Myriam Dumont

List of Publications by Year
in descending order

42 papers	1,904 citations	471509 17 h-index	254184 43 g-index
44 all docs	44 docs citations	44 times ranked	1514 citing authors

#	Article	IF	Citations
1	Friction stir welding of AZ31 magnesium alloy rolled sheets: Influence of processing parameters. Acta Materialia, 2009, 57, 326-334.	7.9	412
2	Implementation of classical nucleation and growth theories for precipitation. Acta Materialia, 2008, 56, 2119-2132.	7.9	252
3	Characterisation and modelling of precipitate evolution in an Alâ€“Znâ€“Mg alloy during non-isothermal heat treatments. Acta Materialia, 2003, 51, 6077-6094.	7.9	247
4	Characterisation of the composition and volume fraction of Î·â€² and Î· precipitates in an Alâ€“Znâ€“Mg alloy by a combination of atom probe, small-angle X-ray scattering and transmission electron microscopy. Acta Materialia, 2005, 53, 2881-2892.	7.9	205
5	A combined approach to microstructure mapping of an Alâ€“Li AA2199 friction stir weld. Acta Materialia, 2011, 59, 3002-3011.	7.9	115
6	Microstructure mapping in friction stir welds of 7449 aluminium alloy using SAXS. Acta Materialia, 2006, 54, 4793-4801.	7.9	104
7	Precipitation kinetics of Si in aluminium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 480, 383-391.	5.6	63
8	3DAP measurements of Al content in different types of precipitates in aluminium alloys. Surface and Interface Analysis, 2007, 39, 206-212.	1.8	61
9	Effect of the bainitic transformation temperature on retained austenite fraction and stability in Ti microalloyed TRIP steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 518, 89-96.	5.6	51
10	Influence of the microstructural changes and induced residual stresses on tensile properties of wrought magnesium alloy friction stir welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 551, 288-292.	5.6	50
11	A multi-scale study of the interaction of Sn solutes with dislocations during static recovery in Î±-Fe. Acta Materialia, 2019, 174, 92-104.	7.9	34
12	The variation of the unstrained lattice parameter in an AA7010 friction stir weld. Acta Materialia, 2007, 55, 4111-4120.	7.9	33
13	Precipitate microstructures and resulting properties of Al-Zn-Mg metal inert gas-weld heat-affected zones. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1437-1448.	2.2	30
14	Study of precipitation kinetics: towards non-isothermal and coupled phenomena. Philosophical Magazine, 2005, 85, 3091-3112.	1.6	26
15	Combined Effect of Heating Rate and Microalloying Elements on Recrystallization During Annealing of Dual-Phase Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 2865-2875.	2.2	19
16	Influence of Heating Rate on Ferrite Recrystallization and Austenite Formation in Cold-Rolled Microalloyed Dual-Phase Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 66-77.	2.2	19
17	Chemical composition of nano-phases studied by anomalous small-angle X-ray scattering: Application to oxide nano-particles in ODS steels. Materials Characterization, 2014, 87, 138-142.	4.4	18
18	Carbon diffusivity and kinetics of spinodal decomposition of martensite in a model Fe-Ni-C alloy. Materials Letters, 2018, 214, 213-216.	2.6	17

#	Article	IF	Citations
19	Texture evolution in Nd:YAG-laser welds of AZ31 magnesium alloy hot rolled sheets and its influence on mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2049-2055.	5.6	13
20	Ferrite recrystallization and austenite formation during annealing of cold-rolled advanced high-strength steels: In situ synchrotron X-ray diffraction and modeling. Materials Characterization, 2019, 154, 20-30.	4.4	13
21	Influence of a 2-D defect on the partitioning during the formation of a cementite particle in steels. Computational Materials Science, 2015, 106, 64-68.	3.0	12
22	Recent Developments in Small-Angle X-Ray Scattering for the Study of Metals and Polymers. Advanced Engineering Materials, 2001, 3, 579.	3.5	11
23	Dilatometry revealing Si precipitation in Alâ€“Si-alloys. International Journal of Materials Research, 2009, 100, 1005-1013.	0.3	11
24	Effects of Ag or Si on precipitation in the alloy Al-2.5 mass% Cu-1.5 mass% Mg. Philosophical Magazine, 2005, 85, 3735-3754.	1.6	10
25	Austenite formation in a ferrite/martensite cold-rolled microstructure during annealing of advanced high-strength steels. Metallurgical Research and Technology, 2014, 111, 3-8.	0.7	10
26	Growth and migration of nanocavities in He+ multi-implanted Si measured by in situ small-angle X-ray scattering. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 182, 45-51.	3.5	6
27	Segregation affecting the evolution of primary recrystallization textures in a ternary Fe-Si-Sn alloy. IOP Conference Series: Materials Science and Engineering, 2018, 375, 012016.	0.6	6
28	Precipitate Microstructure in the Heat-Affected Zone of Al-Zn-Mg MIG-Welds and Evolution during Post-Welding Heat Treatments. Materials Science Forum, 2002, 396-402, 1561-1566.	0.3	5
29	Use of Small-Angle X-Ray Scattering for the Characterisation of Precipitates in Aluminium Alloys. Materials Science Forum, 2006, 519-521, 1349-1354.	0.3	4
30	A methodology suitable for TEM local measurements of carbon concentration in retained austenite. Materials Characterization, 2008, 59, 1307-1311.	4.4	4
31	Segregation of Sn on migrating interfaces of ferrite recrystallisation: quantification through APT measurements and comparison with the solute drag theory. Materialia, 2020, 9, 100541.	2.7	4
32	Determination of the pressure in micrometric bubbles in irradiated nuclear fuels. Journal of Nuclear Materials, 2021, 543, 152591.	2.7	4
33	Characterisation and Modelling of Non-Isothermal Precipitation in Metallic Systems. Advanced Engineering Materials, 2006, 8, 1236-1239.	3.5	3
34	Morphology and reactivity of aluminium nanocrystalline powders. International Journal of Nanotechnology, 2012, 9, 618.	0.2	3
35	Application of the JMAK precipitation law in iron loss modelling to account for magnetic ageing effect. Journal of Magnetism and Magnetic Materials, 2021, , 168901.	2.3	3
36	How Sn addition influences texture development in single-phase Fe alloys: Correlation between local chemical information, microstructure and recrystallisation. Materials Characterization, 2022, 190, 112072.	4.4	3

#	Article	IF	Citations
37	Characterisation of nanocavities in He+-implanted silicon by transmission electron microscopy and small-angle X-ray scattering. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 162, 135-142.	3.5	2
38	Quantitative characterization and precipitation kinetics: towards the non-isothermal precipitation and the coupled phenomena. Revue De Metallurgie, 2004, 101, 361-379.	0.3	1
39	Determination of the volume fraction of precipitates in a nitrided Fe-0.354 wt% C-2.93 wt% Cr model alloy by anomalous small angle X-ray scattering. Materials Characterization, 2018, 135, 134-138.	4.4	1
40	TEM characterisation of helium platelets in implanted uranium dioxide. Journal of Nuclear Materials, 2020, 528, 151832.	2.7	1
41	Characterization by APT and TEM of Xe nano-bubbles in CeO2. Nuclear Instruments & Methods in Physics Research B, 2020, 469, 24-27.	1.4	1
42	Characterization of Nanocavities in Silicon Using Small Angle X-Ray Scattering. Materials Research Society Symposia Proceedings, 2007, 994, 1.	0.1	0