Eloi Pineda

List of Publications by Year in Descending Order

85 papers	1,349 citations	18 h-index	35 g-index
87 ext. papers	1,675 ext. citations	5.1 avg, IF	4.8 L-index

#	Paper	IF	Citations
85	Effect of physical aging and cyclic loading on power-law creep of high-entropy metallic glass. *Journal of Materials Science and Technology*, **2022**, 115, 1-9	9.1	0
84	Structure, mechanical properties and nanocrystallization of (FeCoCrNi)-(B,Si) high-entropy metallic glasses. *Intermetallics*, **2022**, 141, 107432	3.5	1
83	Analysis of the anelastic deformation of high-entropy Pd20Pt20Cu20Ni20P20 metallic glass under stress relaxation and recovery. *Journal of Materials Science and Technology*, **2022**, 107, 82-91	9.1	1
82	Comprehensive insights into the thermal and mechanical effects of metallic glasses via creep. *Journal of Materials Science and Technology*, **2022**, 99, 39-47	9.1	2
81	Sluggish dynamics of homogeneous flow in high-entropy metallic glasses. *Scripta Materialia*, **2022**, 214, 114673	5.6	1
80	A hierarchically correlated flow defect model for metallic glass: Universal understanding of stress relaxation and creep. *International Journal of Plasticity*, **2022**, 154, 103288	7.6	4
79	Unraveling the microstructural heterogeneity and plasticity of Zr50Cu40Al10 bulk metallic glass by nanoindentation. *International Journal of Plasticity*, **2022**, 154, 103305	7.6	1
78	Evolution of the distribution of flow units of a metallic glass under cyclic loading. *Journal of Alloys and Compounds*, **2022**, 916, 165479	5.7	0
77	Relaxation dynamics of Pd-Ni-P metallic glass: decoupling of anelastic and viscous processes. *Journal of Physics Condensed Matter*, **2021**, 33,	1.8	3
76	Intrinsic relaxation in a supercooled ZrTiNiCuBe glass forming liquid. *Physical Review Materials*, **2021**, 5,	3.2	1
75	Inelastic deformation of metallic glasses under dynamic cyclic loading. *Scripta Materialia*, **2021**, 194, 113675	5.6	2
74	Effect of minor addition on dynamic mechanical relaxation in ZrCu-based metallic glasses. *Journal of Non-Crystalline Solids*, **2021**, 553, 120496	3.9	3
73	Investigation of the mechanical properties and biocompatibility of planar and electrospun alkene-styrene copolymers against P(VDF-TrFE) and porcine skin: Potential use as second skin substrates. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 119, 104481	4.1	1
72	Identifying the high entropy characteristic in La-based metallic glasses. *Applied Physics Letters*, **2021** , 119, 051905	3.4	2
71	Dynamic mechanical relaxation and thermal creep of high-entropy La30Ce30Ni10Al20Co10 bulk metallic glass. *Science China: Physics, Mechanics and Astronomy*, **2021**, 64, 1	3.6	11
70	Dynamic mechanical relaxation behavior of Zr35Hf17.5Ti5.5Al12.5Co7.5Ni12Cu10 high entropy bulk metallic glass. *Journal of Materials Science and Technology*, **2021**, 83, 248-255	9.1	17
69	Stress relaxation in high-entropy Pd20Pt20Cu20Ni20P20 metallic glass: Experiments, modeling and theory. *Mechanics of Materials*, **2021**, 160, 103959	3.3	1

