Roland Schierholz

List of Publications by Year
in descending order

50	1,160	411340 20	466096 32
papers	citations	h-index	g-index

54	54	54	2069
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigating the Interface between Ceramic Particles and Polymer Matrix in Hybrid Electrolytes by Electrochemical Strain Microscopy. Nanomaterials, 2022, 12, 654.	1.9	4
2	Instability of Ga-substituted Li₇La₃Zr₂O₁₂ toward metallic Li. Journal of Materials Chemistry A, 2022, 10, 10998-11009.	5.2	14
3	Exploring the Interface of Skinâ€Layered Titanium Fibers for Electrochemical Water Splitting. Advanced Energy Materials, 2021, 11, 2002926.	10.2	48
4	Signal Origin of Electrochemical Strain Microscopy and Link to Local Chemical Distribution in Solid State Electrolytes. Small Methods, 2021, 5, 2001279.	4.6	10
5	Oxygen Nonstoichiometry and Valence State of Manganese in La_{1â€“x}Ca_xMnO_{3+Î´}. ACS Omega, 2021, 6, 9638-9652.	1.6	7
6	Nanoâ€Scale Complexions Facilitate Li Dendriteâ€Free Operation in LATP Solidâ€State Electrolyte. Advanced Energy Materials, 2021, 11, 2100707.	10.2	36
7	Microstructural details of spindle-like lithium titanium phosphate revealed in three dimensions. RSC Advances, 2021, 11, 34605-34612.	1.7	1
8	Defects and Phase Formation in Non-Stoichiometric LaFeO₃: a Combined Theoretical and Experimental Study. Chemistry of Materials, 2021, 33, 9473-9485.	3.2	9
9	Operando Transmission Electron Microscopy Study of All-Solid-State Battery Interface: Redistribution of Lithium among Interconnected Particles. ACS Applied Energy Materials, 2020, 3, 5101-5106.	2.5	14
10	Combined quantitative microscopy on the microstructure and phase evolution in Li1.3Al0.3Ti1.7(PO4)3 ceramics. Journal of Advanced Ceramics, 2020, 9, 149-161.	8.9	29
11	Frontispiece: Nanoscopic Porous Iridium/Iridium Dioxide Superstructures (15â€…nm): Synthesis and Thermal Conversion by Inâ€…Situ Transmission Electron Microscopy. Chemistry - A European Journal, 2019, 25, .	1.7	0
12	Carbonisation temperature dependence of electrochemical activity of nitrogen-doped carbon fibres from electrospinning as air-cathodes for aqueous-alkaline metalâ€“air batteries. RSC Advances, 2019, 9, 27231-27241.	1.7	23
13	Nanoscopic Porous Iridium/Iridium Dioxide Superstructures (15â€…nm): Synthesis and Thermal Conversion by Inâ€…Situ Transmission Electron Microscopy. Chemistry - A European Journal, 2019, 25, 11048-11057.	1.7	4
14	The carbonization of polyacrylonitrile-derived electrospun carbon nanofibers studied by in situ transmission electron microscopy. RSC Advances, 2019, 9, 6267-6277.	1.7	35
15	Transformation of carbon-supported Ptâ€“Ni octahedral electrocatalysts into cubes: toward stable electrocatalysis. Nanoscale, 2018, 10, 21353-21362.	2.8	7
16	Analysis of the effects of different carbon coating strategies on structure and electrochemical behavior of LiCoPO4 material as a high-voltage cathode electrode for lithium ion batteries. Electrochimica Acta, 2018, 279, 108-117.	2.6	19
17	Correlative electrochemical strain and scanning electron microscopy for local characterization of the solid state electrolyte Li_{1.3}Al_{0.3}Ti_{1.7}(PO₄)₃. Beilstein Journal of Nanotechnology, 2018, 9, 1564-1572.	1.5	29
18	Monolithic All-Phosphate Solid-State Lithium-Ion Battery with Improved Interfacial Compatibility. ACS Applied Materials & Interfaces, 2018, 10, 22264-22277.	4.0	68

