

Stefan Kowarik

List of Publications by Year in descending order

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51
papers

3,332
citations

218677

26
h-index

214800

47
g-index

51
all docs

51
docs citations

51
times ranked

4966
citing authors

#	ARTICLE	IF	CITATIONS
1	Step-by-Step Route for the Synthesis of Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2007, 129, 15118-15119.	13.7	811
2	Biomolecular Recognition Based on Single Gold Nanoparticle Light Scattering. <i>Nano Letters</i> , 2003, 3, 935-938.	9.1	711
3	Real-Time Observation of Structural and Orientational Transitions during Growth of Organic Thin Films. <i>Physical Review Letters</i> , 2006, 96, 125504.	7.8	199
4	Tuning the Work Function of Polar Zinc Oxide Surfaces using Modified Phosphonic Acid Self-Assembled Monolayers. <i>Advanced Functional Materials</i> , 2014, 24, 7014-7024.	14.9	160
5	Impact of White Light Illumination on the Electronic and Chemical Structures of Mixed Halide and Single Crystal Perovskites. <i>Advanced Optical Materials</i> , 2017, 5, 1700139.	7.3	136
6	Optical properties of pentacene and perfluoropentacene thin films. <i>Journal of Chemical Physics</i> , 2007, 127, 194705.	3.0	131
7	Organic molecular beam deposition: fundamentals, growth dynamics, and <i>in situ</i> studies. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 184005.	1.8	97
8	Molecular Reorganization in Organic Field-Effect Transistors and Its Effect on Two-Dimensional Charge Transport Pathways. <i>ACS Nano</i> , 2013, 7, 1257-1264.	14.6	79
9	Structure, morphology, and growth dynamics of perfluoropentacene thin films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008, 2, 120-122.	2.4	67
10	Fiber Optic Train Monitoring with Distributed Acoustic Sensing: Conventional and Neural Network Data Analysis. <i>Sensors</i> , 2020, 20, 450.	3.8	62
11	Band-offset engineering in organic/inorganic semiconductor hybrid structures. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11642.	2.8	57
12	Energy-dispersive X-ray reflectivity and GID for real-time growth studies of pentacene thin films. <i>Thin Solid Films</i> , 2007, 515, 5606-5610.	1.8	53
13	Formation of Carboxy- and Amide-Terminated Alkyl Monolayers on Silicon(111) Investigated by ATR-FTIR, XPS, and X-ray Scattering: Construction of Photoswitchable Surfaces. <i>Langmuir</i> , 2013, 29, 11758-11769.	3.5	48
14	Anomalous roughness evolution of rubrene thin films observed in real time during growth. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 1834.	2.8	45
15	Light-Controlled π -Molecular Zippers-Based on Azobenzene Main Chain Polymers. <i>Macromolecules</i> , 2015, 48, 1531-1537.	4.8	43
16	Real-time X-ray diffraction measurements of structural dynamics and polymorphism in diindenoperylene growth. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 95, 233-239.	2.3	42
17	Real-time dynamic strain sensing in optical fibers using artificial neural networks. <i>Optics Express</i> , 2019, 27, 7405.	3.4	35
18	Crystal Grain Orientation in Organic Homo- and Heteroepitaxy of Pentacene and Perfluoropentacene Studied with X-ray Spectromicroscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13061-13067.	3.1	34