68	Modelling and physical analysis of the high-temperature rheological behavior of a metallic glass. *International Journal of Plasticity*, **2021**, 146, 103107	7.6	11
67	Effects of the Addition of Fe, Co on the Azo Dye Degradation Ability of Mn-Al Mechanically Alloyed Powders. *Metals*, **2020**, 10, 1578	2.3	2
66	Martensitic Transformation, Thermal Analysis and Magnetocaloric Properties of Ni-Mn-Sn-Pd Alloys. *Processes*, **2020**, 8, 1582	2.9	2
65	Unified perspective on structural heterogeneity of a LaCe-based metallic glass from versatile dynamic stimuli. *Intermetallics*, **2020**, 125, 106922	3.5	4
64	X-ray photon correlation spectroscopy revealing the change of relaxation dynamics of a severely deformed Pd-based bulk metallic glass. *Acta Materialia*, **2020**, 195, 446-453	8.4	6
63	Magnetic properties, martensitic and magnetostructural transformations of ferromagnetic Ni□Mn□Sn□Cu shape memory alloys. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	6
62	Azo-dye degradation by Mn-Al powders. *Journal of Environmental Management*, **2020**, 258, 110012	7.9	5
61	New (FeCoCrNi)-(B,Si) high-entropy metallic glasses, study of the crystallization processes by X-ray diffraction and M□ssbauer spectroscopy.. *Journal of Non-Crystalline Solids*, **2020**, 547, 120301	3.9	4
60	Structural heterogeneities and mechanical behavior of amorphous alloys. *Progress in Materials Science*, **2019**, 104, 250-329	42.2	248
59	Study of medium range reordering by plastic deformation in Cu46Zr46Al8. *Journal of Alloys and Compounds*, **2018**, 744, 34-40	5.7	
58	Application of mechanically alloyed MnAl particles to de-colorization of azo dyes. *Journal of Alloys and Compounds*, **2018**, 741, 240-245	5.7	9
57	Anti-Aging in Ultrastable Metallic Glasses. *Physical Review Letters*, **2018**, 120, 135504	7.4	32
56	Microscopic evidence of the connection between liquid-liquid transition and dynamical crossover in an ultraviscous metallic glass former. *Physical Review Materials*, **2018**, 2,	3.2	10
55	Dealloying of Cu-Mg-Ca Alloys. *Metals*, **2018**, 8, 919	2.3	3
54	Plastic deformation induced anisotropy in metallic glasses: A molecular dynamics study. *Journal of Alloys and Compounds*, **2017**, 707, 102-107	5.7	7
53	Rapid degradation of azo-dye using Mn□Al powders produced by ball-milling. *RSC Advances*, **2017**, 7, 12620-12628	3.7	24
52	Comparing the atomic and macroscopic aging dynamics in an amorphous and partially crystalline Zr44Ti11Ni10Cu10Be25 bulk metallic glass. *Journal of Materials Research*, **2017**, 32, 2014-2021	2.5	5
51	Sub-T relaxation times of the □process in metallic glasses. *Journal of Non-Crystalline Solids*, **2017**, 471, 322-327	3.9	14

50	Physical aging effects on the dynamic relaxation behavior and mechanical properties of Cu46Zr46Al8 metallic glass. *Journal of Alloys and Compounds*, **2017**, 726, 195-200	5.7	8
49	High efficiency decolorization of azo dye Reactive Black 5 by Ca-Al particles. *Journal of Environmental Chemical Engineering*, **2017**, 5, 6107-6113	6.8	11
48	Relaxation processes and physical aging in metallic glasses. *Journal of Physics Condensed Matter*, **2017**, 29, 503002	1.8	53
47	Phonon dispersion relation of metallic glasses. *Physical Review B*, **2016**, 94,	3.3	10
46	Relaxation dynamics of Fe55Cr10Mo14C15B6 metallic glass explored by mechanical spectroscopy and calorimetry measurements. *Journal of Thermal Analysis and Calorimetry*, **2016**, 125, 711-719	4.1	2
45	Modeling of the Sub-Tg Relaxation Spectrum of Pd42.5Ni7.5Cu30P20 Metallic Glass. *Journal of Physical Chemistry B*, **2016**, 120, 2838-44	3.4	4
44	Characterization of mechanical relaxation in a Cu□r□l metallic glass. *Journal of Alloys and Compounds*, **2015**, 643, S17-S21	5.7	12
43	X-Ray Photon Correlation Spectroscopy Reveals Intermittent Aging Dynamics in a Metallic Glass. *Physical Review Letters*, **2015**, 115, 175701	7.4	69
42	Mechanical Relaxation of Metallic Glasses: An Overview of Experimental Data and Theoretical Models. *Metals*, **2015**, 5, 1073-1111	2.3	45
41	Structural and dynamical properties of Mg65Cu25Y10 metallic glasses studied by in situ high energy X-ray diffraction and time resolved X-ray photon correlation spectroscopy. *Journal of Alloys and Compounds*, **2014**, 615, S45-S50	5.7	14
40	Role of Nb in glass formation of Fe□r□o□B□Nb BMGs. *Journal of Alloys and Compounds*, **2014**, 604, 157-163	5.7	26
39	Aging and structural relaxation of hyper-quenched Mg65Cu25Y10 metallic glass. *Journal of Alloys and Compounds*, **2014**, 615, S9-S12	5.7	10
38	Glass-formation and corrosion properties of Fe□r□o□B glassy ribbons with low Cr content. *Journal of Alloys and Compounds*, **2014**, 615, S128-S131	5.7	24
37	Molecular dynamics computation of the dynamical structure factor of a Lennard□ones glass: Propagation of acoustic modes at the nm-scale. *Journal of Alloys and Compounds*, **2014**, 586, S250-S253	5.7	0
36	Relaxation dynamics and aging in structural glasses **2013**,		15
35	Relaxation of rapidly quenched metallic glasses: Effect of the relaxation state on the slow low temperature dynamics. *Acta Materialia*, **2013**, 61, 3002-3011	8.4	45
34	Inelastic X-ray scattering in metallic glasses. *Intermetallics*, **2012**, 30, 148-153	3.5	3
33	Atomic-scale relaxation dynamics and aging in a metallic glass probed by x-ray photon correlation spectroscopy. *Physical Review Letters*, **2012**, 109, 165701	7.4	163

