

# Stefan Guldin

## List of Publications by Year in descending order

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72  
papers

3,238  
citations

218381

26  
h-index

149479

56  
g-index

109  
all docs

109  
docs citations

109  
times ranked

5286  
citing authors

#	ARTICLE	IF	CITATIONS
1	Block copolymer self-assembly for nanophotonics. <i>Chemical Society Reviews</i> , 2015, 44, 5076-5091.	18.7	328
2	Dye-Sensitized Solar Cell Based on a Three-Dimensional Photonic Crystal. <i>Nano Letters</i> , 2010, 10, 2303-2309.	4.5	310
3	Biomimetic layer-by-layer assembly of artificial nacre. <i>Nature Communications</i> , 2012, 3, 966.	5.8	303
4	A 3D Optical Metamaterial Made by Self-Assembly. <i>Advanced Materials</i> , 2012, 24, OP23-7.	11.1	288
5	Self-Cleaning Antireflective Optical Coatings. <i>Nano Letters</i> , 2013, 13, 5329-5335.	4.5	155
6	Lessons Learned: From Dye-Sensitized Solar Cells to All-Solid-State Hybrid Devices. <i>Advanced Materials</i> , 2014, 26, 4013-4030.	11.1	144
7	Control of Solid-State Dye-Sensitized Solar Cell Performance by Block-Copolymer-Directed TiO <sub>2</sub> Synthesis. <i>Advanced Functional Materials</i> , 2010, 20, 1787-1796.	7.8	131
8	Recent developments in Pickering emulsions for biomedical applications. <i>Current Opinion in Colloid and Interface Science</i> , 2019, 39, 173-189.	3.4	113
9	Charge Transport Limitations in Self-Assembled TiO <sub>2</sub> Photoanodes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 698-703.	2.1	111
10	Block copolymer directed synthesis of mesoporous TiO <sub>2</sub> for dye-sensitized solar cells. <i>Soft Matter</i> , 2009, 5, 134-139.	1.2	108
11	Improved conductivity in dye-sensitized solar cells through block-copolymer confined TiO <sub>2</sub> crystallisation. <i>Energy and Environmental Science</i> , 2011, 4, 225-233.	15.6	88
12	Tunable Mesoporous Bragg Reflectors Based on Block-Copolymer Self-Assembly. <i>Advanced Materials</i> , 2011, 23, 3664-3668.	11.1	88
13	Pore Filling of Spiro-OMeTAD in Solid-State Dye-Sensitized Solar Cells Determined Via Optical Reflectometry. <i>Advanced Functional Materials</i> , 2012, 22, 5010-5019.	7.8	78
14	Gyroid-Structured 3D ZnO Networks Made by Atomic Layer Deposition. <i>Advanced Functional Materials</i> , 2014, 24, 863-872.	7.8	68
15	Triblock-Terpolymer-Directed Self-Assembly of Mesoporous TiO <sub>2</sub> : High-Performance Photoanodes for Solid-State Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2012, 2, 676-682.	10.2	58
16	Ordered Mesoporous to Macroporous Oxides with Tunable Isomorphic Architectures: Solution Criteria for Persistent Micelle Templates. <i>Chemistry of Materials</i> , 2016, 28, 1653-1667.	3.2	57
17	Acoustic Immunosensing of Exosomes Using a Quartz Crystal Microbalance with Dissipation Monitoring. <i>Analytical Chemistry</i> , 2020, 92, 4082-4093.	3.2	55
18	Refractive indices of MBE-grown Al <sub>x</sub> Ga(1-x)As ternary alloys in the transparent wavelength region. <i>AIP Advances</i> , 2021, 11, .	0.6	52

