Alberto Leonardi

List of Publications by Citations

22 papers	270 citations	11 h-index	15 g-index
23 ext. papers	325 ext. citations	5.4 avg, IF	3.62 L-index

#	Paper	IF	Citations
22	Common volume functions and diffraction line profiles of polyhedral domains. *Journal of Applied Crystallography*, **2012**, 45, 1162-1172	3.8	33
21	Achieving Highly Durable Random Alloy Nanocatalysts through Intermetallic Cores. *ACS Nano*, **2019**, 13, 4008-4017	16.7	26
20	Effect of lattice mismatch and shell thickness on strain in core@shell nanocrystals. *Nanoscale Advances*, **2020**, 2, 1105-1114	5.1	20
19	On the reliability of powder diffraction Line Profile Analysis of plastically deformed nanocrystalline systems. *Scientific Reports*, **2016**, 6, 20712	4.9	20
18	Realistic nano-polycrystalline microstructures: beyond the classical Voronoi tessellation. *Philosophical Magazine*, **2012**, 92, 986-1005	1.6	19
17	Imaging the kinetics of anisotropic dissolution of bimetallic core-shell nanocubes using graphene liquid cells. *Nature Communications*, **2020**, 11, 3041	17.4	18
16	Structure and morphology of shape-controlled Pd nanocrystals. *Journal of Applied Crystallography*, **2015**, 48, 1534-1542	3.8	17
15	Debye-Waller coefficient of heavily deformed nanocrystalline iron. *Journal of Applied Crystallography*, **2017**, 50, 508-518	3.8	16
14	Dislocation Effects on the Diffraction Line Profiles from Nanocrystalline Domains. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 5722-5732	2.3	14
13	Strain in atomistic models of nanocrystalline clusters. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 8546-53	1.3	12
12	Directional pair distribution function for diffraction line profile analysis of atomistic models. *Journal of Applied Crystallography*, **2013**, 46, 63-75	3.8	11
11	High-performance powder diffraction pattern simulation for large-scale atomistic models via full-precision pair distribution function computation. *Journal of Applied Crystallography*, **2016**, 49, 1593-1608	3.8	10
10	Particle Shape Control via Etching of Core@Shell Nanocrystals. *ACS Nano*, **2018**, 12, 9186-9195	16.7	9
9	Atomistic interpretation of microstrain in diffraction line profile analysis. *Thin Solid Films*, **2013**, 530, 40-43	2.2	9
8	Atomistic modelling of polycrystalline microstructures: An evolutional approach to overcome topological restrictions. *Computational Materials Science*, **2013**, 67, 238-242	3.2	9
7	Atomistic Model of Metal Nanocrystals with Line Defects: Contribution to Diffraction Line Profile. *Frontiers in Materials*, **2015**, 1,	4	8
6	Interactions of lattice distortion fields in nano polycrystalline materials revealed by molecular dynamics and X-ray powder diffraction. *Acta Materialia*, **2017**, 133, 380-392	8.4	7

5	Eshelby twist and correlation effects in diffraction from nanocrystals. *Journal of Applied Physics*, **2015**, 117, 164304	2.5	7
4	Understanding Powder X-ray Diffraction Profiles from Layered Minerals: The Case of Kaolinite Nanocrystals. *Inorganic Chemistry*, **2020**, 59, 5357-5367	5.1	3
3	Diffraction line broadening from nanocrystals under large hydrostatic pressures. *Powder Diffraction* , **2013**, 28, S184-S196	1.8	1
2	Whole pair distribution function modeling: the bridging of Bragg and Debye scattering theories. *IUCrJ*, **2021**, 8, 257-269	4.7	1
1	Efficient solution of particle shape functions for the analysis of powder total scattering data.. *Journal of Applied Crystallography*, **2022**, 55, 329-339	3.8	0