Isabella Gallino

List of Publications by Year
in descending order

53	1,585	279798	302126
papers	citations	23 h-index	39 g-index

54	54	54	1121
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enthalpy relaxation and its relation to the thermodynamics and crystallization of the Zr58.5Cu15.6Ni12.8Al10.3Nb2.8 bulk metallic glass-forming alloy. Acta Materialia, 2007, 55, 1367-1376.	7.9	140
2	Solid state reactions in Al/Ni alternate foils induced by cold rolling and annealing. Acta Materialia, 1999, 47, 1901-1914.	7.9	102
3	X-Ray Photon Correlation Spectroscopy Reveals Intermittent Aging Dynamics in a Metallic Glass. Physical Review Letters, 2015, 115, 175701.	7.8	100
4	Hierarchical aging pathways and reversible fragile-to-strong transition upon annealing of a metallic glass former. Acta Materialia, 2018, 144, 400-410.	7.9	86
5	Kinetic and thermodynamic studies of the fragility of bulk metallic glass forming liquids. Journal of Applied Physics, 2010, 108, .	2.5	84
6	High temperature melt viscosity and fragile to strong transition in Zrâ€“Cuâ€“Niâ€“Alâ€“Nb(Ti) and Cu47Ti34Zr11Ni8 bulk metallic glasses. Acta Materialia, 2012, 60, 4712-4719.	7.9	82
7	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math>relaxation and low-temperature aging in a Au-based bulk metallic glass: From elastic properties to atomic-scale structure. Physical Review B, 2014, 89, .	3.2	64
8	Vitrification decoupling from Î±-relaxation in a metallic glass. Science Advances, 2020, 6, eaay1454.	10.3	54
9	Linking structure to fragility in bulk metallic glass-forming liquids. Applied Physics Letters, 2015, 106, .	3.3	51
10	The effect of cooling rates on the apparent fragility of Zr-based bulk metallic glasses. Journal of Applied Physics, 2010, 107, .	2.5	50
11	Thermo-physical characterization of the Fe67Mo6Ni3.5Cr3.5P12C5.5B2.5 bulk metallic glass forming alloy. Acta Materialia, 2016, 118, 129-139.	7.9	50
12	Glass transition with decreasing correlation length during cooling of Fe50Co50 superlattice and strong liquids. Nature Physics, 2011, 7, 178-182.	16.7	46
13	Oxidation and corrosion of highly alloyed Cuâ€“Feâ€“Ni as inert anode material for aluminum electrowinning in as-cast and homogenized conditions. Corrosion Science, 2012, 63, 293-303.	6.6	45
14	Corrosion resistance of Cuâ€“Zrâ€“Alâ€“Y and Zrâ€“Cuâ€“Niâ€“Alâ€“Nb bulk metallic glasses. Journal of Alloys and Compounds, 2007, 434-435, 234-236.	5.5	41
15	Equilibrium viscosity of Zrâ€“Cuâ€“Niâ€“Alâ€“Nb bulk metallic glasses. Scripta Materialia, 2010, 63, 573-576.	5.2	40
16	The effect of low-temperature structural relaxation on free volume and chemical short-range ordering in a Au49Cu26.9Si16.3Ag5.5Pd2.3 bulk metallic glass. Scripta Materialia, 2015, 103, 14-17.	5.2	40
17	The kinetic fragility of Pt-P- and Ni-P-based bulk glass-forming liquids and its thermodynamic and structural signature. Acta Materialia, 2017, 132, 118-127.	7.9	36
18	On the thermodynamics, kinetics, and sub-Tg relaxations of Mg-based bulk metallic glasses. Acta Materialia, 2018, 155, 117-127.	7.9	33

