

Cornelia Rodenburg

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6984258/publications.pdf>

Version: 2024-02-01

88
papers

1,678
citations

304743

22
h-index

361022

35
g-index

92
all docs

92
docs citations

92
times ranked

2062
citing authors

#	ARTICLE	IF	CITATIONS
1	Interfacial Morphology between Ramie Fibers and Phenolic Resins: Effects of Plasma Treatment and Cure Cycle. <i>Journal of Composite Materials</i> , 2022, 56, 889-897.	2.4	4
2	Low-voltage SEM of air-sensitive powders: From sample preparation to micro/nano analysis with secondary electron hyperspectral imaging. <i>Micron</i> , 2022, 156, 103234.	2.2	13
3	Identifying and mapping chemical bonding within phenolic resin using secondary electron hyperspectral imaging. <i>Polymer Chemistry</i> , 2021, 12, 177-182.	3.9	10
4	Controlling PbI ₂ Stoichiometry during Synthesis to Improve the Performance of Perovskite Photovoltaics. <i>Chemistry of Materials</i> , 2021, 33, 554-566.	6.7	13
5	Spinning Beta Silks Requires Both pH Activation and Extensional Stress. <i>Advanced Functional Materials</i> , 2021, 31, 2103295.	14.9	22
6	Monitoring Carbon in Electron and Ion Beam Deposition within FIB-SEM. <i>Materials</i> , 2021, 14, 3034.	2.9	18
7	Mesoscale structure development reveals when a silkworm silk is spun. <i>Nature Communications</i> , 2021, 12, 3711.	12.8	17
8	Understanding Surface Modifications Induced via Argon Plasma Treatment through Secondary Electron Hyperspectral Imaging. <i>Advanced Science</i> , 2021, 8, 2003762.	11.2	16
9	A novel characterisation approach to reveal the mechanochemical effects of oxidation and dynamic distension on polypropylene surgical mesh. <i>RSC Advances</i> , 2021, 11, 34710-34723.	3.6	10
10	HelixJet: An innovative plasma source for next-generation additive manufacturing (3D printing). <i>Plasma Processes and Polymers</i> , 2020, 17, 1900099.	3.0	6
11	An Accurate Device for Apparent Emissivity Characterization in Controlled Atmospheric Conditions Up To 1423 K. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 4210-4221.	4.7	7
12	Characterizing Crosslinking Within Polymeric Biomaterials in the SEM by Secondary Electron Hyperspectral Imaging. <i>Macromolecular Rapid Communications</i> , 2020, 41, e1900484.	3.9	10
13	Tensegrity Modelling and the High Toughness of Spider Dragline Silk. <i>Nanomaterials</i> , 2020, 10, 1510.	4.1	11
14	Solvent vapour annealing of methylammonium lead halide perovskite: what's the catch?. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10943-10956.	10.3	11
15	Optimizing size and distribution of voids in phenolic resins through the choice of catalyst types. <i>Journal of Applied Polymer Science</i> , 2019, 136, 48249.	2.6	10
16	Making Sense of Complex Carbon and Metal/Carbon Systems by Secondary Electron Hyperspectral Imaging. <i>Advanced Science</i> , 2019, 6, 1900719.	11.2	14
17	Novel plasma treatment for preparation of laser sintered nanocomposite parts. <i>Additive Manufacturing</i> , 2019, 25, 297-306.	3.0	7
18	Exploiting Plasma Exposed, Natural Surface Nanostructures in Ramie Fibers for Polymer Composite Applications. <i>Materials</i> , 2019, 12, 1631.	2.9	17

