

Bernhard Schuster

List of Publications by Year in descending order

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72
papers

2,731
citations

172457

29
h-index

189892

50
g-index

78
all docs

78
docs citations

78
times ranked

2199
citing authors

#	ARTICLE	IF	CITATIONS
1	Functional incorporation of the insect odorant receptor coreceptor in tethered lipid bilayer nanoarchitectures. <i>Biosensors and Bioelectronics</i> , 2022, 203, 114024.	10.1	3
2	Quantitative Analysis of Core Lipid Production in <i>Methanothermobacter marburgensis</i> at Different Scales. <i>Bioengineering</i> , 2022, 9, 169.	3.5	2
3	Archaea Biotechnology. <i>Biotechnology Advances</i> , 2021, 47, 107668.	11.7	68
4	S-Layer Ultrafiltration Membranes. <i>Membranes</i> , 2021, 11, 275.	3.0	13
5	Electrochemical Biosensors Based on S-Layer Proteins. <i>Sensors</i> , 2020, 20, 1721.	3.8	27
6	Formation of planar hybrid lipid/polymer membranes anchored to an S-layer protein lattice by vesicle binding and rupture. <i>Soft Materials</i> , 2020, 18, 443-450.	1.7	4
7	Formation and characteristics of mixed lipid/polymer membranes on a crystalline surface-layer protein lattice. <i>Biointerphases</i> , 2020, 15, 011002.	1.6	6
8	Nanotechnology with S-layer Proteins. <i>Methods in Molecular Biology</i> , 2020, 2073, 195-218.	0.9	7
9	CRISPR-mediated gene silencing reveals involvement of the archaeal S-layer in cell division and virus infection. <i>Nature Communications</i> , 2019, 10, 4797.	12.8	35
10	Albumin-bound nanodiscs as delivery vehicle candidates: Development and characterization. <i>Biophysical Chemistry</i> , 2019, 251, 106178.	2.8	18
11	Environmental factors influence the <i>Haloferax volcanii</i> S-layer protein structure. <i>PLoS ONE</i> , 2019, 14, e0216863.	2.5	14
12	Bioinspired detection sensor based on functional nanostructures of S-proteins to target the folate receptors in breast cancer cells. <i>Sensors and Actuators B: Chemical</i> , 2018, 267, 224-230.	7.8	29
13	Physiology and methane productivity of <i>Methanobacterium thermaggregans</i> . <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 7643-7656.	3.6	20
14	S-Layer Protein-Based Biosensors. <i>Biosensors</i> , 2018, 8, 40.	4.7	34
15	Embedded Disposable Functionalized Electrochemical Biosensor with a 3D-Printed Flow Cell for Detection of Hepatic Oval Cells (HOCs). <i>Genes</i> , 2018, 9, 89.	2.4	31
16	Acoustic and hybrid 3D-printed electrochemical biosensors for the real-time immunodetection of liver cancer cells (HepG2). <i>Biosensors and Bioelectronics</i> , 2017, 94, 500-506.	10.1	64
17	Archaeal S-Layers: Overview and Current State of the Art. <i>Frontiers in Microbiology</i> , 2017, 8, 2597.	3.5	78
18	Emulsomes Meet S-layer Proteins: An Emerging Targeted Drug Delivery System. <i>Current Pharmaceutical Biotechnology</i> , 2015, 16, 392-405.	1.6	48

