Horst-Günter Rubahn

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Structure-based drug designing and immunoinformatics approach for SARS-CoV-2. Science Advances, 2020, 6, eabb8097.	4.7	138
2	Dynamics of Photoinduced Degradation of Perovskite Photovoltaics: From Reversible to Irreversible Processes. ACS Applied Energy Materials, 2018, 1, 799-806.	2.5	85
3	Reconsidering figures of merit for performance and stability of perovskite photovoltaics. Energy and Environmental Science, 2018, 11, 739-743.	15.6	79
4	Photodeposition of Au Nanoclusters for Enhanced Photocatalytic Dye Degradation over TiO ₂ Thin Film. ACS Applied Materials & Interfaces, 2020, 12, 14983-14992.	4.0	75
5	Diamond like carbon nanocomposites with embedded metallic nanoparticles. Reports on Progress in Physics, 2018, 81, 024501.	8.1	45
6	Crystalline Molybdenum Oxide Thin-Films for Application as Interfacial Layers in Optoelectronic Devices. ACS Applied Materials & Interfaces, 2017, 9, 7717-7724.	4.0	44
7	Light-emitting organic nanoaggregates from functionalized p-quaterphenylenes. Soft Matter, 2008, 4, 277-285.	1.2	42
8	Highly Stable Monocrystalline Silver Clusters for Plasmonic Applications. Langmuir, 2017, 33, 6062-6070.	1.6	40
9	Tuning the optoelectronic properties of amorphous MoOx films by reactive sputtering. Applied Physics Letters, 2015, 106, .	1.5	35
10	Biomimetic Approach to Inhibition of Photooxidation in Organic Solar Cells Using Beta-Carotene as an Additive. ACS Applied Materials & Interfaces, 2019, 11, 41570-41579.	4.0	34
11	The influence of electrical effects on device performance of organic solar cells with nano-structured electrodes. Scientific Reports, 2017, 7, 5300.	1.6	26
12	Crystalline Molybdenum Oxide Layers as Efficient and Stable Hole Contacts in Organic Photovoltaic Devices. ACS Applied Energy Materials, 2019, 2, 420-427.	2.5	26
13	Cauliflower-like CeO ₂ –TiO ₂ hybrid nanostructures with extreme photocatalytic and self-cleaning properties. Nanoscale, 2019, 11, 9840-9844.	2.8	24
14	Efficient Rollâ€On Transfer Technique for Wellâ€Aligned Organic Nanofibers. Small, 2011, 7, 2460-2463.	5.2	23
15	Long-term stabilization of organic solar cells using UV absorbers. Journal Physics D: Applied Physics, 2016, 49, 125604.	1.3	23
16	Long-term stabilization of organic solar cells using hydroperoxide decomposers as additives. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	23
17	Electrospun ZnO nanofiber interlayers for enhanced performance of organic photovoltaic devices. Solar Energy, 2020, 197, 311-316.	2.9	23
18	4P-NPD ultra-thin films as efficient exciton blocking layers in DBP/C ₇₀ based organic solar cells. Journal Physics D: Applied Physics, 2017, 50, 385101.	1.3	21

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19	Photocatalytic Growth of Hierarchical Au Needle Clusters on Highly Active TiO ₂ Thin Film. Advanced Materials Interfaces, 2018, 5, 1800465.	1.9	21
20	Degradation pathways in standard and inverted DBP-C70 based organic solar cells. Scientific Reports, 2019, 9, 4024.	1.6	20
21	2D materials for organic and perovskite photovoltaics. Nano Energy, 2022, 94, 106833.	8.2	20
22	Degradation Behavior of Scalable Nonfullerene Organic Solar Cells Assessed by Outdoor and Indoor ISOS Stability Protocols. Energy Technology, 2020, 8, 2000295.	1.8	19
23	Nonlinear Optical Response of SbSI Nanorods Dominated with Direct Band Gaps. Journal of Physical Chemistry C, 2021, 125, 15441-15447.	1.5	18
24	Plasmonic metasurface Luneburg lens. Photonics Research, 2019, 7, 1112.	3.4	16
25	Work function mapping of MoOx thin-films for application in electronic devices. Ultramicroscopy, 2017, 183, 99-103.	0.8	15
26	Meat and fish freshness evaluation by functionalized cantilever-based biosensors. Microsystem Technologies, 2020, 26, 867-871.	1.2	15
27	Organic nanofibers integrated by transfer technique in field-effect transistor devices. Nanoscale Research Letters, 2011, 6, 319.	3.1	14
28	Surface plasmon polariton generation by light scattering off aligned organic nanofibers. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 249.	0.9	14
29	Current Matching in Multifold DBP/C70 Organic Solar Cells With Open-Circuit Voltages of up to 6.44 V. IEEE Journal of Photovoltaics, 2017, 7, 1319-1323.	1.5	13
30	Tailoring of Silver Nanoparticle Size Distributions in Hydrogenated Amorphous Diamond‣ike Carbon Nanocomposite Thin Films by Direct Femtosecond Laser Interference Patterning. Advanced Engineering Materials, 2020, 22, 1900951.	1.6	12
31	Sputter-Deposited Titanium Oxide Layers as Efficient Electron Selective Contacts in Organic Photovoltaic Devices. ACS Applied Energy Materials, 2020, 3, 253-259.	2.5	12
32	Local excitation of surface plasmon polaritons by second-harmonic generation in crystalline organic nanofibers. Optics Express, 2012, 20, 16715.	1.7	11
33	Surface plasmon polariton excitation by second harmonic generation in single organic nanofibers. Optics Express, 2015, 23, 16356.	1.7	11
34	Bias-Dependent Dynamics of Degradation and Recovery in Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 6562-6573.	2.5	11
35	ITO with embedded silver grids as transparent conductive electrodes for large area organic solar cells. Nanotechnology, 2017, 28, 405303.	1.3	10
36	Efficient Coupling of Single Organic Molecules to Channel Plasmon Polaritons Supported by V-Grooves in Monocrystalline Gold. ACS Photonics, 2020, 7, 2211-2218.	3.2	10