#	ARTICLE	IF	CITATIONS
19	Revealing Spider Silk's 3D Nanostructure Through Low Temperature Plasma Etching and Advanced Low-Voltage SEM. <i>Frontiers in Materials</i> , 2019, 5, .	2.4	9
20	Mapping Polymer Molecular Order in the SEM with Secondary Electron Hyperspectral Imaging. <i>Advanced Science</i> , 2019, 6, 1801752.	11.2	19
21	Anisotropic Approach for Simulating Electron Transport in Layered Materials: Computational and Experimental Study of Highly Oriented Pyrolytic Graphite. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10159-10166.	3.1	14
22	Dark electrical bias effects on moisture-induced degradation in inverted lead halide perovskite solar cells measured by using advanced chemical probes. <i>Sustainable Energy and Fuels</i> , 2018, 2, 905-914.	4.9	32
23	New perspectives on nano-engineering by secondary electron spectroscopy in the helium ion and scanning electron microscope. <i>MRS Communications</i> , 2018, 8, 226-240.	1.8	23
24	Searching for order in atmospheric pressure plasma jets. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 014038.	2.1	15
25	“Secondary electron spectra of semi-crystalline polymers” A novel polymer characterisation tool? <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2018, 222, 95-105.	1.7	9
26	Localized effect of PbI_2 excess in perovskite solar cells probed by high-resolution chemical optoelectronic mapping. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23010-23018.	10.3	47
27	Stoichiometry-dependent local instability in MAPbI_3 perovskite materials and devices. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23578-23586.	10.3	21
28	High-Efficiency Spray-Coated Perovskite Solar Cells Utilizing Vacuum-Assisted Solution Processing. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 39428-39434.	8.0	74
29	High-Performance Multilayer Encapsulation for Perovskite Photovoltaics. <i>Advanced Energy Materials</i> , 2018, 8, 1801234.	19.5	68
30	Surface modification of the laser sintering standard powder polyamide 12 by plasma treatments. <i>Plasma Processes and Polymers</i> , 2018, 15, 1800032.	3.0	9
31	Optimized organometal halide perovskite solar cell fabrication through control of nanoparticle crystal patterning. <i>Journal of Materials Chemistry C</i> , 2017, 5, 2352-2359.	5.5	12
32	Nanoscale Mapping of Bromide Segregation on the Cross Sections of Complex Hybrid Perovskite Photovoltaic Films Using Secondary Electron Hyperspectral Imaging in a Scanning Electron Microscope. <i>ACS Omega</i> , 2017, 2, 2126-2133.	3.5	16
33	Mapping Nanostructural Variations in Silk by Secondary Electron Hyperspectral Imaging. <i>Advanced Materials</i> , 2017, 29, 1703510.	21.0	20
34	Low-Voltage SEM of Natural Plant Fibers: Microstructure Properties (Surface and Cross-Section) and their Link to the Tensile Properties. <i>Procedia Engineering</i> , 2017, 200, 295-302.	1.2	24
35	Efficient perovskite photovoltaic devices using chemically doped PCDTBT as a hole-transport material. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15714-15723.	10.3	29
36	Nanoclay/Polymer Composite Powders for Use in Laser Sintering Applications: Effects of Nanoclay Plasma Treatment. <i>Jom</i> , 2017, 69, 2278-2285.	1.9	10

