

Beatrice Ruta

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

54
papers

1,475
citations

22
h-index

37
g-index

54
ext. papers

1,750
ext. citations

6.5
avg, IF

4.77
L-index

#	Paper	IF	Citations
54	Relaxation dynamics of Pd-Ni-P metallic glass: decoupling of anelastic and viscous processes. <i>Journal of Physics Condensed Matter</i> , 2021 , 33,	1.8	3
53	Intrinsic relaxation in a supercooled ZrTiNiCuBe glass forming liquid. <i>Physical Review Materials</i> , 2021 , 5,	3.2	1
52	Glass-forming ability correlated with the liquid-liquid transition in Pd _{42.5} Ni _{42.5} P ₁₅ alloy. <i>Scripta Materialia</i> , 2021 , 193, 117-121	5.6	10
51	Microscopic Structural Evolution during Ultrastable Metallic Glass Formation. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 40098-40105	9.5	3
50	Nanoscale Ion Dynamics Control on Amorphous Calcium Carbonate Crystallization: Precise Control of Calcite Crystal Sizes. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 25645-25656	3.8	1
49	Relaxation Dynamics, Softness, and Fragility of Microgels with Interpenetrated Polymer Networks. <i>Macromolecules</i> , 2020 , 53, 1596-1603	5.5	15
48	Vitrification decoupling from Relaxation in a metallic glass. <i>Science Advances</i> , 2020 , 6, eaay1454	14.3	31
47	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2020 , 1989-2018		2
46	Wave-Vector Dependence of the Dynamics in Supercooled Metallic Liquids. <i>Physical Review Letters</i> , 2020 , 125, 055701	7.4	4
45	Slowing down of dynamics and orientational order preceding crystallization in hard-sphere systems. <i>Science Advances</i> , 2020 , 6,	14.3	4
44	Concentration and velocity profiles in a polymeric lithium-ion battery electrolyte. <i>Energy and Environmental Science</i> , 2020 , 13, 4312-4321	35.4	17
43	Nonmonotonous atomic motions in metallic glasses. <i>Physical Review B</i> , 2020 , 102,	3.3	4
42	Relaxation dynamics induced in glasses by absorption of hard x-ray photons. <i>Physical Review B</i> , 2019 , 99,	3.3	7
41	Ultrastable metallic glasses formed on cold substrates. <i>Nature Communications</i> , 2018 , 9, 1389	17.4	51
40	Anti-Aging in Ultrastable Metallic Glasses. <i>Physical Review Letters</i> , 2018 , 120, 135504	7.4	32
39	Role of Impurities in the Kinetic Persistence of Amorphous Calcium Carbonate: A Nanoscopic Dynamics View. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 16983-16991	3.8	20
38	Microscopic evidence of the connection between liquid-liquid transition and dynamical crossover in an ultraviscous metallic glass former. <i>Physical Review Materials</i> , 2018 , 2,	3.2	10

37	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2018 , 1-30		2
36	Hierarchical aging pathways and reversible fragile-to-strong transition upon annealing of a metallic glass former. <i>Acta Materialia</i> , 2018 , 144, 400-410	8.4	58
35	Comparing the atomic and macroscopic aging dynamics in an amorphous and partially crystalline Zr ₄₄ Ti ₁₁ Ni ₁₀ Cu ₁₀ Be ₂₅ bulk metallic glass. <i>Journal of Materials Research</i> , 2017 , 32, 2014-2021	2.5	5
34	Sub-T relaxation times of the β process in metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2017 , 471, 322-327	3.9	14
33	Dynamics and Imaging Using Coherent X-rays at the European Synchrotron. <i>Synchrotron Radiation News</i> , 2017 , 30, 13-18	0.6	6
32	Thermal transport properties in amorphous/nanocrystalline metallic composites: A microscopic insight. <i>Acta Materialia</i> , 2017 , 136, 425-435	8.4	12
31	Hard X-rays as pump and probe of atomic motion in oxide glasses. <i>Scientific Reports</i> , 2017 , 7, 3962	4.9	21
30	Relaxation processes and physical aging in metallic glasses. <i>Journal of Physics Condensed Matter</i> , 2017 , 29, 503002	1.8	53
29	Relaxation Decoupling in Metallic Glasses at Low Temperatures. <i>Physical Review Letters</i> , 2017 , 118, 225901	4.1	63
28	On the nontrivial wave-vector dependence of the elastic modulus of glasses. <i>Physical Review B</i> , 2016 , 93,	3.3	7
27	Unveiling the structural arrangements responsible for the atomic dynamics in metallic glasses during physical aging. <i>Nature Communications</i> , 2016 , 7, 10344	17.4	62
26	Structure beyond pair correlations: X-ray cross-correlation from colloidal crystals. <i>Journal of Applied Crystallography</i> , 2016 , 49, 2046-2052	3.8	15
25	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2016 , 1617-1641		6
24	Hydrophobic Silica Nanoparticles Induce Gel Phases in Phospholipid Monolayers. <i>Langmuir</i> , 2016 , 32, 4868-76	4	19
23	Structural and microscopic relaxations in a colloidal glass. <i>Soft Matter</i> , 2015 , 11, 466-71	3.6	32
22	Free-volume dependent atomic dynamics in beta relaxation pronounced La-based metallic glasses. <i>Acta Materialia</i> , 2015 , 99, 290-296	8.4	32
21	X-Ray Photon Correlation Spectroscopy Reveals Intermittent Aging Dynamics in a Metallic Glass. <i>Physical Review Letters</i> , 2015 , 115, 175701	7.4	69
20	2D dynamical arrest transition in a mixed nanoparticle-phospholipid layer studied in real and momentum spaces. <i>Scientific Reports</i> , 2015 , 5, 17930	4.9	39