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19	Block Copolymer Directed Metamaterials and Metasurfaces for Novel Optical Devices. <i>Advanced Optical Materials</i> , 2021, 9, 2100175.	3.6	47
20	Monolithic route to efficient dye-sensitized solar cells employing diblock copolymers for mesoporous TiO <sub>2</sub> . <i>Journal of Materials Chemistry</i> , 2010, 20, 1261-1268.	6.7	40
21	Humidity-Tolerant Ultrathin NiO Gas-Sensing Films. <i>ACS Sensors</i> , 2020, 5, 1389-1397.	4.0	38
22	Layer-by-Layer Formation of Block Copolymer-Derived TiO <sub>2</sub> for Solid-State Dye-Sensitized Solar Cells. <i>Small</i> , 2012, 8, 432-440.	5.2	35
23	Ordered mesoporous titania from highly amphiphilic block copolymers: tuned solution conditions enable highly ordered morphologies and ultra-large mesopores. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11478-11492.	5.2	35
24	Robust Operation of Mesoporous Antireflective Coatings under Variable Ambient Conditions. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 10315-10321.	4.0	33
25	Structural Characterization of Mesoporous Thin Film Architectures: A Tutorial Overview. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 5195-5208.	4.0	33
26	All-Silicone-based Distributed Bragg Reflectors for Efficient Flexible Luminescent Solar Concentrators. <i>Nano Energy</i> , 2020, 70, 104507.	8.2	28
27	High-Surface-Area Porous Platinum Electrodes for Enhanced Charge Transfer. <i>Advanced Energy Materials</i> , 2014, 4, 1400510.	10.2	26
28	A Versatile AuNP Synthetic Platform for Decoupled Control of Size and Surface Composition. <i>Langmuir</i> , 2018, 34, 6820-6826.	1.6	26
29	Nanostructure Dependence of TaNb <sub>2</sub> O <sub>5</sub> Intercalation Pseudocapacitance Probed Using Tunable Isomorphic Architectures. <i>Advanced Functional Materials</i> , 2021, 31, .	7.8	24
30	High-Performance Planar Thin Film Thermochromic Window via Dynamic Optical Impedance Matching. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 8140-8145.	4.0	22
31	Information Entropy as a Reliable Measure of Nanoparticle Dispersity. <i>Chemistry of Materials</i> , 2020, 32, 3701-3706.	3.2	21
32	Fluorinated Metal-Organic Coatings with Selective Wettability. <i>Journal of the American Chemical Society</i> , 2021, 143, 9972-9981.	6.6	21
33	Low temperature crystallisation of mesoporous TiO <sub>2</sub> . <i>Nanoscale</i> , 2013, 5, 10518.	2.8	19
34	Phase behaviour and applications of a binary liquid mixture of methanol and a thermotropic liquid crystal. <i>Soft Matter</i> , 2018, 14, 4615-4620.	1.2	17
35	Freestanding Ultrathin Nanoparticle Membranes Assembled at Transient Liquid-Liquid Interfaces. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600191.	1.9	16
36	A Toolkit to Quantify Target Compounds in Thin-Layer-Chromatography Experiments. <i>Journal of Chemical Education</i> , 2018, 95, 2191-2196.	1.1	16

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37	Photocatalytic Template Removal by Non-Ozone-Generating UV Irradiation for the Fabrication of Well-Defined Mesoporous Inorganic Coatings. ACS Applied Materials & Interfaces, 2019, 11, 19308-19314.	4.0	16
38	Application of the Spatial Distribution Function to Colloidal Ordering. Langmuir, 2019, 35, 16605-16611.	1.6	15
39	Dual-Mode and Label-Free Detection of Exosomes from Plasma Using an Electrochemical Quartz Crystal Microbalance with Dissipation Monitoring. Analytical Chemistry, 2022, 94, 2465-2475.	3.2	14
40	Tuning Pore Dimensions of Mesoporous Inorganic Films by Homopolymer Swelling. Langmuir, 2019, 35, 14074-14082.	1.6	12
41	Multidimensional Characterization of Mixed Ligand Nanoparticles Using Small Angle Neutron Scattering. Chemistry of Materials, 2019, 31, 6750-6758.	3.2	12
42	Solvent Vapor Annealing for Controlled Pore Expansion of Block Copolymer-Assembled Inorganic Mesoporous Films. Langmuir, 2022, 38, 3297-3304.	1.6	11
43	pH-Mediated molecular differentiation for fluorimetric quantification of chemotherapeutic drugs in human plasma. Chemical Communications, 2018, 54, 1485-1488.	2.2	10
44	Comparative characterisation of non-monodisperse gold nanoparticle populations by X-ray scattering and electron microscopy. Nanoscale, 2020, 12, 12007-12013.	2.8	10
45	Supramolecular packing of alkyl substituted Janus face all- <i>cis</i> 2,3,4,5,6-pentafluorocyclohexyl motifs. Chemical Science, 2021, 12, 9712-9719.	3.7	10
46	Fractionation of block copolymers for pore size control and reduced dispersity in mesoporous inorganic thin films. Nanoscale, 2020, 12, 18455-18462.	2.8	9
47	Temperature-induced liquid crystal microdroplet formation in a partially miscible liquid mixture. Soft Matter, 2021, 17, 947-954.	1.2	9
48	Controlled Porosity in Ferroelectric BaTiO <sub>3</sub> Photoanodes. ACS Applied Materials & Interfaces, 2022, 14, 13147-13157.	4.0	9
49	Inorganic Nanoarchitectures by Organic Self-Assembly. Springer Theses, 2013, , .	0.0	8
50	Use of a New Non-Pyrophoric Liquid Aluminum Precursor for Atomic Layer Deposition. Materials, 2019, 12, 1429.	1.3	6
51	Microfluidics of binary liquid mixtures with temperature-dependent miscibility. Molecular Systems Design and Engineering, 2020, 5, 358-365.	1.7	6
52	Controlled synthesis of SPION@SiO <sub>2</sub> nanoparticles using design of experiments. Materials Advances, 2022, 3, 6007-6018.	2.6	6
53	Chemical vapour deposition (CVD) of nickel oxide using the novel nickel dialkylaminoalkoxide precursor [Ni(dmamp) <sub>2</sub> ] (dmamp = 2-dimethylamino-2-methyl-1-propanolate). RSC Advances, 2021, 11, 22199-22205.	1.7	5
54	Controlling the coassembly of highly amphiphilic block copolymers with a hydrolytic sol by solvent exchange. RSC Advances, 2015, 5, 22499-22502.	1.7	4

