Raúl E Bolmaro

List of Publications by Year in descending order

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108 papers 1,588 citations

331538 21 h-index 35 g-index

109 all docs

109 docs citations

109 times ranked 1454 citing authors

#	Article	IF	CITATIONS
1	Deformation and texture evolution in AZ31 magnesium alloy during uniaxial loading. Acta Materialia, 2006, 54, 549-562.	3.8	302
2	X-ray evaluation of dislocation density in ODS-Eurofer steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 142-146.	2.6	113
3	Surface resistance of YBa2Cu3O7films on SrTiO3and LaGaO3substrates. Applied Physics Letters, 1989, 55, 914-916.	1.5	42
4	Crystallographic relationships in the crossed lamellar microstructure of the shell of the gastropod Conus marmoreus. Acta Biomaterialia, 2012, 8, 830-835.	4.1	40
5	In vivo evaluation of albendazole microspheres for the treatment of Toxocara canis larva migrans. European Journal of Pharmaceutics and Biopharmaceutics, 2010, 75, 451-454.	2.0	39
6	Analysis of the micro and substructural evolution during severe plastic deformation of ARMCO iron and consequences in mechanical properties. Materials Science & Diple Regineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 740-741, 108-120.	2.6	39
7	An Eshelby inclusion-based model for the study of stresses and plastic strain localization in metal matrix composites I: General formulation and its application to round particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 229, 182-191.	2.6	36
8	Shape memory properties of highly textured Cu–Al–Ni–(Ti) alloys. Materials Science & Dience & D	2.6	36
9	Characterization of phases in an Fe–Mn–Si–Cr–Ni shape memory alloy processed by different thermomechanical methods. Materials Characterization, 2015, 109, 128-137.	1.9	33
10	Strain partitioning and texture evolution during cold rolling of AISI 201 austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 702, 161-172.	2.6	33
11	Microstructural evolution and mechanical properties on an ARB processed IF steel studied by X-ray diffraction and EBSD. Materials Characterization, 2016, 118, 332-339.	1.9	32
12	Effects of strain-induced martensite and its reversion on the magnetic properties of AISI 201 austenitic stainless steel. Journal of Magnetism and Magnetic Materials, 2016, 419, 156-165.	1.0	31
13	Long-term microstructural stability of oxide-dispersion strengthened Eurofer steel annealed at 800ŰC. Journal of Nuclear Materials, 2014, 448, 33-42.	1.3	30
14	Texture analysis with a time-of-flight neutron strain scanner. Journal of Applied Crystallography, 2014, 47, 1337-1354.	1.9	25
15	Texture evolution during thermomechanical treatments in Fe–Mn–Si shape memory alloys. Materials Science & Science & Properties, Microstructure and Processing, 2008, 481-482, 578-581.	2.6	24
16	The evolution of texture in an equal channel pressed aluminum AA1050. Materials Science & Description of texture in an equal channel pressed aluminum AA1050. Materials Science & Description of texture and Processing A: Structural Materials: Properties, Microstructure and Processing, 2015, 623, 22-31.	2.6	24
17	In situ measurements of texture variations during a tensile loading of Mg-alloy AM20 using synchrotron X-ray radiation. Scripta Materialia, 2004, 51, 455-460.	2.6	23
18	Cyclic softening mechanisms of Zircaloy-4. Journal of Nuclear Materials, 2004, 326, 195-200.	1.3	22

