Andrei A Mazilkin

List of Publications by Year
in descending order

30 papers	1,453 citations	471371 17 h-index	501076 28 g-index
30 all docs	30 docs citations	30 times ranked	1639 citing authors

#	Article	IF	Citations
1	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. Materials Research Letters, 2022, 10, 163-256.	4.1	215
2	Stabilizing Effect of a Hybrid Surface Coating on a Ni-Rich NCM Cathode Material in All-Solid-State Batteries. Chemistry of Materials, 2019, 31, 9664-9672.	3.2	174
3	Investigation into Mechanical Degradation and Fatigue of High-Ni NCM Cathode Material: A Long-Term Cycling Study of Full Cells. ACS Applied Energy Materials, 2019, 2, 7375-7384.	2.5	106
4	Grain boundaries as the controlling factor for the ferromagnetic behaviour of Co-doped ZnO. Philosophical Magazine, 2013, 93, 1371-1383.	0.7	100
5	Ferromagnetic behaviour of ZnO: the role of grain boundaries. Beilstein Journal of Nanotechnology, 2016, 7, 1936-1947.	1.5	99
6	Effect of Low-Temperature Al2O3 ALD Coating on Ni-Rich Layered Oxide Composite Cathode on the Long-Term Cycling Performance of Lithium-Ion Batteries. Scientific Reports, 2019, 9, 5328.	1.6	91
7	Li₂ZrO₃-Coated NCM622 for Application in Inorganic Solid-State Batteries: Role of Surface Carbonates in the Cycling Performance. ACS Applied Materials & Interfaces, 2020, 12, 57146-57154.	4.0	90
8	The Role of Intragranular Nanopores in Capacity Fade of Nickel-Rich Layered Li(Ni_{1â€“xâ€“y}Co_xMn_y)O₂ Cathode Materials. ACS Nano, 2019, 13, 10694-10704.	7.3	79
9	Phase transitions induced by severe plastic deformation: steady-state and equifinality. International Journal of Materials Research, 2015, 106, 657-664.	0.1	76
10	Structure and Properties of Nanograined Feâ€“C Alloys after Severe Plastic Deformation. Advanced Engineering Materials, 2011, 13, 463-469.	1.6	74
11	Enhancing the Electrochemical Performance of LiNi_{0.70}Co_{0.15}Mn_{0.15}O₂ Cathodes Using a Practical Solution-Based Al₂O₃ Coating. ACS Applied Materials & Interfaces, 2020, 12, 31392-31400.	4.0	57
12	Advanced Nanoparticle Coatings for Stabilizing Layered Niâ€Rich Oxide Cathodes in Solidâ€State Batteries. Advanced Functional Materials, 2022, 32, .	7.8	45
13	New frontier in printed thermoelectrics: formation of Î²-Ag₂Se through thermally stimulated dissociative adsorption leads to high ZT. Journal of Materials Chemistry A, 2020, 8, 16366-16375.	5.2	32
14	From LiNiO₂ to Li₂NiO₃: Synthesis, Structures and Electrochemical Mechanisms in Li-Rich Nickel Oxides. Chemistry of Materials, 2020, 32, 9211-9227.	3.2	28
15	Silicon Nanoparticles with a Polymer-Derived Carbon Shell for Improved Lithium-Ion Batteries: Investigation into Volume Expansion, Gas Evolution, and Particle Fracture. ACS Omega, 2018, 3, 16706-16713.	1.6	27
16	Influence of carbon on the mechanical behavior and microstructure evolution of CoCrFeMnNi processed by high pressure torsion. Materialia, 2021, 16, 101059.	1.3	27
17	The effect of gallium substitution on the structure and electrochemical performance of LiNiO₂ in lithium-ion batteries. Materials Advances, 2020, 1, 639-647.	2.6	23
18	Grain boundary segregation induced precipitation in a non equiatomic nanocrystalline CoCuFeMnNi compositionally complex alloy. Acta Materialia, 2021, 220, 117281.	3.8	18

#	Article	IF	Citations
19	Single step synthesis of W-modified LiNiO₂ using an ammonium tungstate flux. Journal of Materials Chemistry A, 2022, 10, 7841-7855.	5.2	17
20	Tailoring the protonic conductivity of porous yttria-stabilized zirconia thin films by surface modification. Physical Chemistry Chemical Physics, 2020, 22, 11519-11528.	1.3	14
21	Structure, phase composition, and microhardness of carbon steels after high-pressure torsion. Journal of Materials Science, 2008, 43, 3800-3805.	1.7	12
22	Quantifying solid-state mechanical mixing by high-pressure torsion. Journal of Alloys and Compounds, 2021, 878, 160419.	2.8	11
23	Multiâ€Element Surface Coating of Layered Niâ€Rich Oxide Cathode Materials and Their Longâ€Term Cycling Performance in Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2022, 9, 2101100.	1.9	10
24	Coercivity and domain structure of nanograined Feâ€“C alloys after high-pressure torsion. Journal of Materials Science, 2008, 43, 3775-3781.	1.7	8
25	Highly photoluminescent and stable silicon nanocrystals functionalized via microwave-assisted hydrosilylation. RSC Advances, 2018, 8, 9979-9984.	1.7	8
26	Design of Ordered Mesoporous CeO₂â€“YSZ Nanocomposite Thin Films with Mixed Ionic/Electronic Conductivity via Surface Engineering. ACS Nano, 2022, 16, 3182-3193.	7.3	8
27	On the formation of nanocrystalline aluminides during high pressure torsion of Al/Ni alternating foils and post-processing multilayer reaction. Journal of Alloys and Compounds, 2022, 905, 164201.	2.8	3
28	Nanostructured Feâ€“Crâ€“W Steel Exhibits Enhanced Resistance to Selfâ€Ion Irradiation. Advanced Engineering Materials, 2020, 22, 1901333.	1.6	1
29	Phase Transformations in the Alï£¿Mg Alloys Driven by Highâ€Pressure Torsion. Physica Status Solidi (B): Basic Research, 2021, 258, 2100210.	0.7	0
30	Aging of WE43 magnesium alloy after mechanical crushing and subsequent high pressure torsion. Letters on Materials, 2019, 9, 370-374.	0.2	0