

Simon Hettler

List of Publications by Year in descending order

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40
papers

400
citations

759233

12
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839539

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41
docs citations

41
times ranked

375
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon contamination in scanning transmission electron microscopy and its impact on phase-plate applications. <i>Micron</i> , 2017, 96, 38-47.	2.2	35
2	Shelling with MoS ₂ : Functional CuS@MoS ₂ hybrids as electrocatalysts for the oxygen reduction and hydrogen evolution reactions. <i>Chemical Engineering Journal</i> , 2021, 420, 129771.	12.7	35
3	Charging of carbon thin films in scanning and phase-plate transmission electron microscopy. <i>Ultramicroscopy</i> , 2018, 184, 252-266.	1.9	29
4	Low affinity binding of plasma proteins to lipid-coated quantum dots as observed by in situ fluorescence correlation spectroscopy. <i>Nanoscale</i> , 2015, 7, 9980-9984.	5.6	27
5	Phase plates in the transmission electron microscope: operating principles and applications. <i>Microscopy (Oxford, England)</i> , 2021, 70, 75-115.	1.5	24
6	In-Focus Electrostatic Zach Phase Plate Imaging for Transmission Electron Microscopy with Tunable Phase Contrast of Frozen Hydrated Biological Samples. <i>Microscopy and Microanalysis</i> , 2014, 20, 175-183.	0.4	21
7	Contrast of Backscattered Electron SEM Images of Nanoparticles on Substrates with Complex Structure. <i>Scanning</i> , 2017, 2017, 1-12.	1.5	21
8	Computer simulations analysis for determining the polarity of charge generated by high energy electron irradiation of a thin film. <i>Micron</i> , 2017, 100, 10-22.	2.2	16
9	In-situ reduction by Joule heating and measurement of electrical conductivity of graphene oxide in a transmission electron microscope. <i>2D Materials</i> , 2021, 8, 031001.	4.4	16
10	Nanotubes from Ternary WS ₂ (1-x)Se _{2x} Alloys: Stoichiometry Modulated Tunable Optical Properties. <i>Journal of the American Chemical Society</i> , 2022, 144, 10530-10542.	13.7	15
11	Thin-Film Phase Plates for Transmission Electron Microscopy Fabricated from Metallic Glasses. <i>Microscopy and Microanalysis</i> , 2016, 22, 955-963.	0.4	14
12	Charging of electron beam irradiated amorphous carbon thin films at liquid nitrogen temperature. <i>Ultramicroscopy</i> , 2019, 196, 161-166.	1.9	14
13	On the role of inelastic scattering in phase-plate transmission electron microscopy. <i>Ultramicroscopy</i> , 2015, 155, 27-41.	1.9	13
14	Improving Fabrication and Application of Zach Phase Plates for Phase-Contrast Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2012, 18, 1010-1015.	0.4	12
15	High-resolution transmission electron microscopy with an electrostatic Zach phase plate. <i>New Journal of Physics</i> , 2016, 18, 053005.	2.9	12
16	Investigation of hole-free phase plate performance in transmission electron microscopy under different operation conditions by experiments and simulations. <i>Advanced Structural and Chemical Imaging</i> , 2019, 5, .	4.0	10
17	YS-TaS ₂ and YxLa1-xS-TaS ₂ (0 ≤ x ≤ 1) Nanotubes: A Family of Misfit Layered Compounds. <i>ACS Nano</i> , 2020, 14, 5445-5458.	14.6	10
18	Asymmetric misfit nanotubes: Chemical affinity outwits the entropy at high-temperature solid-state reactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	9