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19	The influence of deformation path on strain characteristics of AA1050 aluminium processed by equal-channel angular pressing followed by rolling. Materials Science & Degineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 646, 154-162.	2.6	22
20	Heterogeneity of strain path, texture and microstructure evolution of AA6063-T6 processed by Equal Channel Angular Sheet Extrusion (ECASE). Journal of Alloys and Compounds, 2018, 768, 349-357.	2.8	22
21	Comparison of a low carbon steel processed by Cold Rolling (CR) and Asymmetrical Rolling (ASR): Heterogeneity in strain path, texture, microstructure and mechanical properties. Journal of Manufacturing Processes, 2021, 64, 557-575.	2.8	22
22	A comparison of the texture development in pure and simple shear and during path changes. Scripta Metallurgica Et Materialia, 1992, 27, 1717-1722.	1.0	21
23	Mechanical spectroscopy of deformed WE43 magnesium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 442, 476-479.	2.6	21
24	Computational modeling of texture and microstructure evolution in Al alloys deformed by ECAE. Scripta Materialia, 2006, 55, 1099-1102.	2.6	21
25	Prediction of Generation of High- and Low-Angle Grain Boundaries (HAGB and LAGB) During Severe Plastic Deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 4674-4684.	1.1	21
26	Evaluation of microstructure anisotropy on room and medium temperature ECAP deformed F138 steel. Materials Characterization, 2015, 107, 98-111.	1.9	20
27	Study of a drawing-quality sheet steel. II: Forming-limit curves by experiments and micromechanical simulations. International Journal of Solids and Structures, 2010, 47, 2294-2299.	1.3	19
28	A new approach to crystal spin calculation during deformation texture development. Scripta Materialia, 2000, 43, 553-559.	2.6	18
29	Study of a drawing-quality sheet steel. I: Stress/strain behaviors and Lankford coefficients by experiments and micromechanical simulations. International Journal of Solids and Structures, 2010, 47, 2285-2293.	1.3	18
30	Recrystallization textures in fcc materials: A simulation based on micromechanical modeling data. Scripta Materialia, 2005, 53, 147-152.	2.6	17
31	Poisson's ratio in zirconium single crystals. Journal of Nuclear Materials, 1983, 118, 78-82.	1.3	16
32	On plastic strain distribution and texture development in fiber composites. Acta Metallurgica Et Materialia, 1993, 41, 1893-1905.	1.9	16
33	Growing of crystalline zones in EPDM irradiated with a low neutron flux. Nuclear Instruments & Methods in Physics Research B, 2004, 225, 297-304.	0.6	16
34	Crystal spin in two-sites self consistent models: From kinematics to kinetics. Computational Materials Science, 1997, 9, 237-250.	1.4	15
35	Effect of organic impurities on the morphology and crystallographic texture of zinc electrodeposits. Hydrometallurgy, 2017, 169, 330-338.	1.8	15
36	Thermal stability of ARMCO iron processed by ECAP. International Journal of Advanced Manufacturing Technology, 2018, 98, 2917-2932.	1.5	15

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37	Texture development of wire drawn Cu–Fe composites. Physica B: Condensed Matter, 2000, 276-278, 888-889.	1.3	13
38	Determination of Residual Stresses in High Speed Milled Aluminium Alloys Using a Method of Indent Pairs. Experimental Mechanics, 2010, 50, 205-215.	1.1	13
39	An Eshelby inclusion based model for the study of stresses and plastic strain localization in metal matrix composites II. Fiber reinforcement and lamellar inclusions. Materials Science & Diplication A: Structural Materials: Properties, Microstructure and Processing, 1997, 229, 192-202.	2.6	12
40	XRD and EBSD analysis of anisotropic microstructure development in cold rolled F138 stainless steel. Materials Characterization, 2017, 123, 137-152.	1.9	12
41	Mechanical and microstructural behavior of a heterogeneous austenitic stainless steel processed by Equal Channel Angular Sheet Extrusion (ECASE). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 792, 139779.	2.6	12
42	Finite element method simulations for two-phase material plastic strains. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 196, 53-63.	2.6	11
43	Chitosan microparticles: influence of the gelation process on the release profile and oral bioavailability of albendazole, a class II compound. Drug Development and Industrial Pharmacy, 2014, 40, 1476-1482.	0.9	11
44	Study of recovery and first recrystallisation kinetics in CGO Fe3%Si steels using misorientationâ€derived parameters (EBSD). Journal of Microscopy, 2019, 275, 133-148.	0.8	11
45	Equal channel angular sheet extrusion (ECASE) as a precursor of heterogeneity in an AA6063-T6 alloy. International Journal of Advanced Manufacturing Technology, 2019, 102, 3459-3471.	1.5	11
46	Development of wire drawing textures in Cu–Fe: the influence of macroscopic and microscopic heterogeneities. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 1-19.	0.8	11
47	Texture development in Agî—,Ni powder composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 175, 113-124.	2.6	10
48	Cyclic softening mechanisms of Zry-4 at room temperature: the unlikely influence of texture variations. Scripta Materialia, 2004, 51, 617-621.	2.6	10
49	Relationship between Dislocation Densityand Hydrogen Trappingin a Cold Worked API 5L X60 Steel. , 2015, 8, 1031-1038.		9
50	Severe Plastic Deformation by Equal Channel Angular Pressing and Rolling: The Influence of the Deformation Path on Strain Distribution. Advanced Engineering Materials, 2018, 20, 1700055.	1.6	9
51	Inducing heterogeneity in an austenitic stainless steel by equal channel angular sheet extrusion (ECASE). Journal of Materials Research and Technology, 2019, 8, 2473-2479.	2.6	9
52	An Ultra-Fast Annealing Treatment by Electropulsing during Pure Copper Wire Drawing. Metals, 2019, 9, 1253.	1.0	9
53	Preparation and structural characterization of ZnO and CeO 2 nanocomposite powders as  active catalytic supports'. Powder Technology, 2014, 267, 180-192.	2.1	8
54	Is it Possible to Use Rolling Methods to Improve Textures on Fe–Mn–Si Shape Memory Alloys?. Advanced Engineering Materials, 2018, 20, 1700062.	1.6	8

