Francesco Puosi

List of Publications by Year in descending order

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34 papers	693 citations	623188 14 h-index	552369 26 g-index
35 all docs	35 docs citations	35 times ranked	536 citing authors

#	Article	IF	Citations
1	Driving Rate Dependence of Avalanche Statistics and Shapes at the Yielding Transition. Physical Review Letters, 2016, 116, 065501.	2.9	107
2	Communication: Correlation of the instantaneous and the intermediate-time elasticity with the structural relaxation in glassforming systems. Journal of Chemical Physics, 2012, 136, 041104.	1.2	70
3	Time-dependent elastic response to a local shear transformation in amorphous solids. Physical Review E, 2014, 89, 042302.	0.8	56
4	Predictive relation for the Î±-relaxation time of a coarse-grained polymer melt under steady shear. Science Advances, 2020, 6, eaaz0777.	4.7	45
5	Spatial displacement correlations in polymeric systems. Journal of Chemical Physics, 2012, 136, 164901.	1.2	38
6	Scaling between Relaxation, Transport, and Caged Dynamics in Polymers: From Cage Restructuring to Diffusion. Journal of Physical Chemistry B, 2011, 115, 14046-14051.	1.2	36
7	Thermodynamic scaling of vibrational dynamics and relaxation. Journal of Chemical Physics, 2016, 145, 234904.	1.2	35
8	Probing relevant ingredients in mean-field approaches for the athermal rheology of yield stress materials. Soft Matter, 2015, 11, 7639-7647.	1.2	33
9	Scaling between relaxation, transport and caged dynamics in a binary mixture on a per-component basis. Journal of Chemical Physics, 2013, 138, 12A532.	1.2	27
10	The kinetic fragility of liquids as manifestation of the elastic softening. European Physical Journal E, 2015, 38, 87.	0.7	24
11	Communication: Fast and local predictors of the violation of the Stokes-Einstein law in polymers and supercooled liquids. Journal of Chemical Physics, 2012, 136, 211101.	1.2	20
12	Elastic consequences of a single plastic event: Towards a realistic account of structural disorder and shear wave propagation in models of flowing amorphous solids. Journal of the Mechanics and Physics of Solids, 2015, 78, 333-351.	2.3	18
13	Dynamical, structural and chemical heterogeneities in a binary metallic glass-forming liquid. Journal of Physics Condensed Matter, 2018, 30, 145701.	0.7	16
14	Nucleation kinetics in a supercooled metallic glass former. Acta Materialia, 2019, 174, 387-397.	3.8	15
15	Communication: Fast dynamics perspective on the breakdown of the Stokes-Einstein law in fragile glassformers. Journal of Chemical Physics, 2018, 148, 131102.	1.2	14
16	Thermodynamic scaling of relaxation: insights from anharmonic elasticity. Journal of Physics Condensed Matter, 2017, 29, 135101.	0.7	13
17	Comment on â€œGeneralized localization model of relaxation in glass-forming liquidsâ€• Soft Matter, 2013, 9, 7890.	1.2	12
18	Competition of the connectivity with the local and the global order in polymer melts and crystals. Journal of Chemical Physics, 2013, 139, 184501.	1.2	12

#	Article	IF	Citations
19	Weak links between fast mobility and local structure in molecular and atomic liquids. Journal of Chemical Physics, 2015, 142, 124504.	1.2	12
20	Cage rattling does not correlate with the local geometry in molecular liquids. Journal of Non-Crystalline Solids, 2015, 407, 29-33.	1.5	11
21	Plastic response and correlations in athermally sheared amorphous solids. Physical Review E, 2016, 94, 032604.	0.8	11
22	Johariâ€“Goldstein Heterogeneous Dynamics in a Model Polymer. Macromolecules, 2021, 54, 2053-2058.	2.2	11
23	Direct calculation of the critical Casimir force in a binary fluid. Physical Review E, 2016, 94, 040102.	0.8	10
24	Fast Vibrational Modes and Slow Heterogeneous Dynamics in Polymers and Viscous Liquids. International Journal of Molecular Sciences, 2019, 20, 5708.	1.8	10
25	In silico broadband mechanical spectroscopy of amorphous tantala. Physical Review Research, 2019, 1, .	1.3	8
26	Coincident Correlation between Vibrational Dynamics and Primary Relaxation of Polymers with Strong or Weak Johari-Goldstein Relaxation. Polymers, 2020, 12, 761.	2.0	6
27	Dynamic slowing-down and crystal nucleation in a supercooled metallic glass former induced by local icosahedral order. Physical Review Materials, 2019, 3, .	0.9	5
28	Vibrational scaling of the heterogeneous dynamics detected by mutual information. European Physical Journal E, 2019, 42, 146.	0.7	2
29	Mutual Information in Molecular and Macromolecular Systems. International Journal of Molecular Sciences, 2021, 22, 9577.	1.8	2
30	Non-local cooperative atomic motions that govern dissipation in amorphous tantala unveiled by dynamical mechanical spectroscopy. Acta Materialia, 2020, 201, 1-6.	3.8	1
31	Nanoscale Elastoplastic Wrinkling of Ultrathin Molecular Films. International Journal of Molecular Sciences, 2021, 22, 11732.	1.8	1
32	Metallic glass-formers in 2D exhibit the same scaling as in 3D between vibrational dynamics and structural relaxation. Journal of Physics Condensed Matter, 2020, 32, 085701.	0.7	0
33	Open and Anisotropic Soft Regions in a Model Polymer Glass. Polymers, 2021, 13, 1336.	2.0	0
34	Evidence of negative thermal expansion in supercooled tantala. Journal of Non-Crystalline Solids, 2021, 577, 121308.	1.5	0