#	Article	IF	Citations
19	On the high glass-forming ability of Pt-Cu-Ni/Co-P-based liquids. Acta Materialia, 2017, 141, 109-119.	7.9	32
20	On the Fragility of Bulk Metallic Glass Forming Liquids. Entropy, 2017, 19, 483.	2.2	30
21	Kinetics, Thermodynamics, and Structure of Bulk Metallic Glass Forming Liquids. Jom, 2017, 69, 2178-2186.	1.9	27
22	Thermodynamic and kinetic studies of the Cuâ€“Zrâ€“Al(â€“Sn) bulk metallic glass-forming system. Journal of Alloys and Compounds, 2020, 844, 156126.	5.5	26
23	The impact of fragility on the calorimetric glass transition in bulk metallic glasses. Intermetallics, 2014, 55, 138-144.	3.9	23
24	Ultrafast formation of single phase B2 AlCoCrFeNi high entropy alloy films by reactive Ni/Al multilayers as heat source. Materials and Design, 2021, 206, 109790.	7.0	21
25	A colourimetric and microstructural study of the tarnishing of gold-based bulk metallic glasses. Corrosion Science, 2014, 85, 258-269.	6.6	20
26	Relaxation Pathways in Metallic Glasses. Jom, 2017, 69, 2171-2177.	1.9	20
27	The role of Ga addition on the thermodynamics, kinetics, and tarnishing properties of the Au-Ag-Pd-Cu-Si bulk metallic glass forming system. Acta Materialia, 2019, 165, 315-326.	7.9	20
28	Selective laser melting of a Fe-Si-Cr-B-C-based complex-shaped amorphous soft-magnetic electric motor rotor with record dimensions. Materials and Design, 2022, 215, 110483.	7.0	18
29	Homogenization of Highly Alloyed Cu-Fe-Ni: A Phase Diagram Study. Journal of Phase Equilibria and Diffusion, 2008, 29, 131-135.	1.4	16
30	Fatigue crack growth behavior of a Zr58.5Cu15.6Ni12.8Al10.3Nb2.8 bulk metallic glass-forming alloy. Scripta Materialia, 2011, 64, 359-362.	5.2	15
31	Atomic scale analysis of phase formation and diffusion kinetics in Ag/Al multilayer thin films. Journal of Applied Physics, 2016, 120, .	2.5	15
32	On the thermodynamics and its connection to structure in the Pt-Pd-Cu-Ni-P bulk metallic glass forming system. Acta Materialia, 2021, 220, 117300.	7.9	15
33	Microscopic evidence of the connection between liquid-liquid transition and dynamical crossover in an ultraviscous metallic glass former. Physical Review Materials, 2018, 2, .	2.4	14
34	Oxidation of glassy Niâ€“Nbâ€“Sn alloys and its influence on the thermodynamics and kinetics of crystallization. Acta Materialia, 2016, 102, 176-186.	7.9	13
35	On the kinetic and thermodynamic fragility of the Pt60Cu16Co2P22 and Pt57.3Cu14.6Ni5.3P22.8 bulk metallic glasses. Journal of Alloys and Compounds, 2014, 615, S35-S39.	5.5	12
36	Ni₆₀Nb₄₀ Nanoglass for Tunable Magnetism and Methanol Oxidation. ACS Applied Nano Materials, 2020, 3, 7252-7259.	5.0	11

#	Article	IF	Citations
37	On the devitrification of Cuâ€“Zrâ€“Al alloys: Solving the apparent contradiction between polymorphic liquid-liquid transition and phase separation. Acta Materialia, 2022, 226, 117668.	7.9	11
38	High temperature oxidation of the refractory alloy glass Nb35Ni60Sn5. Journal of Alloys and Compounds, 2007, 434-435, 225-228.	5.5	10
39	On the abnormal room temperature tarnishing of an 18 karat gold bulk metallic glass alloy. Journal of Alloys and Compounds, 2014, 615, S118-S122.	5.5	10
40	Development of novel 18-karat, premium-white gold bulk metallic glasses with improved tarnishing resistance. Materials and Design, 2018, 140, 495-504.	7.0	10
41	Ignition in ternary Ru/Al-based reactive multilayersâ€”Effects of chemistry and stacking sequence. Journal of Applied Physics, 2018, 124, .	2.5	10
42	Influence of Initial Temperature and Convective Heat Loss on the Self-Propagating Reaction in Al/Ni Multilayer Foils. Materials, 2021, 14, 7815.	2.9	8
43	Enthalpy relaxation of the Zr58.5Cu15.6Ni12.8Al10.3Nb2.8 bulk metallic glass forming alloy. Journal of Alloys and Compounds, 2007, 434-435, 141-144.	5.5	7
44	Phase Transformation and Characterization of 3D Reactive Microstructures in Nanoscale Al/Ni Multilayers. Applied Sciences (Switzerland), 2021, 11, 9304.	2.5	7
45	Ultrafast scanning calorimetry of newly developed Au-Ga bulk metallic glasses. Journal of Physics Condensed Matter, 2020, 32, 324001.	1.8	5
46	Influence of Processing Route on the Surface Reactivity of Cu47Ti33Zr11Ni6Sn2Si1 Metallic Glass. Metals, 2021, 11, 1173.	2.3	5
47	High temperature melt viscosity and fragile-to-strong transition in Zr-Cu-Ni-Al-Nb(Ti) and Cu47Ti34Zr11Ni8 bulk metallic glasses. AIP Conference Proceedings, 2013, , .	0.4	4
48	On the formation of nanocrystalline aluminides during high pressure torsion of Al/Ni alternating foils and post-processing multilayer reaction. Journal of Alloys and Compounds, 2022, 905, 164201.	5.5	3
49	Analysis of thermophysical properties of lead silicates in comparison to bulk metallic glasses. Journal of Non-Crystalline Solids, 2018, 485, 66-73.	3.1	2
50	Improving Participation of Engineering Students Studying Abroad: An International Dual-Degree Program in Materials Science and Mechanical Engineering. Jom, 2013, 65, 840-845.	1.9	1
51	Metallurgy Beyond Iron. Publications of the Astronomical Society of Australia, 2009, 26, iii-vii.	3.4	0
52	The Influence of Shear on the Liquid-Liquid Transition and Crystallization of Undercooled Zr _{41.2}Ti _{13.8}Cu _{12.5}Ni _{10.0}Be _{22.5} Bulk Metallic Glass Forming Alloy. SSRN Electronic Journal, 0, , .	0.4	0
53	The effect of shear on the liquidâ€“liquid transition and crystallization of the undercooled Zr41.2Ti13.8Cu12.5Ni10.0Be22.5 (Vit1) bulk metallic glass forming alloy. Journal of Physics Condensed Matter, 2021, 33, 474002.	1.8	0