#	Article	IF	Citations
19	An Advanced All Phosphate Lithium-Ion Battery Providing High Electrochemical Stability, High Rate Capability and Long-Term Cycling Performance. Journal of the Electrochemical Society, 2017, 164, A370-A379.	1.3	8
20	Morphology Dependency of Li3V2(PO4)3/C Cathode Material Regarding to Rate Capability and Cycle Life in Lithium-ion Batteries. Electrochimica Acta, 2017, 232, 310-322.	2.6	26
21	Observing different modes of mobility in lithium titanate spinel by nuclear magnetic resonance. RSC Advances, 2017, 7, 25276-25284.	1.7	17
22	Superionic bulk conductivity in Li1.3Al0.3Ti1.7(PO4)3 solid electrolyte. Solid State Ionics, 2017, 309, 180-186.	1.3	60
23	LiTi₂(PO₄)₃/C Anode Material with a Spindleâ€Like Morphology for Batteries with High Rate Capability and Improved Cycle Life. ChemElectroChem, 2016, 3, 1157-1169.	1.7	19
24	Photogrammetry of the three-dimensional shape and texture of a nanoscale particle using scanning electron microscopy and free software. Ultramicroscopy, 2016, 169, 80-88.	0.8	29
25	Hydrogen interstitial defects in acceptor-type CuO-doped PbTiO3â€"Uptake and dissolution of water vapor and formation of (CuTiâ€³â^'(OH)Oâ€¢)â€² defect complexes. Applied Physics Letters, 2016, 109, 122904.	1.5	3
26	Influence of microstructure and AlPO₄ secondary-phase on the ionic conductivity of Li1.3Al0.3Ti1.7(PO4)3 solid-state electrolyte. Functional Materials Letters, 2016, 09, 1650066.	0.7	61
27	STEMâ€"EELS analysis reveals stable high-density He in nanopores of amorphous silicon coatings deposited by magnetron sputtering. Nanotechnology, 2015, 26, 075703.	1.3	29
28	On the origin of differential phase contrast at a locally charged and globally charge-compensated domain boundary in a polar-ordered material. Ultramicroscopy, 2015, 154, 57-63.	0.8	53
29	Full solution processed mesostructured optical resonators integrating colloidal semiconductor quantum dots. Nanoscale, 2015, 7, 16583-16589.	2.8	9
30	Microstructure of sodium-potassium niobate ceramics sintered under high alkaline vapor pressure atmosphere. Journal of the European Ceramic Society, 2014, 34, 4213-4221.	2.8	28
31	On the formation of the porous structure in nanostructured a-Si coatings deposited by dc magnetron sputtering at oblique angles. Nanotechnology, 2014, 25, 355705.	1.3	39
32	Analyzing the defect structure of CuO-Doped PZT and KNN piezoelectrics from electron paramagnetic resonance. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1447-1455.	1.7	10
33	A new bottom-up methodology to produce silicon layers with a closed porosity nanostructure and reduced refractive index. Nanotechnology, 2013, 24, 275604.	1.3	28
34	Ferroelectric domains in PZT ceramics at the morphotropic phase boundary. Can the splitting of reflections in SAED patterns be used for the distinction of different pseudo-cubic phases?. Journal of Applied Crystallography, 2012, 45, 766-777.	1.9	11
35	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Ti<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>O<mml:math	1.1	22
36	Refinement of structural parameters of PbTiO3by convergent-beam electron diffraction. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s65-s65.	0.3	0

#	Article	IF	Citations
37	Refinement of structural parameters of PbTiO3by convergent-beam electron diffraction. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s218-s218.	0.3	0
38	Combined refinement of high-resolution neutron and synchrotron data of PLZT. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s202-s202.	0.3	0
39	Domain structure in PbZr1â^'xTixO3. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s203-s203.	0.3	1
40	The role of nonmagnetic phases in improving the magnetic properties of devitrified Pr2Fe14B-based nanocomposites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 149, 73-76.	1.7	5
41	Catalytic Induced Thermal Conversion of Amorphous Carbon into Single Walled Carbon Nanotubes. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 911-915.	0.6	5
42	Catalyst free growth of a carbon nanotubeâ€"alumina composite structure. Inorganica Chimica Acta, 2008, 361, 1770-1778.	1.2	59
43	Crystal symmetry in single domains of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>PbZr</mml:mtext></mml:mrow><mml:mrow><mml:mn>1-x</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mtext>Ti</mml:mtext></mml:mrow><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mtext>O</mml:mtext></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> for x=0.54. Physical Review B, 2008, 78, .	1.1	31
44	The system of PbZr1â^'xTixO3studied by convergent-beam electron diffraction. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C145-C145.	0.3	0
45	Nature of the morphotropic phase boundary (MPB) in lead zirconate titanate (PZT). Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C102-C102.	0.3	0
46	Nanodomains in morphotropic lead zirconate titanate ceramics: On the origin of the strong piezoelectric effect. Journal of Applied Physics, 2007, 102, .	1.1	128
47	Silica Glass Segregation in 3 wt% LiFâ€Doped Hotâ€Pressed Y₂Si₂O₇. Journal of the American Ceramic Society, 2007, 90, 3307-3310.	1.9	4
48	Symmetry study of PbZr1â^'xTixO3by convergent-beam electron diffraction. Acta Crystallographica Section A: Foundations and Advances, 2007, 63, s65-s66.	0.3	0
49	Local symmetry in PbZrxTi1-xO3ceramics. Acta Crystallographica Section A: Foundations and Advances, 2005, 61, c400-c400.	0.3	2
50	FEI Titan G2 80-200 CREWLEY. Journal of Large-scale Research Facilities JLSRF, 0, 2, A43.	0.0	111