018, 130, 12806-12830.	1.6	3

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55	Generation and Characterization of a Polyclonal Human Reference Antibody to Measure Anti-Drug Antibody Titers in Patients with Fabry Disease. International Journal of Molecular Sciences, 2021, 22, 2680.	1.8	3
56	Towards applications of synthetic cells in nanotechnology. Current Opinion in Chemical Biology, 2022, 68, 102145.	2.8	3
57	Implementation of Blue Light Switchable Bacterial Adhesion for Design of Biofilms. Bio-protocol, 2018, 8, e2893.	0.2	1
58	Advances in Experimental Cell Biology and Cell-Material Interactions. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2013, , 87-105.	0.3	0