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19	Cooperative Switching in Nanofibers of Azobenzene Oligomers. <i>Scientific Reports</i> , 2016, 6, 25605.	3.3	31
20	Light Controls Polymorphism in Thin Films of Sexithiophene. <i>Crystal Growth and Design</i> , 2015, 15, 1319-1324.	3.0	30
21	Coverage dependent adsorption dynamics in hyperthermal organic thin film growth. <i>Journal of Chemical Physics</i> , 2009, 130, 124701.	3.0	29
22	Thin film growth studies using time-resolved x-ray scattering. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 043003.	1.8	29
23	Fast fitting of reflectivity data of growing thin films using neural networks. <i>Journal of Applied Crystallography</i> , 2019, 52, 1342-1347.	4.5	29
24	Artificial neural networks for quantitative online NMR spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 4447-4459.	3.7	27
25	Near-Field Surface Plasmon Excitation on Structured Gold Films. <i>Nano Letters</i> , 2003, 3, 3-7.	9.1	26
26	<i>In situ</i> X-ray scattering studies of OFET interfaces. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 461-474.	1.8	26
27	Lattice Matching as the Determining Factor for Molecular Tilt and Multilayer Growth Mode of the Nanographene Hexa-peri-hexabenzocoronene. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 21484-21493.	8.0	26
28	Phase separation and electrical switching between two isosymmetric multiferroic phases in tensile strained BiFeO_3 films. <i>Physical Review B</i> , 2014, 89, .	3.2	26
29	Carbazole-Phenylbenzotriazole Copolymers as Absorber Material in Organic Solar Cells. <i>Macromolecules</i> , 2013, 46, 3870-3878.	4.8	25
30	Dewetting of an Organic Semiconductor Thin Film Observed in Real-time. <i>Advanced Engineering Materials</i> , 2009, 11, 291-294.	3.5	24
31	Observing hydrogen silsesquioxane crosslinking with broadband CARS. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 770-774.	2.5	23
32	Molecular structure of the substrate-induced thin-film phase of tetracene. <i>Journal of Chemical Physics</i> , 2018, 149, 144701.	3.0	23
33	Diffusion and nucleation in multilayer growth of PTCDI-C8 studied with <i>in situ</i> X-ray growth oscillations and real-time small angle X-ray scattering. <i>Journal of Chemical Physics</i> , 2017, 146, 052803.	3.0	19
34	Thin-Film Texture and Optical Properties of Donor/Acceptor Complexes. Diindenoperylene/F6TCNNQ vs Alpha-Sexithiophene/F6TCNNQ. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18705-18714.	3.1	17
35	Strain-gradient-induced magnetic anisotropy in straight-stripe mixed-phase bismuth ferrites: Insight into flexomagnetism. <i>Physical Review B</i> , 2017, 96, .	3.2	14
36	Neural network analysis of neutron and x-ray reflectivity data: pathological cases, performance and perspectives. <i>Machine Learning: Science and Technology</i> , 2021, 2, 045003.	5.0	13

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37	Comparative study of the growth of sputtered aluminum oxide films on organic and inorganic substrates. <i>Thin Solid Films</i> , 2008, 516, 6377-6381.	1.8	12
38	Polymorphism in $\hat{\Gamma}$ -sexithiophene crystals: relative stability and transition path. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 14603-14609.	2.8	11
39	Thermally driven smoothening of molecular thin films: Structural transitions in n-alkane layers studied in real-time. <i>Journal of Chemical Physics</i> , 2015, 143, 164707.	3.0	9
40	Structure of <i>p</i> -Sexiphenyl Nanocrystallites in ZnO Revealed by High-Resolution Transmission Electron Microscopy. <i>Crystal Growth and Design</i> , 2016, 16, 2789-2794.	3.0	9
41	Machine learning predictions of surface migration barriers in nucleation and non-equilibrium growth. <i>Communications Materials</i> , 2021, 2, .	6.9	8
42	Miniaturized Bragg-grating couplers for SiN-photonics crystal slabs. <i>Optics Express</i> , 2015, 23, 9803.	3.4	7
43	Direct Photoalignment and Optical Patterning of Molecular Thin Films. <i>Advanced Materials</i> , 2017, 29, 1604382.	21.0	7
44	Quantifying reaction spread and x-ray exposure sensitivity in hydrogen silsesquioxane latent resist patterns with x-ray spectromicroscopy. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 1304-1313.	1.2	6
45	Thermally activated post-growth dewetting of fullerene C ₆₀ on mica. <i>Physica Status Solidi - Rapid Research Letters</i> , 2015, 9, 646-651.	2.4	6
46	Spiro-Bridged Ladder-Type Oligo(<i>p</i> -phenylene)s: Fine Tuning Solid State Structure and Optical Properties. <i>Advanced Functional Materials</i> , 2017, 27, 1704077.	14.9	5
47	Artificial neural networks and data fusion enable concentration predictions for inline process analytics. , 2022, 1, 405-412.		3
48	Train monitoring using distributed fiber optic acoustic sensing. , 2021, , .		1
49	Artificial Intelligence for Mass Spectrometry and Nuclear Magnetic Resonance Spectroscopy Using a Novel Data Augmentation Method. <i>IEEE Transactions on Emerging Topics in Computing</i> , 2022, 10, 87-98.	4.6	1
50	In Situ X-Ray Scattering Studies of OFET Interfaces. , 0, , 161-187.		0
51	Artificial Intelligence for Mass Spectrometry and Nuclear Magnetic Resonance Spectroscopy. , 2021, , .		0