Andrei A Mazilkin

List of Publications by Citations

29 papers	801 citations	14 h-index	28 g-index
30 ext. papers	1,074 ext. citations	6.4 avg, IF	4.21 L-index

#	Paper	IF	Citations
29	Grain boundaries as the controlling factor for the ferromagnetic behaviour of Co-doped ZnO. *Philosophical Magazine*, **2013**, 93, 1371-1383	1.6	97
28	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	9.6	94
27	Ferromagnetic behaviour of ZnO: the role of grain boundaries. *Beilstein Journal of Nanotechnology*, **2016**, 7, 1936-1947	3	93
26	Structure and Properties of Nanograined Fe Alloys after Severe Plastic Deformation. *Advanced Engineering Materials*, **2011**, 13, 463-469	3.5	73
25	Effect of Low-Temperature AlO ALD Coating on Ni-Rich Layered Oxide Composite Cathode on the Long-Term Cycling Performance of Lithium-Ion Batteries. *Scientific Reports*, **2019**, 9, 5328	4.9	66
24	Phase transitions induced by severe plastic deformation: steady-state and equifinality. *International Journal of Materials Research*, **2015**, 106, 657-664	0.5	56
23	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	6.1	54
22	The Role of Intragranular Nanopores in Capacity Fade of Nickel-Rich Layered Li(NiCoMn)O Cathode Materials. *ACS Nano*, **2019**, 13, 10694-10704	16.7	47
21	LiZrO-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	9.5	37
20	Enhancing the Electrochemical Performance of LiNiCoMnO Cathodes Using a Practical Solution-Based AlO Coating. *ACS Applied Materials & Interfaces*, **2020**, 12, 31392-31400	9.5	28
19	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. *Materials Research Letters*, **2022**, 10, 163-256	7.4	26
18	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	3.9	22
17	New frontier in printed thermoelectrics: formation of Ag2Se through thermally stimulated dissociative adsorption leads to high ZT. *Journal of Materials Chemistry A*, **2020**, 8, 16366-16375	13	21
16	The effect of gallium substitution on the structure and electrochemical performance of LiNiO2 in lithium-ion batteries. *Materials Advances*, **2020**, 1, 639-647	3.3	14
15	Structure, phase composition, and microhardness of carbon steels after high-pressure torsion. *Journal of Materials Science*, **2008**, 43, 3800-3805	4.3	11
14	From LiNiO2 to Li2NiO3: Synthesis, Structures and Electrochemical Mechanisms in Li-Rich Nickel Oxides. *Chemistry of Materials*, **2020**, 32, 9211-9227	9.6	11
13	Influence of carbon on the mechanical behavior and microstructure evolution of CoCrFeMnNi processed by high pressure torsion. *Materialia*, **2021**, 16, 101059	3.2	11

List of Publications

12	Advanced Nanoparticle Coatings for Stabilizing Layered Ni-Rich Oxide Cathodes in Solid-State Batteries. *Advanced Functional Materials*,2111829	15.6	10
11	Tailoring the protonic conductivity of porous yttria-stabilized zirconia thin films by surface modification. *Physical Chemistry Chemical Physics*, **2020**, 22, 11519-11528	3.6	9
10	Coercivity and domain structure of nanograined Fe□ alloys after high-pressure torsion. *Journal of Materials Science*, **2008**, 43, 3775-3781	4.3	7
9	Highly photoluminescent and stable silicon nanocrystals functionalized microwave-assisted hydrosilylation.. *RSC Advances*, **2018**, 8, 9979-9984	3.7	4
8	Quantifying solid-state mechanical mixing by high-pressure torsion. *Journal of Alloys and Compounds*, **2021**, 878, 160419	5.7	4
7	Nanostructured Fe□Cr□ Steel Exhibits Enhanced Resistance to Self-Ion Irradiation. *Advanced Engineering Materials*, **2020**, 22, 1901333	3.5	1
6	Multi-Element Surface Coating of Layered Ni-Rich Oxide Cathode Materials and Their Long-Term Cycling Performance in Lithium-Ion Batteries. *Advanced Materials Interfaces*,2101100	4.6	1
5	Grain boundary segregation induced precipitation in a non equiatomic nanocrystalline CoCuFeMnNi compositionally complex alloy. *Acta Materialia*, **2021**, 220, 117281	8.4	1
4	Single step synthesis of W-modified LiNiO2 using an ammonium tungstate flux. *Journal of Materials Chemistry A*, **2022**, 10, 7841-7855	13	1
3	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	5.7	0
2	Aging of WE43 magnesium alloy after mechanical crushing and subsequent high pressure torsion. *Letters on Materials*, **2019**, 9, 370-374	0.9	
1	Phase Transformations in the Al?Mg Alloys Driven by High-Pressure Torsion. *Physica Status Solidi (B): Basic Research*,2100210	1.3	