Pedro Henrique R Pereira

List of Publications by Year
in descending order

49 papers	1,448 citations	304602 22 h-index	330025 37 g-index
49 all docs	49 docs citations	49 times ranked	916 citing authors

#	Article	IF	Citations
1	Using finite element modeling to examine the temperature distribution in quasi-constrained high-pressure torsion. Acta Materialia, 2012, 60, 3190-3198.	3.8	271
2	The fabrication of graphene-reinforced Al-based nanocomposites using high-pressure torsion. Acta Materialia, 2019, 164, 499-511.	3.8	121
3	Effect of temperature rise on microstructural evolution during high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 714, 167-171.	2.6	74
4	Modeling the temperature rise in high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 593, 185-188.	2.6	68
5	Influence of grain size on the flow properties of an Al-Mg-Sc alloy over seven orders of magnitude of strain rate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 685, 367-376.	2.6	64
6	Microstructural evolution and superplasticity in an Mgâ€“Gdâ€“Yâ€“Zr alloy after processing by different SPD techniques. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 577-585.	2.6	53
7	The Effect of Highâ€Pressure Torsion on Microstructure, Hardness and Corrosion Behavior for Pure Magnesium and Different Magnesium Alloys. Advanced Engineering Materials, 2019, 21, 1801081.	1.6	42
8	Microstructure, Texture, and Superplasticity of a Fine-Grained Mg-Gd-Zr Alloy Processed by Equal-Channel Angular Pressing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6056-6069.	1.1	40
9	Mechanical properties of an Al-Zn-Mg alloy processed by ECAP and heat treatments. Journal of Alloys and Compounds, 2018, 769, 631-639.	2.8	38
10	Effect of ECAP processing on microstructure evolution and dynamic compressive behavior at different temperatures in an Al-Zn-Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 617-625.	2.6	35
11	Characterization of precipitates in an Al-Zn-Mg alloy processed by ECAP and subsequent annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 712, 146-156.	2.6	35
12	Development of a magnesium-alumina composite through cold consolidation of machining chips by high-pressure torsion. Journal of Alloys and Compounds, 2019, 780, 422-427.	2.8	35
13	Grain refinement and superplastic flow in a fully lamellar Ti-6Al-4V alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 398-405.	2.6	33
14	Factors influencing superplasticity in the Ti-6Al-4V alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 718, 198-206.	2.6	32
15	Exceptionally high strength and good ductility in an ultrafine-grained 316L steel processed by severe plastic deformation and subsequent annealing. Materials Letters, 2018, 214, 240-242.	1.3	31
16	Cytotoxicity and Corrosion Behavior of Magnesium and Magnesium Alloys in Hank's Solution after Processing by Highâ€Pressure Torsion. Advanced Engineering Materials, 2019, 21, 1900391.	1.6	31
17	A magnesium-aluminium composite produced by high-pressure torsion. Journal of Alloys and Compounds, 2019, 804, 421-426.	2.8	29
18	Effect of heat treatments on the microstructures and tensile properties of an ultrafine-grained Al-Zn-Mg alloy processed by ECAP. Journal of Alloys and Compounds, 2018, 749, 567-574.	2.8	28

