Charbel Moussa

List of Publications by Year
in descending order

28 papers	600 citations	687220 13 h-index	610775 24 g-index
28 all docs	28 docs citations	28 times ranked	499 citing authors

#	Article	IF	Citations
1	About quantitative EBSD analysis of deformation and recovery substructures in pure Tantalum. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012038.	0.3	110
2	Statistical analysis of dislocations and dislocation boundaries from EBSD data. Ultramicroscopy, 2017, 179, 63-72.	0.8	95
3	Modeling of dynamic and post-dynamic recrystallization by coupling a full field approach to phenomenological laws. Materials and Design, 2017, 133, 498-519.	3.3	50
4	Identification of the hardening law of materials with spherical indentation using the average representative strain for several penetration depths. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 606, 409-416.	2.6	41
5	Evaluation of the tensile properties of a material through spherical indentation: definition of an average representative strain and a confidence domain. Journal of Materials Science, 2014, 49, 592-603.	1.7	39
6	On the Coupling between Recrystallization and Precipitation Following Hot Deformation in a Î³-Î³â€² Nickel-Based Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4199-4213.	1.1	31
7	Study of the concept of representative strain and constraint factor introduced by Vickers indentation. Mechanics of Materials, 2014, 68, 1-14.	1.7	30
8	Estimation of geometrically necessary dislocation density from filtered EBSD data by a local linear adaptation of smoothing splines. Journal of Applied Crystallography, 2019, 52, 548-563.	1.9	30
9	Characterization of homogenous and plastically graded materials with spherical indentation and inverse analysis. Journal of Materials Research, 2012, 27, 20-27.	1.2	24
10	A new topological approach for the mean field modeling of dynamic recrystallization. Materials and Design, 2018, 146, 194-207.	3.3	21
11	Continuous dynamic recrystallization in a Znâ€"Cuâ€"Ti sheet subjected to bilinear tensile strain. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 789, 139689.	2.6	21
12	Mechanical characterization of carbonitrided steel with spherical indentation using the average representative strain. Materials and Design, 2016, 89, 1191-1198.	3.3	18
13	Experimental and numerical investigation on carbonitrided steel characterization with spherical indentation. Surface and Coatings Technology, 2014, 258, 782-789.	2.2	14
14	Improvement of 3D mean field models for capillarity-driven grain growth based on full field simulations. Journal of Materials Science, 2016, 51, 10970-10981.	1.7	14
15	Full field modeling of dynamic recrystallization in a CPFEM context â€" Application to 304L steel. Computational Materials Science, 2020, 184, 109892.	1.4	11
16	Orientation and deformation conditions dependence of dislocation substructures in cold deformed pure tantalum. Materials Characterization, 2021, 171, 110789.	1.9	9
17	Influence of pre-recovery on the recrystallization of pure tantalum. Journal of Materials Science, 2021, 56, 15354-15378.	1.7	9
18	DIGIMUÂ®: Full field recrystallization simulations for optimization of multi-pass processes. AIP Conference Proceedings, 2019, , .	0.3	7

#	Article	IF	Citations
19	Dynamic and Post-dynamic Recrystallization During Supersolvus Forging of the New Nickel-Based Superalloyâ€"VDM Alloy 780. Minerals, Metals and Materials Series, 2020, , 450-460.	0.3	7
20	A mean field model of agglomeration as an extension to existing precipitation models. Acta Materialia, 2020, 192, 40-51.	3.8	4
21	Extrema of micro-hardness in fully pearlitic compacted graphite cast iron. International Journal of Cast Metals Research, 2020, 33, 218-225.	0.5	3
22	Comparaison entre les dÃ©formations reprÃ©sentatives de lâ€™indentation Vickers et de lâ€™indentation sphÃ©rique. Materiaux Et Techniques, 2013, 101, 303.	0.3	3
23	Influence of crystallographic orientation on the recrystallization of pure tantalum through microstructure-based estimation of the stored energy. International Journal of Refractory Metals and Hard Materials, 2022, 104, 105786.	1.7	3
24	Determination of the Plastic Strain by Spherical Indentation of Uniaxially Deformed Sheet Metals. Key Engineering Materials, 0, 651-653, 950-956.	0.4	2
25	Prediction of the grain size evolution during thermal treatments at the mesoscopic scale: a numerical framework and industrial examples. Materiaux Et Techniques, 2018, 106, 105.	0.3	2
26	Full field modeling of dynamic recrystallization in a global level set framework, application to 304L stainless steel. MATEC Web of Conferences, 2016, 80, 02005.	0.1	1
27	Revue bibliographique sur la caractÃ©risation mÃ©canique des matÃ©riaux utilisant la dÃ©formation reprÃ©sentative en indentation sphÃ©rique. Materiaux Et Techniques, 2013, 101, 302.	0.3	1
28	Full-Field Approach for Modeling of Microstructural Evolutions During Forming Processes. , 2019, , .		0