#	ARTICLE	IF	CITATIONS
37	Novel organic photovoltaic polymer blends: A rapid, 3-dimensional morphology analysis using backscattered electron imaging in the scanning electron microscope. <i>Solar Energy Materials and Solar Cells</i> , 2017, 160, 182-192.	6.2	12
38	Comparative study of image contrast in scanning electron microscope and helium ion microscope. <i>Journal of Microscopy</i> , 2017, 268, 313-320.	1.8	13
39	Feasibility of Plasma Treated Clay in Clay/Polymer Nanocomposites Powders for use Laser Sintering (LS). <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 195, 012003.	0.6	3
40	Nanoscale Mapping of Semi-Crystalline Polypropylene. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2017, 14, 1700153.	0.8	4
41	Quantitative secondary electron imaging for work function extraction at atomic level and layer identification of graphene. <i>Scientific Reports</i> , 2016, 6, 21045.	3.3	26
42	Sub-5 nm graphene nanopore fabrication by nitrogen ion etching induced by a low-energy electron beam. <i>Nanotechnology</i> , 2016, 27, 195302.	2.6	13
43	Angle selective backscattered electron contrast in the low-voltage scanning electron microscope: Simulation and experiment for polymers. <i>Ultramicroscopy</i> , 2016, 171, 126-138.	1.9	12
44	Indium-free multilayer semi-transparent electrodes for polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2016, 144, 600-607.	6.2	18
45	Application of low-voltage backscattered electron imaging to the mapping of organic photovoltaic blend morphologies. <i>Journal of Physics: Conference Series</i> , 2015, 644, 012017.	0.4	2
46	Separating topographical and chemical analysis of nanostructure of polymer composite in low voltage SEM. <i>Journal of Physics: Conference Series</i> , 2015, 644, 012018.	0.4	2
47	Sub-nanometre resolution imaging of polymer-fullerene photovoltaic blends using energy-filtered scanning electron microscopy. <i>Nature Communications</i> , 2015, 6, 6928.	12.8	56
48	The effect of residual palladium catalyst on the performance and stability of PCDTBT:PC70BM organic solar cells. <i>Organic Electronics</i> , 2015, 27, 266-273.	2.6	46
49	Arginine-glycine-aspartic acid functional branched semi-interpenetrating hydrogels. <i>Soft Matter</i> , 2015, 11, 7567-7578.	2.7	8
50	High-efficiency inverted polymer solar cells via dual effects of introducing the high boiling point solvent and the high conductive PEDOT:PSS layer. <i>Organic Electronics</i> , 2014, 15, 2059-2067.	2.6	7
51	Helium ion microscopy based wall thickness and surface roughness analysis of polymer foams obtained from high internal phase emulsion. <i>Ultramicroscopy</i> , 2014, 139, 13-19.	1.9	9
52	Helium ion microscopy and energy selective scanning electron microscopy – two advanced microscopy techniques with complementary applications. <i>Journal of Physics: Conference Series</i> , 2014, 522, 012049.	0.4	2
53	Imaging the Bulk Nanoscale Morphology of Organic Solar Cell Blends Using Helium Ion Microscopy. <i>Nano Letters</i> , 2011, 11, 4275-4281.	9.1	28
54	Surface morphology of silica nanowires at the nanometer scale. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 3042-3045.	3.1	5

#	ARTICLE	IF	CITATIONS
55	Resolution Limits of Secondary Electron Dopant Contrast in Helium Ion and Scanning Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2011, 17, 637-642.	0.4	12
56	Energy Selective Secondary Electron Detection in SEM for the Characterization of Polymers. <i>Microscopy and Microanalysis</i> , 2011, 17, 880-881.	0.4	1
57	Comparison of multilayered nanowire imaging by SEM and Helium Ion Microscopy. <i>Journal of Physics: Conference Series</i> , 2010, 241, 012080.	0.4	0
58	Progress towards site-specific dopant profiling in the scanning electron microscope. <i>Journal of Physics: Conference Series</i> , 2010, 209, 012068.	0.4	3
59	Energy filtered scanning electron microscopy: applications to characterisation of semiconductors. <i>Journal of Physics: Conference Series</i> , 2010, 241, 012074.	0.4	4
60	Energy selective scanning electron microscopy to reduce the effect of contamination layers on scanning electron microscope dopant mapping. <i>Ultramicroscopy</i> , 2010, 110, 1185-1191.	1.9	47
61	The role of helium ion microscopy in the characterisation of complex three-dimensional nanostructures. <i>Ultramicroscopy</i> , 2010, 110, 1178-1184.	1.9	6
62	The effect of oxidation and carbon contamination on SEM dopant contrast. <i>Journal of Physics: Conference Series</i> , 2010, 241, 012078.	0.4	6
63	Energy filtered scanning electron microscopy: Applications to dopant contrast. <i>Journal of Physics: Conference Series</i> , 2010, 209, 012053.	0.4	2
64	Dopant contrast in the Helium Ion Microscope: contrast mechanism. <i>Journal of Physics: Conference Series</i> , 2010, 241, 012076.	0.4	5
65	Quantitative dopant contrast in the helium ion microscope. <i>Europhysics Letters</i> , 2009, 86, 26005.	2.0	15
66	Dopant contrast in the helium ion microscope. <i>Europhysics Letters</i> , 2009, 85, 46001.	2.0	13
67	The Effect of Oxide Overlayers on Secondary Electron Dopant Mapping. <i>Microscopy and Microanalysis</i> , 2009, 15, 237-243.	0.4	17
68	One Year On: New and Unique Applications of He Ion Microscopy. <i>Microscopy and Microanalysis</i> , 2009, 15, 652-653.	0.4	2
69	A comprehensive Monte Carlo calculation of dopant contrast in secondary-electron imaging. <i>Europhysics Letters</i> , 2008, 82, 30006.	2.0	28
70	High resolution dopant profiling in the SEM, image widths and surface band-bending. <i>Journal of Physics: Conference Series</i> , 2008, 126, 012033.	0.4	10
71	A comprehensive Monte Carlo calculation of dopant contrast in secondary-electron imaging. <i>Europhysics Letters</i> , 2008, 82, 49901.	2.0	5
72	A quantitative analysis of the influence of carbides size distributions on wear behaviour of high-speed steel in dry rolling/sliding contact. <i>Acta Materialia</i> , 2007, 55, 2443-2454.	7.9	96