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19	Relevance of glycosylation of S-layer proteins for cell surface properties. <i>Acta Biomaterialia</i> , 2015, 19, 149-157.	8.3	32
20	S-layer fusion protein as a tool functionalizing emulsomes and CurcuEmulsomes for antibody binding and targeting. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 128, 132-139.	5.0	30
21	Probing Peptide and Protein Insertion in a Biomimetic S-Layer Supported Lipid Membrane Platform. <i>International Journal of Molecular Sciences</i> , 2015, 16, 2824-2838.	4.1	14
22	Inspired and stabilized by nature: ribosomal synthesis of the human voltage gated ion channel (VDAC) into 2D-protein-tethered lipid interfaces. <i>Biomaterials Science</i> , 2015, 3, 1406-1413.	5.4	28
23	Biomimetic interfaces based on S-layer proteins, lipid membranes and functional biomolecules. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140232.	3.4	39
24	S-layers: principles and applications. <i>FEMS Microbiology Reviews</i> , 2014, 38, 823-864.	8.6	325
25	The grab-and-drop protocol: a novel strategy for membrane protein isolation and reconstitution from single cells. <i>Analyst</i> , 2014, 139, 3296-3304.	3.5	10
26	S-layer Coated Emulsomes as Potential Nanocarriers. <i>Small</i> , 2013, 9, 2895-2904.	10.0	39
27	Characterization of CurcuEmulsomes: nanoformulation for enhanced solubility and delivery of curcumin. <i>Journal of Nanobiotechnology</i> , 2013, 11, 37.	9.1	89
28	Nanotechnology with S-Layer Proteins. <i>Methods in Molecular Biology</i> , 2013, 996, 153-175.	0.9	18
29	S-Layer Proteins. , 2013, , 507-568.		5
30	Insertion of an Anionic Analogue of the Antimicrobial Peptide PGLa in Lipid Architectures Including S-Layer Supported Lipid Bilayers. <i>Current Nanoscience</i> , 2013, 9, 262-270.	1.2	6
31	Liposome fusion on proteinaceous S-layer lattices triggered via ²⁺ -diketone ligandâ€“europium(iii) complex formation. <i>Soft Matter</i> , 2011, 7, 5514.	2.7	18
32	Multitechnique study on a recombinantly produced <i>Bacillus halodurans</i> laccase and an S-layer/laccase fusion protein. <i>Biointerphases</i> , 2011, 6, 63-72.	1.6	10
33	Nanobiotechnology with S-Layer Proteins as Building Blocks. <i>Progress in Molecular Biology and Translational Science</i> , 2011, 103, 277-352.	1.7	54
34	S-layer templated bioinspired synthesis of silica. <i>Colloids and Surfaces B: Biointerfaces</i> , 2010, 75, 565-572.	5.0	12
35	Prokaryotic Cell Wall Components: Structure and Biochemistry. , 2010, , 459-481.		14
36	Composite S-layer lipid structures. <i>Journal of Structural Biology</i> , 2009, 168, 207-216.	2.8	47

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37	Tailor-made crystalline structures of truncated S-layer proteins on heteropolysaccharides. <i>Soft Matter</i> , 2009, 5, 334-341.	2.7	12
38	Intact lipid vesicles reversibly tethered to a bacterial S-layer protein lattice. <i>Soft Matter</i> , 2009, 5, 325-333.	2.7	10
39	S-layer stabilized lipid membranes (Review). <i>Biointerphases</i> , 2008, 3, FA3-FA11.	1.6	47
40	Genetically Engineered S-Layer Proteins and S-Layer-Specific Heteropolysaccharides as Components of a Versatile Molecular Construction Kit for Applications in Nanobiotechnology. , 2008, , 55-86.		8
41	Polymeric Nanoparticles as Imaging Probes for Protein Kinase Activity in Cells. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 8744-8746.	13.8	14
42	S-layers as a tool kit for nanobiotechnological applications. <i>FEMS Microbiology Letters</i> , 2007, 267, 131-144.	1.8	169
43	S-Layers as a basic building block in a molecular construction kit. <i>FEBS Journal</i> , 2007, 274, 323-334.	4.7	162
44	Biomimetic S-Layer Supported Lipid Membranes. <i>Current Nanoscience</i> , 2006, 2, 143-152.	1.2	27
45	S-Layer Proteins as Key Components of a Versatile Molecular Construction Kit for Biomedical Nanotechnology. <i>Mini-Reviews in Medicinal Chemistry</i> , 2006, 6, 909-920.	2.4	30
46	Bacterial Surface Layer Proteins: a Simple but Versatile Biological Self-assembly System in Nature. , 2006, , 277-290.		9
47	Biomimetic Design of Nanopatterned Membranes. <i>Nanobiotechnology</i> , 2005, 1, 153-164.	1.2	21
48	Nanotechnology With S-Layer Proteins. , 2005, 300, 101-124.		31
49	S-Layers as Patterning Elements for Application in Nanobiotechnology. <i>Journal of Nanoscience and Nanotechnology</i> , 2005, 5, 1939-1953.	0.9	46
50	2D-Protein Crystals (S-Layers) as Support for Lipid Membranes. <i>Behavior Research Methods</i> , 2005, 1, 247-293.	4.0	14
51	S-Layers. , 2005, , 77-92.		4
52	Crystalline Bacterial Cell Surface Layers (S-Layers). , 2005, , .		5
53	S-Layer Proteins as Supporting Scaffoldings for Functional Lipid Membranes. <i>IEEE Transactions on Nanobioscience</i> , 2004, 3, 16-21.	3.3	25
54	Highly robust lipid membranes on crystalline S-layer supports investigated by electrochemical impedance spectroscopy. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2004, 1661, 154-165.	2.6	57