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55	Texture in Cu-based shape memory strips obtained by twin roll casting. Materials Science & Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 688-692.	2.6	7
56	Preparation, characterization and dissolution studies of fast release diclofenac sodium tablets from PVP solid dispersions. Pharmaceutical Development and Technology, 2010, 15, 162-168.	1.1	7
57	CRYPTIC DIAGENETIC CHANGES IN QUATERNARY ARAGONITIC SHELLS: A TEXTURAL, CRYSTALLOGRAPHIC, AND TRACE-ELEMENT STUDY ON AMIANTIS PURPURATA (BIVALVIA) FROM PATAGONIA, ARGENTINA. Palaios, 2013, 28, 438-451.	0.6	7
58	How to build a puncture- and breakage-resistant eggshell? Mechanical and structural analyses of avian brood parasites and their hosts. Journal of Experimental Biology, 2021, 224, .	0.8	7
59	An iterative approach to mechanical properties of MMCs at the onset of plastic deformation. Materials Science & Diplication A: Structural Materials: Properties, Microstructure and Processing, 1997, 229, 203-218.	2.6	6
60	Heat treatment effect on an AA6063 alloy. Materials Letters, 2020, 277, 128338.	1.3	6
61	Anelastic behaviour of materials under multiaxial strains. Journal of Materials Science, 1987, 22, 4158-4164.	1.7	5
62	Obtaining of single phase Cu–Li alloy through an electrodeposition process. Materials Letters, 2005, 59, 349-354.	1.3	5
63	Effects of acetoin as chelating agent on the preparation of SrBi2Ta2O9 thin films from non-hydrolyzing precursors. Journal of Sol-Gel Science and Technology, 2008, 48, 294-302.	1.1	5
64	EBSD characterization of an IF steel processed by Accumulative Roll Bonding. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012077.	0.3	5
65	Equal channel angular sheet extrusion (ECASE) produces twinning heterogeneity in commercially pure titanium. Materials Characterization, 2021, 181, 111460.	1.9	5
66	Elastic and anelastic behaviour of icosahedral quasicrystals. Journal of Materials Science, 1989, 24, 2975-2980.	1.7	4
67	Why Spin Sharing Seems to be Successful in Texture Simulations?. Materials Science Forum, 2002, 408-412, 347-352.	0.3	4
68	Stage for texture measurements above room temperature in a Philips X'Pert Pro MPD diffractometer. Review of Scientific Instruments, 2009, 80, 113903.	0.6	4
69	High-Pressure Torsion of Ti: Synchrotron characterization of phase volume fraction and domain sizes. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012147.	0.3	4
70	Surface Microstructure Modification in Square Extruded Al-Nb Powder Composites by Shot Peening. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012015.	0.3	4
71	EBSD Analysis of Orientation Gradients Developed near Grain Boundaries. Materials Research, 2019, 22,	0.6	4
72	Mechanical Properties and Microstructural Aspects of Two High-Manganese Steels with TWIP/TRIP Effects: A Comparative Study. Metals, 2021, 11, 24.	1.0	4