#	ARTICLE	IF	CITATIONS
73	Oxidation Behavior and Mechanisms of TiAlN/VN Coatings. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 2464-2478.	2.2	26
74	Quantitative secondary electron energy filtering in a scanning electron microscope and its applications. Ultramicroscopy, 2007, 107, 140-150.	1.9	56
75	The influence of beam energy and oxidation on quantitative carbide analysis in the scanning electron microscope. Journal of Applied Physics, 2006, 100, 114902.	2.5	1
76	High resolution quantitative two-dimensional dopant mapping using energy-filtered secondary electron imaging. Journal of Applied Physics, 2006, 100, 054901.	2.5	51
77	Site-specific dopant profiling in a scanning electron microscope using focused ion beam prepared specimens. Applied Physics Letters, 2006, 88, 212110.	3.3	21
78	Mapping the potential within a nanoscale undoped GaAs region using a scanning electron microscope. Applied Physics Letters, 2004, 84, 2109-2111.	3.3	19
79	Effect of experimental parameters on doping contrast of Si p-n junctions in a FEG-SEM. Microelectronic Engineering, 2004, 73-74, 948-953.	2.4	25
80	Hot workability of spray-formed AISI M3:2 high-speed steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 386, 420-427.	5.6	31
81	Hot workability of spray-formed AISI M3:2 high-speed steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 386, 420-427.	5.6	9
82	Effect of experimental parameters on doping contrast of Si p-n junctions in a FEG-SEM. Microelectronic Engineering, 2004, 73-74, 948-953.	2.4	2
83	Optimizing and quantifying dopant mapping using a scanning electron microscope with a through-the-lens detector. Applied Physics Letters, 2003, 83, 293-295.	3.3	37
84	Investigation of intermixing in TiAlN/VN nanoscale multilayer coatings by energy-filtered TEM. Surface and Coatings Technology, 2002, 151-152, 209-213.	4.8	33
85	Industrial scale manufactured superlattice hard PVD coatings. Surface Engineering, 2001, 17, 15-27.	2.2	117
86	Shortlisted substrate ion etching in combined steered cathodic arc sputter deposition system: effects on interface architecture, adhesion, and tool performance. Surface Engineering, 2000, 16, 176-180.	2.2	20
87	The interface between TiAlN hard coatings and steel substrates generated by high energetic Cr+ bombardment. Surface and Coatings Technology, 2000, 125, 66-70.	4.8	24
88	Investigation of Perovskite Solar Cells Homogeneity and Defects by Complementary High-Resolution Mapping Techniques. , 0, , .		0