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55	Probing the interaction of nanoparticles with small molecules in real time via quartz crystal microbalance monitoring. <i>Nanoscale</i> , 2019, 11, 11107-11113.	2.8	4
56	Faster Intercalation Pseudocapacitance Enabled by Adjustable Amorphous Titania where Tunable Isomorphic Architectures Reveal Accelerated Lithium Diffusivity. <i>Batteries and Supercaps</i> , 0, , .	2.4	4
57	Self-assembly as a design tool for the integration of photonic structures into excitonic solar cells. <i>Proceedings of SPIE</i> , 2011, , .	0.8	3
58	Optical Aspects of Thin Films and Interfaces. <i>Springer Theses</i> , 2013, , 19-32.	0.0	3
59	A combined experimental and theoretical study into the performance of multilayer vanadium dioxide nanocomposites for energy saving applications. , 2018, , .		3
60	Mesoporous Bragg reflectors: block-copolymer self-assembly leads to building blocks with well defined continuous pores and high control over optical properties. , 2011, , .		2
61	Tunable Mesoporous Bragg Reflectors Based on Block Copolymer Self-Assembly. <i>Springer Theses</i> , 2013, , 117-127.	0.0	2
62	Noble metal nanoparticles with anisotropy in shape and surface functionality for biomedical applications. , 2018, , 313-333.		2
63	Soft matter design principles for inorganic photonic nanoarchitectures in photovoltaics, colorimetric sensing, and self-cleaning antireflective coatings. <i>Proceedings of SPIE</i> , 2014, , .	0.8	1
64	Synthetic guidelines for the precision engineering of gold nanoparticles. <i>Current Opinion in Chemical Engineering</i> , 2020, 29, 59-66.	3.8	1
65	Optimising Light Source Positioning for Even and Flux-Efficient Illumination. <i>Journal of Open Source Software</i> , 2019, 4, 1392.	2.0	1
66	Using nanocavity plasmons to improve solar cell efficiency. , 2009, , .		0
67	Block Copolymer-Induced Structure Control for Inorganic Nanomaterials. <i>Springer Theses</i> , 2013, , 71-85.	0.0	0
68	Crystal Growth in Block Copolymer-Derived Mesoporous TiO <sub>2</sub> . <i>Springer Theses</i> , 2013, , 87-100.	0.0	0
69	Thin Film Processing of Block Copolymer Structure-Directed Inorganic Materials. <i>Springer Theses</i> , 2013, , 101-115.	0.0	0
70	Dye-Sensitised Solar Cell Based on a Three-Dimensional Photonic Crystal. <i>Springer Theses</i> , 2013, , 129-140.	0.0	0
71	Pseudocapacitance: Nanostructure Dependence of Ta <sub>2</sub> O <sub>5</sub> Intercalation Pseudocapacitance Probed Using Tunable Isomorphic Architectures ( <i>Adv. Funct. Mater.</i> 1/2021). <i>Advanced Functional Materials</i> , 2021, 31, 2170005.	7.8	0
72	Cover Feature: Faster Intercalation Pseudocapacitance Enabled by Adjustable Amorphous Titania Where Tunable Isomorphic Architectures Reveal Accelerated Lithium Diffusivity ( <i>Batteries &amp; Supercaps</i> )	2.4	4