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55	Interplay of Phospholipase A2 with S-Layer-Supported Lipid Monolayers. <i>Langmuir</i> , 2003, 19, 3393-3397.	3.5	17
56	New Method for Generating Tetraether Lipid Membranes on Porous Supports. <i>Langmuir</i> , 2003, 19, 2392-2397.	3.5	48
57	The effect of hydrostatic pressure on S-layer-supported lipid membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2002, 1563, 29-34.	2.6	34
58	Single channel recordings of $\hat{I}\pm$ -hemolysin reconstituted in S-layer-supported lipid bilayers. <i>Bioelectrochemistry</i> , 2002, 55, 5-7.	4.6	44
59	A supramolecular construction kit based on surface-layer proteins. , 2002, , 57-61.		1
60	S-layer Ultrafiltration Membranes: A New Support for Stabilizing Functionalized Lipid Membranes. <i>Langmuir</i> , 2001, 17, 499-503.	3.5	72
61	Characterization and use of crystalline bacterial cell surface layers. <i>Progress in Surface Science</i> , 2001, 68, 231-278.	8.3	143
62	Molecular Nanotechnology and Nanobiotechnology with Two-Dimensional Protein Crystals (S-Layers). , 2001, , .		3
63	S-layer-supported lipid membranes. <i>Reviews in Molecular Biotechnology</i> , 2000, 74, 233-254.	2.8	61
64	Microphase Separation in Low Density Lipoproteins. <i>Journal of Biological Chemistry</i> , 1999, 274, 1334-1341.	3.4	30
65	Probing the stability of S-layer-supported planar lipid membranes. <i>European Biophysics Journal</i> , 1999, 28, 583-590.	2.2	46
66	The Effect of S-Layer Protein Adsorption and Crystallization on the Collective Motion of a Planar Lipid Bilayer Studied by Dynamic Light Scattering. <i>Biophysical Journal</i> , 1999, 77, 2066-2074.	0.5	38
67	Voltage clamp studies on S-layer-supported tetraether lipid membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1369, 51-60.	2.6	46
68	Self-assembled $\hat{I}\pm$ -hemolysin pores in an S-layer-supported lipid bilayer. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1370, 280-288.	2.6	72
69	Thermal Stability of Apolipoprotein B100 in Low-Density Lipoprotein Is Disrupted at Early Stages of Oxidation While Neutral Lipid Core Organization Is Conserved. <i>Biochemistry</i> , 1998, 37, 938-944.	2.5	16
70	<title>S-layers as patterning structures and supporting layers for biomimetic membranes</title>. , 1997, , .		3
71	VI. Applications of S-layers. <i>FEMS Microbiology Reviews</i> , 1997, 20, 151-175.	8.6	40
72	A Comparison of Structure and Thermal Behavior in Human Plasma Lipoprotein(a) and Low-Density Lipoprotein. <i>Calorimetry and Small-Angle X-ray Scattering. Biochemistry</i> , 1995, 34, 3795-3801.	2.5	18