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73	Effect of microstructural heterogeneity on the balanced-biaxial and tensile behavior of a Zn alloy sheet. Materials Today Communications, 2022, 30, 103126.	0.9	4
74	On the measurement of Young's modulus of tubes by propagation of longitudinal waves. Journal of Nuclear Materials, 1983, 116, 166-171.	1.3	3
75	Anelastic behaviour of materials under multiaxial strains. Journal of Materials Science, 1988, 23, 93-100.	1.7	3
76	Anelastic behaviour of materials under multiaxial strains. Journal of Materials Science, 1988, 23, 371-379.	1.7	3
77	ECAE of Al-4%Cu Alloys: Experimental Study Assisted by Polycrystalline-FEM Simulations. Materials Science Forum, 2005, 495-497, 775-784.	0.3	3
78	Effects of the Chelating Agent on the Fabrication of SBT Thin Films: Part II. Microstructural Properties. Ferroelectrics, 2006, 335, 35-43.	0.3	3
79	Texture Evolution as Determined by In situ Neutron Diffraction During Annealing of Iron Deformed by Equal Channel Angular Pressing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4235-4246.	1.1	3
80	Effect of texture heterogeneities on the shape memory properties of rolled Fe-Mn-Si SMA. Zeitschrift FÃ $\frac{1}{4}$ r Kristallographie, Supplement, 2009, 2009, 297-302.	0.5	3
81	Preparation, characterization and dissolution studies of fast release diclofenac sodium tablets from PVP solid dispersions. Pharmaceutical Development and Technology, 2009, 00, 090710041713042-7.	1.1	3
82	Texture Development and Texture Influence on the Mechanical Properties of the Mg-Alloy AZ31. Materials Science Forum, 2002, 408-412, 1067-1072.	0.3	2
83	The texture development of ECAP processed AA1050 aluminum, before and after a final anneal: effect of the initial texture. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012152.	0.3	2
84	Strain path dependence of anisotropic microstructure evolution on low Stacking Fault Energy F138 steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 698, 1-11.	2.6	2
85	Generalized pole figures from post-processing whole Debye–Scherrer patterns for microstructural analysis on deformed materials. Journal of Synchrotron Radiation, 2022, 29, 732-748.	1.0	2
86	Poisson's Ratio of Metals and Alloys. , 1985, , 287-292.		1
87	Measurement and Simulation of Extrusion Textures in Al-Mg Composites. Materials Science Forum, 2000, 321-324, 621-625.	0.3	1
88	Exploring Self-Consistent Models as a Source for Recrystallization Simulation. Materials Science Forum, 2002, 408-412, 353-358.	0.3	1
89	Transformation Textures in Steels: A Simulation Based on Micromechanical Modeling Data. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1210-1218.	1.1	1
90	Deformation analysis on F138 austenitic stainless steel: ECAE and rolling. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012057.	0.3	1

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91	Anisotropic and Heterogeneous Development of Microstructures. Combining Laboratory/Synchrotron X-rays and EBSD on a few SPD Metallic Systems. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012148.	0.3	1
92	Study of Plastic Heterogeneity in a Low Carbon Steel Sheet by EBSD., 2015, 8, 986-993.		1
93	Texture, Microstructure, and Surface Mechanical Properties of AZ31 Magnesium Alloys Processed by ECASD. Advanced Engineering Materials, 2018, 20, 1700228.	1.6	1
94	Dynamic Recrystallization during Warm Accumulative Asymmetric Roll Bonding (AARB) of the AA1050 Aluminium. Materials Science Forum, 0, 941, 1342-1347.	0.3	1
95	Experiments and simulation evaluation in quartz veins textures in the Guamanes shear belt, Córdoba Pampean Ranges, Central Argentina. Zeitschrift FÃ⅓r Kristallographie, Supplement, 2009, 2009, 123-129.	0.5	1
96	ECAP of Fe. Experiments and simulations of the in-elbow textures. Zeitschrift FÃ 1 /4r Kristallographie, Supplement, 2009, 2009, 117-122.	0.5	1
97	Comparison of a Self-Consistent Approach and a Pure Kinematical Model for Plastic Deformation and Texture Development. Materials Science Forum, 1994, 157-162, 1809-1814.	0.3	0
98	Unsteady Texture Components in Two-Phase Materials as a Result of Strain Inhomogenetiy. Materials Science Forum, 2000, 321-324, 276-281.	0.3	0
99	Residual Strains in Al-Mg Composites Deformed by Extrusion. Experimental Data and Simulations. Materials Science Forum, 2000, 321-324, 626-630.	0.3	0
100	SELF-CON: A Self Consistent Software Package for Micromechanical Simulations. Materials Science Forum, 2002, 408-412, 341-346.	0.3	0
101	Textures Applied to Mechanical Processing Technology Assessment in Ancient Bronze. Materials Science Forum, 2005, 495-497, 719-724.	0.3	0
102	Simulation of Recrystallization Textures in fcc Materials Starting from Self-Consistent Modelling Results. Materials Science Forum, 2005, 495-497, 1207-1212.	0.3	0
103	The Evolution of Texture in AA 1050 Alloy Deformed by Equal-Channel Angular Pressing. Materials Science Forum, 2010, 667-669, 577-582.	0.3	0
104	The Evolution of Texture and Deformation Anisotropy at an Equal Channel Extruded Aluminum 1050 Alloy. Materials Science Forum, 0, 783-786, 192-197.	0.3	0
105	Combined materials characterization by area detector investigations using hard X-rays. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012104.	0.3	0
106	Protrusions formed during primary recrystallization of cross-rolled coarse-grained niobium. International Journal of Refractory Metals and Hard Materials, 2019, 85, 105080.	1.7	0
107	A Model of Plastic Spin Taking into Account Grain Interaction During Rolling. Ceramic Transactions, 0, , 734-744.	0.1	0
108	Assessing the Power of Electron Back Scattering Diffraction Characterization of Deformed F-138 Steel from the View Point of Crystal Diffraction. Praktische Metallographie/Practical Metallography, 2014, 51, 634-655.	0.1	0