Maria G Tsoutsouva

List of Publications by Year
in descending order

26	513	687363 13	677142 22
papers	citations	h-index	g-index

27	27	27	441
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	ZnO thin films prepared by pulsed laser deposition. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 480-483.	3.5	85
2	In situ investigation of the structural defect generation and evolution during the directional solidification of ã€˜110ã€‰ seeded growth Si. Acta Materialia, 2016, 115, 210-223.	7.9	54
3	Segregation, precipitation and dislocation generation between seeds in directionally solidified mono-like silicon for photovoltaic applications. Journal of Crystal Growth, 2014, 401, 397-403.	1.5	43
4	Formation mechanism and properties of twinned structures in (111) seeded directionally solidified solar grade silicon. Acta Materialia, 2016, 121, 24-36.	7.9	38
5	Characterization of defects in mono-like silicon for photovoltaic applications using X-ray Bragg diffraction imaging. Journal of Applied Crystallography, 2015, 48, 645-654.	4.5	37
6	Mono-like silicon ingots grown on low angle misoriented seeds: Defect characterization by synchrotron X-ray diffraction imaging. Acta Materialia, 2015, 88, 112-120.	7.9	36
7	{1 1 1} facet growth laws and grain competition during silicon crystallization. Journal of Crystal Growth, 2017, 479, 1-8.	1.5	27
8	Optimized hydrogen sensing properties of nanocomposite NiO:Au thin films grown by dual pulsed laser deposition. Sensors and Actuators B: Chemical, 2013, 176, 103-109.	7.8	25
9	Interfacial atomic structure and electrical activity of nano-facetted CSL grain boundaries in high-performance multi-crystalline silicon. Journal of Applied Physics, 2020, 127, .	2.5	18
10	Undercooling measurement and nucleation study of silicon droplets on various substrates. Journal of Crystal Growth, 2016, 451, 103-112.	1.5	16
11	Growth undercooling in multi-crystalline pure silicon and in silicon containing light impurities (C) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.5	16
12	Composite multilayered coatings on mild steel. Journal of Coatings Technology Research, 2011, 8, 125-133.	2.5	14
13	Undercooling measurement and nucleation study of silicon droplet solidification. Crystal Research and Technology, 2015, 50, 55-61.	1.3	14
14	Cellular dislocations patterns in monolike silicon: Influence of stress, time under stress and impurity doping. Journal of Crystal Growth, 2018, 489, 42-50.	1.5	14
15	Dynamic observation of dislocation evolution and interaction with twin boundaries in silicon crystal growth using in â€“ situ synchrotron X-ray diffraction imaging. Acta Materialia, 2021, 210, 116819.	7.9	14
16	Strain building and correlation with grain nucleation during silicon growth. Acta Materialia, 2019, 177, 141-150.	7.9	12
17	Cathodic electrolytic deposition of ZnO on mild steel. Corrosion Engineering Science and Technology, 2011, 46, 513-516.	1.4	9
18	Laser energy density, structure and properties of pulsed-laser deposited zinc oxide films. Applied Surface Science, 2011, 257, 6314-6319.	6.1	8

#	Article	IF	Citations
19	X-ray Based in Situ Investigation of Silicon Growth Mechanism Dynamicsâ€"Application to Grain and Defect Formation. Crystals, 2020, 10, 555.	2.2	7
20	Infrared measurement of undercooling during silicon solidification on bare and Si3N4 coated quartz substrates. Journal of Crystal Growth, 2016, 453, 130-137.	1.5	6
21	Random angle grain boundary formation and evolution dynamics during Si directional solidification. Acta Materialia, 2019, 171, 253-260.	7.9	6
22	In Situ Imaging of Dislocation Expansion in FZâ€Si Seeds During Temperature Ramp Heating Process. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700758.	1.8	5
23	Corrosion of Nanocrystalline Ni-W Coated Copper. Journal of Surface Engineered Materials and Advanced Technology, 2015, 05, 65-72.	0.2	3
24	Observation of cation-specific critical behavior at the improper ferroelectric phase transition in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Gd</mml:mi><mml:mn>2</mml:mn></mml: Physical Review Materials, 2022, 6, .	2.4	3
25	Stabilization of Nanoalumina Colloidal Slips. Journal of the American Ceramic Society, 2015, 98, 2366-2372.	3.8	2
26	Cathodic Deposition of ZnSe on Copper Substrates. ECS Transactions, 2009, 25, 175-183.	0.5	1