32	Acoustic properties of metallic glasses in the mesoscopic regime by inelastic X-ray scattering. *Journal of Alloys and Compounds*, **2011**, 509, S95-S98	5.7	3
31	Role of Mo in the local configuration and structure stabilization of amorphous steels, a Synchrotron X-ray diffraction and Mössbauer study. *Journal of Alloys and Compounds*, **2011**, 509, S56-S59	5.7	2
30	Communication: are metallic glasses different from other glasses? A closer look at their high frequency dynamics. *Journal of Chemical Physics*, **2011**, 135, 101101	3.9	3
29	Polyamorphic transitions in Ce-based metallic glasses by synchrotron radiation. *Physical Review B*, **2011**, 84,	3.3	33
28	High frequency dynamics of BMG determined by synchrotron radiation: A microscopic picture. *Journal of Alloys and Compounds*, **2010**, 495, 319-322	5.7	4
27	Fragility measurement of Pd-based metallic glass by dynamic mechanical analysis. *Journal of Alloys and Compounds*, **2010**, 504, S215-S218	5.7	8
26	Structural study of conventional and bulk metallic glasses during annealing. *Journal of Alloys and Compounds*, **2009**, 483, 578-581	5.7	10
25	Phase-field modelling of microstructural evolution in primary crystallization. *Journal of Alloys and Compounds*, **2009**, 483, 645-649	5.7	9
24	Mössbauer characterization of an amorphous steel with optimal Mo content. *Journal of Non-Crystalline Solids*, **2008**, 354, 5138-5139	3.9	1
23	Structural evolution of metallic glasses during annealing through in situ synchrotron X-ray diffraction. *Journal of Non-Crystalline Solids*, **2008**, 354, 5140-5142	3.9	4
22	Temporal evolution of the domain structure in a Poisson-Voronoi nucleation and growth transformation: results for one and three dimensions. *Physical Review E*, **2008**, 78, 021110	2.4	18
21	Temporal evolution of the domain structure in a Poisson-Voronoi transformation. *Journal of Statistical Mechanics: Theory and Experiment*, **2007**, 2007, P06007-P06007	1.9	15
20	Domain-size distribution in a Poisson-Voronoi nucleation and growth transformation. *Physical Review E*, **2007**, 75, 040107	2.4	27
19	Phase-field modeling of glass crystallization: Change of the transport properties and crystallization kinetic. *Journal of Non-Crystalline Solids*, **2007**, 353, 1002-1004	3.9	4
18	Fragility and glass-forming ability of the Ca-Mg-Cu system. *Journal of Alloys and Compounds*, **2007**, 434-435, 145-148	5.7	4
17	Theoretical approach to Poisson ratio behavior during structural changes in metallic glasses. *Physical Review B*, **2006**, 73,	3.3	30
16	On the validity of Avrami formalism in primary crystallization. *Journal of Applied Physics*, **2006**, 100, 054902	2.5	63
15	Effects of Soft-Impingement and Non-random Nucleation on the Kinetics and Microstructural Development of Primary Crystallization **2005**, 126-134		

14	Mean Field Kinetic Modelling of Microstructures Driven by Nucleation and Growth Kinetics **2005**, 9-14		
13	Size distribution evolution equations in space-competing domain growth systems. *Philosophical Magazine*, **2004**, 84, 2023-2039	1.6	7
12	Cell size distribution in random tessellations of space. *Physical Review E*, **2004**, 70, 066119	2.4	49
11	Small-angle scattering curves of densely packed particulate solids obtained by nucleation and growth kinetics. *Journal of Applied Crystallography*, **2003**, 36, 836-839	3.8	
10	Microstructural implications of non-random nucleation protocols in nanocrystallized metallic glasses. *Journal of Non-Crystalline Solids*, **2003**, 317, 85-90	3.9	8
9	Non-random nucleation and the Avrami kinetics. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **2002**, 82, 107-121		23
8	On the equations describing the grain size distribution change for KJMA kinetics. *Journal of Non-Crystalline Solids*, **2001**, 287, 88-91	3.9	8
7	Kinetic simulation of primary transformations in glassy alloys. *Journal of Non-Crystalline Solids*, **2001** , 287, 92-95	3.9	8
6	Microstructure development in Kolmogorov, Johnson-Mehl, and Avrami nucleation and growth kinetics. *Physical Review B*, **1999**, 60, 3104-3112	3.3	45
5	Nanostructured precipitates: Experimental versus exact theoretical saxs profiles. *Scripta Materialia*, **1999**, 12, 649-652		1
4	Microstructure Evaluation for Time Dependent Nucleation Protocols in KJMA Kinetics. *Materials Research Society Symposia Proceedings*, **1999**, 580, 321		
3	Modeling of Non-Random Nucleation Protocols. *Materials Research Society Symposia Proceedings*, **1999**, 580, 411		1
2	Refinement of Size Distributions for Primary Crystallizations. *Materials Research Society Symposia Proceedings*, **1997**, 481, 213		
1	Non-random nucleation and the Avrami kinetics		3