

Beatrice Ruta

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2988840/beatrice-ruta-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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	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
53	Sound attenuation at terahertz frequencies and the boson peak of vitreous silica. <i>Physical Review Letters</i> , 2010 , 104, 195501	7.4	108
52	Revealing the fast atomic motion of network glasses. <i>Nature Communications</i> , 2014 , 5, 3939	17.4	73
51	X-Ray Photon Correlation Spectroscopy Reveals Intermittent Aging Dynamics in a Metallic Glass. <i>Physical Review Letters</i> , 2015 , 115, 175701	7.4	69
50	Relaxation Decoupling in Metallic Glasses at Low Temperatures. <i>Physical Review Letters</i> , 2017 , 118, 225901	7.4	63
49	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
48	Compressed correlation functions and fast aging dynamics in metallic glasses. <i>Journal of Chemical Physics</i> , 2013 , 138, 054508	3.9	62
47	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
46	Connection between Boson peak and elastic properties in silicate glasses. <i>Physical Review Letters</i> , 2009 , 102, 195502	7.4	56
45	Relaxation processes and physical aging in metallic glasses. <i>Journal of Physics Condensed Matter</i> , 2017 , 29, 503002	1.8	53
44	Ultrastable metallic glasses formed on cold substrates. <i>Nature Communications</i> , 2018 , 9, 1389	17.4	51
43	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
42	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
41	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
40	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
39	Structural and microscopic relaxations in a colloidal glass. <i>Soft Matter</i> , 2015 , 11, 466-71	3.6	32
38	Free-volume dependent atomic dynamics in beta relaxation pronounced La-based metallic glasses. <i>Acta Materialia</i> , 2015 , 99, 290-296	8.4	32

37	Anti-Aging in Ultrastable Metallic Glasses. <i>Physical Review Letters</i> , 2018 , 120, 135504	7.4	32
36	Vitrification decoupling from β -relaxation in a metallic glass. <i>Science Advances</i> , 2020 , 6, eaay1454	14.3	31
35	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
34	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
33	Nonergodicity factor, fragility, and elastic properties of polymeric glassy sulfur. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 14052-63	3.4	22
32	Hard X-rays as pump and probe of atomic motion in oxide glasses. <i>Scientific Reports</i> , 2017 , 7, 3962	4.9	21
31	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
30	Hydrophobic Silica Nanoparticles Induce Gel Phases in Phospholipid Monolayers. <i>Langmuir</i> , 2016 , 32, 4868-76	4	19
29	Controlling the dynamics of a bidimensional gel above and below its percolation transition. <i>Physical Review E</i> , 2014 , 89, 042308	2.4	17
28	Concentration and velocity profiles in a polymeric lithium-ion battery electrolyte. <i>Energy and Environmental Science</i> , 2020 , 13, 4312-4321	35.4	17
27	Relaxation Dynamics, Softness, and Fragility of Microgels with Interpenetrated Polymer Networks. <i>Macromolecules</i> , 2020 , 53, 1596-1603	5.5	15
26	Relaxation dynamics and aging in structural glasses 2013 ,		15
25	Structure beyond pair correlations: X-ray cross-correlation from colloidal crystals. <i>Journal of Applied Crystallography</i> , 2016 , 49, 2046-2052	3.8	15
24	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
23	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
22	Thermal transport properties in amorphous/nanocrystalline metallic composites: A microscopic insight. <i>Acta Materialia</i> , 2017 , 136, 425-435	8.4	12
21	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
20	Brillouin light scattering study of glassy sorbitol. <i>Philosophical Magazine</i> , 2008 , 88, 3939-3946	1.6	10

19	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
18	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
17	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2015 , 1-21		9
16	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
15	On the nontrivial wave-vector dependence of the elastic modulus of glasses. <i>Physical Review B</i> , 2016 , 93,	3.3	7
14	Relaxation dynamics induced in glasses by absorption of hard x-ray photons. <i>Physical Review B</i> , 2019 , 99,	3.3	7
13	Brillouin light scattering study of polymeric glassy sulfur. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 563-566	3.9	7
12	Dynamics and Imaging Using Coherent X-rays at the European Synchrotron. <i>Synchrotron Radiation News</i> , 2017 , 30, 13-18	0.6	6
11	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2016 , 1617-1641		6
10	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
9	Wave-Vector Dependence of the Dynamics in Supercooled Metallic Liquids. <i>Physical Review Letters</i> , 2020 , 125, 055701	7.4	4
8	Slowing down of dynamics and orientational order preceding crystallization in hard-sphere systems. <i>Science Advances</i> , 2020 , 6,	14.3	4
7	Nonmonotonous atomic motions in metallic glasses. <i>Physical Review B</i> , 2020 , 102,	3.3	4
6	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
5	Microscopic Structural Evolution during Ultrastable Metallic Glass Formation. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 40098-40105	9.5	3
4	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2020 , 1989-2018		2
3	Structural Dynamics of Materials Probed by X-Ray Photon Correlation Spectroscopy 2018 , 1-30		2
2	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

1 Intrinsic relaxation in a supercooled ZrTiNiCuBe glass forming liquid. *Physical Review Materials*, **2021**, 5, 3.2 1