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19	An examination of the elastic distortions of anvils in high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 631, 201-208.	2.6	26
20	Finite Element Modelling of High-Pressure Torsion: An Overview. Materials Transactions, 2019, 60, 1139-1150.	0.4	26
21	Determination of mechanical anisotropy of magnesium processed by ECAP. Journal of Materials Research and Technology, 2014, 3, 331-337.	2.6	25
22	Achieving superior grain refinement and mechanical properties in vanadium through high-pressure torsion and subsequent short-term annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 60-69.	2.6	25
23	Mechanical properties and microstructural evolution of nanocrystalline titanium at elevated temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 669, 358-366.	2.6	24
24	Annealingâ€Induced Hardening in Ultrafineâ€Grained Niâ€“Mo Alloys. Advanced Engineering Materials, 2018, 20, 1800184.	1.6	23
25	Strain heterogeneities in the rolling direction of steel sheets submitted to the skin pass: A finite element analysis. Journal of Materials Processing Technology, 2015, 216, 234-247.	3.1	20
26	Fabrication and characterization of nanostructured immiscible Cuâ€“Ta alloys processed by high-pressure torsion. Journal of Alloys and Compounds, 2020, 832, 155007.	2.8	19
27	An examination of the superplastic characteristics of Alâ€“Mgâ€“Sc alloys after processing. Journal of Materials Research, 2017, 32, 4541-4553.	1.2	17
28	Inverse Hallâ€“Petch Behaviour in an AZ91 Alloy and in an AZ91â€“Al 2 O 3 Composite Consolidated by Highâ€Pressure Torsion. Advanced Engineering Materials, 2020, 22, 1900894.	1.6	16
29	Using finite element modelling to examine the flow process and temperature evolution in HPT under different constraining conditions. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012041.	0.3	15
30	Examining the microhardness evolution and thermal stability of an Alâ€“Mgâ€“Sc alloy processed by high-pressure torsion at a high temperature. Journal of Materials Research and Technology, 2017, 6, 348-354.	2.6	13
31	Microstructural evolution and mechanical behavior of copper processed by low strain amplitude multi-directional forging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 474-483.	2.6	13
32	Magnesium-Based Bioactive Composites Processed at Room Temperature. Materials, 2019, 12, 2609.	1.3	12
33	Using Plane Strain Compression Test to Evaluate the Mechanical Behavior of Magnesium Processed by HPT. Metals, 2022, 12, 125.	1.0	11
34	Examining the Thermal Stability of an Al-Mg-Sc Alloy Processed by High-Pressure Torsion. Materials Research, 2017, 20, 39-45.	0.6	10
35	Consolidation of Magnesium and Magnesium Alloy Machine Chips Using High-Pressure Torsion. Materials Science Forum, 2018, 941, 851-856.	0.3	10
36	Effect of Numbers of Turns of Highâ€Pressure Torsion on the Development of Exceptional Ductility in Pure Magnesium. Advanced Engineering Materials, 2020, 22, 1900565.	1.6	10

#	Article	IF	Citations
37	Interface structures in Al-Nb2O5 nanocomposites processed by high-pressure torsion at room temperature. Materials Characterization, 2020, 162, 110222.	1.9	10
38	Thermal stability and superplastic behaviour of an Al-Mg-Sc alloy processed by ECAP and HPT at different temperatures. IOP Conference Series: Materials Science and Engineering, 2017, 194, 012013.	0.3	9
39	Mechanical behavior and microstructures of aluminum in the Multi-Axial Compression (MAC) with and without specimen re-machining. Materials Letters, 2019, 237, 84-87.	1.3	9
40	Thermal stability and mechanical properties of HPT-processed CP-Ti. IOP Conference Series: Materials Science and Engineering, 2017, 194, 012012.	0.3	7
41	Low Temperature Superplasticity in Ultrafine-Grained AZ31 Alloy. Defect and Diffusion Forum, 0, 385, 59-64.	0.4	6
42	Influence of Strain Amplitude on the Microstructural Evolution and Flow Properties of Copper Processed by Multidirectional Forging. Advanced Engineering Materials, 2020, 22, 1901510.	1.6	6
43	Developing magnesium-based composites through high-pressure torsion. Letters on Materials, 2019, 9, 541-545.	0.2	6
44	Effect of High-pressure Torsion on Corrosion Behavior of a Solution-treated Al-Mg-Sc Alloy in a Saline Solution. Materials Research, 2019, 22, .	0.6	6
45	Influence of Initial Heat Treatment on the Microhardness Evolution of an Al-Mg-Sc Alloy Processed by High-Pressure Torsion. Materials Science Forum, 0, 879, 1471-1476.	0.3	4
46	Analysis of Plastic Deformation and Sample Geometry during the Compression Stage in High-Pressure Torsion. Advanced Materials Research, 0, 922, 592-597.	0.3	3
47	Microstructural evolution and mechanical properties in a Znâ€“Alâ€“Cuâ€“Mg hypoeutectic alloy processed by multi-directional forging at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 801, 140420.	2.6	3
48	Hardness, Microstructure and Strain Distributions in Commercial Purity Aluminum Processed by Multi Directional Forging (MDF). Materials Research, 2020, 23, .	0.6	3
49	Recovery or Non-Recovery in Al-0.1% Mg and Al-1% Mg Alloy during High-Pressure Torsion Processing. Materials Science Forum, 2016, 879, 773-778.	0.3	1