#	ARTICLE	IF	CITATIONS
19	Phase masks for electron microscopy fabricated by thermal scanning probe lithography. <i>Micron</i> , 2019, 127, 102753.	2.2	8
20	A nanocrystalline Hilbert phase-plate for phase-contrast transmission electron microscopy. <i>Ultramicroscopy</i> , 2014, 139, 29-37.	1.9	7
21	Oxide-free aC/Zr 0.65 Al 0.075 Cu 0.275 /aC phase plates for transmission electron microscopy. <i>Ultramicroscopy</i> , 2018, 189, 39-45.	1.9	7
22	Quasi non-diffractive electron Bessel beams using direct phase masks with applications in electron microscopy. <i>New Journal of Physics</i> , 2019, 21, 033007.	2.9	7
23	Fabrication of phase masks from amorphous carbon thin films for electron-beam shaping. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 1290-1302.	2.8	4
24	Inelastic Phase Contrast Using Electrostatic Zach Phase Plates. <i>Microscopy and Microanalysis</i> , 2014, 20, 216-217.	0.4	3
25	Physical Phase Plates for Cryo-Electron Microscopy of Biological Specimens: Comparison of Hole-Free Phase Plates and Zach Electrostatic Phase Plates. <i>Microscopy and Microanalysis</i> , 2018, 24, 892-893.	0.4	3
26	Analyzing contrast in cryo-transmission electron microscopy: Comparison of electrostatic Zach phase plates and hole-free phase plates. <i>Ultramicroscopy</i> , 2020, 218, 113086.	1.9	3
27	Comparative image simulations for phase-plate transmission electron microscopy. <i>Ultramicroscopy</i> , 2021, 227, 113319.	1.9	3
28	Tunable phase contrast of vitrified macromolecular complexes by an obstruction minimized electrostatic phase plate. <i>Microscopy and Microanalysis</i> , 2012, 18, 468-469.	0.4	2
29	Electrostatic Zach phase plates: optimization of properties and applications. <i>Microscopy and Microanalysis</i> , 2012, 18, 466-467.	0.4	2
30	Application of Zach Phase Plates for Phase-Contrast Transmission Electron Microscopy: Status and Future Experiments. <i>Microscopy and Microanalysis</i> , 2014, 20, 214-215.	0.4	2
31	A Nanocrystalline Hilbert Phase-Plate for Phase-Contrast Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2014, 20, 236-237.	0.4	2
32	Thin-Film-Based Phase Plates for Transmission Electron Microscopy Fabricated From Metallic Glasses. <i>Microscopy and Microanalysis</i> , 2015, 21, 1575-1576.	0.4	2
33	High-Resolution Transmission Electron Microscopy With Zach Phase Plate. <i>Microscopy and Microanalysis</i> , 2015, 21, 1581-1582.	0.4	2
34	The Role of Secondary Electron Emission in the Charging of Thin-Film Phase Plates. <i>Microscopy and Microanalysis</i> , 2016, 22, 64-65.	0.4	2
35	Electrostatic Zach Phase Plates for Transmission Electron Microscopy: Status and Future Investigations. <i>Microscopy and Microanalysis</i> , 2017, 23, 828-829.	0.4	2
36	Carbonâ€filmâ€based Zernike phase plates with smooth thickness gradient for phaseâ€contrast transmission electron microscopy with reduced fringing artifacts. <i>Journal of Microscopy</i> , 2022, , .	1.8	2

#	ARTICLE	IF	CITATIONS
37	Strontium deficient Sr _x CoO ₂ -CoO ₂ nanotubes as a high ampacity and high conductivity material. Materials Horizons, 0, , .	12.2	2
38	A Nanocrystalline Hilbert-Phase Plate for Phase-Contrast Transmission Electron Microscopy of Amorphous Objects. Microscopy and Microanalysis, 2012, 18, 496-497.	0.4	1
39	Non-Diffractive Electron Bessel Beams for Scanning Electron Microscopy in Transmission Mode Using Direct Phase Masks. Microscopy and Microanalysis, 2017, 23, 592-593.	0.4	1
40	Aberration-corrected transmission electron microscopy with Zernike phase plates. Ultramicroscopy, 2022, , 113564.	1.9	0