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37	Surface plasmon polariton dispersion relation at organic/dielectric/metal interfaces. Optics Communications, 2014, 331, 77-81.	1.0	8
38	Optimizing Piezoelectric Cantilever Design for Electronic Nose Applications. Chemosensors, 2020, 8, 114.	1.8	8
39	Breath Biomarkers as Disease Indicators: Sensing Techniques Approach for Detecting Breath Gas and COVID-19. Chemosensors, 2022, 10, 167.	1.8	8
40	Micro-cantilevers for optical sensing of biogenic amines. Microsystem Technologies, 2018, 24, 363-369.	1.2	7
41	Synergistic effect of carotenoid and silicone-based additives for photooxidatively stable organic solar cells with enhanced elasticity. Journal of Materials Chemistry C, 2021, 9, 11838-11850.	2.7	7
42	Dibenzo-tetraphenyl diindeno perylene as hole transport layer for high-bandgap perovskite solar cells. Emergent Materials, 2020, 3, 109-116.	3.2	6
43	Excitation of surface plasmon polaritons by fluorescent light from organic nanofibers. Optics Communications, 2017, 402, 630-634.	1.0	5
44	Anomalous Anisotropy in Superconducting Nanodiamond Films Induced by Crystallite Geometry. Physical Review Applied, 2019, 12, .	1.5	5
45	Height patterning of nanostructured surfaces with a focused helium ion beam: a precise and gentle non-sputtering method. Nanotechnology, 2020, 31, 145303.	1.3	5
46	Superconductor-insulator transition driven by pressure-tuned intergrain coupling in nanodiamond films. Physical Review Materials, 2019, 3, .	0.9	5
47	Nanoengineered Antiviral Fibrous Arrays with Rose-Thorn-Inspired Architectures. , 2021, 3, 1566-1571.		5
48	On-substrate fabrication of porous Al2O3 templates with tunable pore diameters and interpore distances. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	4
49	Photo-induced degradation mechanisms in 4P-NPD thin films. Organic Electronics, 2018, 63, 114-119.	1.4	4
50	Surface Modification Enabling Reproducible Cantilever Functionalization for Industrial Gas Sensors. Sensors, 2021, 21, 6041.	2.1	4
51	On-chip immunomagnetic separation of bacteria by in-flow dynamic manipulation of paramagnetic beads. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	2
52	Functionalizing micro-cantilevers for meat degradation measurements. , 2016, , .		2
53	Out-of-plane surface patterning by subsurface processing of polymer substrates with focused ion beams. Beilstein Journal of Nanotechnology, 2020, 11, 1693-1703.	1.5	2
54	Development of an Immunomagnetic Separation Method for Viable <i>Salmonella</i> Typhimurium Detected by Flow Cytometry. OnLine Journal of Biological Sciences, 2016, 16, 165-174.	0.2	1

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55	Functionalized Surfaces as a Tool for Virus Sensing: A Demonstration of Human mastadenovirus Detection in Environmental Waters. Chemosensors, 2021, 9, 19.	1.8	1
56	Formation of Si Nanorods and Discrete Nanophases by Axial Diffusion of Si from Substrate into Au and AuPt Nanoalloy Nanorods. Nanomaterials, 2020, 10, 68.	1.9	0
57	Additive-Assisted Stabilization Against Photooxidation of Organic and Hybrid Solar Cells. , 2022, , 169-193.		0
58	Para-hexaphenylene (p-6P) nanofibers grown on a silver surface for polarization-insensitive surface plasmon polariton excitation. Optics Communications, 2022, 511, 127995.	1.0	0