19	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2015 , 1-21		9
18	Structural and dynamical properties of Mg ₆₅ Cu ₂₅ Y ₁₀ metallic glasses studied by in situ high energy X-ray diffraction and time resolved X-ray photon correlation spectroscopy. <i>Journal of Alloys and Compounds</i> , 2014 , 615, S45-S50	5.7	14
17	Revealing the fast atomic motion of network glasses. <i>Nature Communications</i> , 2014 , 5, 3939	17.4	73
16	Silica nanoparticles as tracers of the gelation dynamics of a natural biopolymer physical gel. <i>Soft Matter</i> , 2014 , 10, 4547-54	3.6	38
15	Anharmonic damping of terahertz acoustic waves in a network glass and its effect on the density of vibrational states. <i>Physical Review Letters</i> , 2014 , 112, 125502	7.4	26
14	Aging and structural relaxation of hyper-quenched Mg ₆₅ Cu ₂₅ Y ₁₀ metallic glass. <i>Journal of Alloys and Compounds</i> , 2014 , 615, S9-S12	5.7	10
13	Controlling the dynamics of a bidimensional gel above and below its percolation transition. <i>Physical Review E</i> , 2014 , 89, 042308	2.4	17
12	Relaxation dynamics and aging in structural glasses 2013 ,		15
11	Compressed correlation functions and fast aging dynamics in metallic glasses. <i>Journal of Chemical Physics</i> , 2013 , 138, 054508	3.9	62
10	Relaxation of rapidly quenched metallic glasses: Effect of the relaxation state on the slow low temperature dynamics. <i>Acta Materialia</i> , 2013 , 61, 3002-3011	8.4	45
9	Acoustic excitations in glassy sorbitol and their relation with the fragility and the boson peak. <i>Journal of Chemical Physics</i> , 2012 , 137, 214502	3.9	33
8	Atomic-scale relaxation dynamics and aging in a metallic glass probed by x-ray photon correlation spectroscopy. <i>Physical Review Letters</i> , 2012 , 109, 165701	7.4	163
7	High frequency acoustic attenuation of vitreous silica: New insight from inelastic x-ray scattering. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 538-541	3.9	8
6	Brillouin light scattering study of polymeric glassy sulfur. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 563-566	3.9	7
5	Nonergodicity factor, fragility, and elastic properties of polymeric glassy sulfur. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 14052-63	3.4	22
4	Sound attenuation at terahertz frequencies and the boson peak of vitreous silica. <i>Physical Review Letters</i> , 2010 , 104, 195501	7.4	108
3	Communication: High-frequency acoustic excitations and boson peak in glasses: A study of their temperature dependence. <i>Journal of Chemical Physics</i> , 2010 , 133, 041101	3.9	29
2	Connection between Boson peak and elastic properties in silicate glasses. <i>Physical Review Letters</i> , 2009 , 102, 195502	7.4	56

- 1 Brillouin light scattering study of glassy sorbitol. *Philosophical Magazine*, **2008**, 88, 3939-3946 1.6 10