Ulrich Buchenau

List of Publications by Citations

33 papers	1,306 citations	13 h-index	33 g-index
33 ext. papers	1,373 ext. citations	3.2 avg, IF	4.35 L-index

#	Paper	IF	Citations
33	Interaction of soft modes and sound waves in glasses. *Physical Review B*, **1992**, 46, 2798-2808	3.3	363
32	Anharmonic potentials and vibrational localization in glasses. *Physical Review B*, **1991**, 43, 5039-5045	3.3	299
31	Dynamics of glassy and liquid selenium. *Physical Review Letters*, **1989**, 63, 2381-2384	7.4	122
30	Low-temperature thermal conductivity of glasses within the soft-potential model. *Physical Review B*, **1997**, 55, 5749-5754	3.3	80
29	Fragility and compressibility at the glass transition. *Physical Review B*, **2004**, 70,	3.3	68
28	Sound-wave scattering in silica. *Physical Review B*, **1998**, 57, 2663-2666	3.3	65
27	High-frequency dynamics of glass-forming polybutadiene. *Physical Review E*, **1999**, 59, 4470-4475	2.4	45
26	Neutron scattering study of the vibrations in vitreous silica and germania. *Journal of Chemical Physics*, **2008**, 128, 244507	3.9	40
25	Mechanical relaxation in glasses and at the glass transition. *Physical Review B*, **2001**, 63,	3.3	36
24	Probing cooperative liquid dynamics with the mean square displacement. *Physical Review E*, **2014**, 90, 042312	2.4	35
23	A new interpretation of dielectric data in molecular glass formers. *Journal of Chemical Physics*, **2006** , 124, 94505	3.9	16
22	Energy landscape - a key concept in the dynamics of liquids and glasses. *Journal of Physics Condensed Matter*, **2003**, 15, S955-S966	1.8	15
21	An asymmetry model for the highly viscous flow. *Journal of Chemical Physics*, **2009**, 131, 074501	3.9	14
20	Thermodynamics and dynamics of the inherent states at the glass transition. *Journal of Non-Crystalline Solids*, **2015**, 407, 179-183	3.9	13
19	Fragility and elasticity: Description of flow in highly viscous liquids. *Physical Review B*, **2009**, 80,	3.3	12
18	Retardation and flow at the glass transition. *Physical Review E*, **2016**, 93, 032608	2.4	9
17	Modeling the nonlinear dielectric response of glass formers. *Journal of Chemical Physics*, **2017**, 146, 214503	3.9	8

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16	Mechanical and dielectric relaxation spectra in seven highly viscous glass formers. *Journal of Non-Crystalline Solids*, **2007**, 353, 3812-3819	3.9	8
15	Pragmatical access to the viscous flow of undercooled liquids. *Physical Review E*, **2017**, 95, 062603	2.4	7
14	Evaluation of x-ray Brillouin scattering data. *Physical Review E*, **2014**, 90, 062319	2.4	7
13	An atomic mechanism for the boson peak in metallic glasses. *Philosophical Magazine*, **2008**, 88, 3885-3900	1.6	7
12	Inelastic Neutron Scattering from Glass Formers. *Progress of Theoretical Physics Supplement*, **1997**, 126, 151-157		6
11	Structural interpretation of the Prigogine-Defay ratio at the glass transition. *Physical Review B*, **2012**, 86,	3.3	5
10	On the mechanism of the highly viscous flow. *Journal of Chemical Physics*, **2011**, 134, 224501	3.9	5
9	Eshelby description of highly viscous flow-Half model, half theory. *Journal of Chemical Physics*, **2018**, 149, 044508	3.9	5
8	Bulk and shear relaxation in glasses and highly viscous liquids. *Journal of Chemical Physics*, **2012**, 136, 224512	3.9	4
7	The breakdown of the shear modulus at the glass transition. *Philosophical Magazine*, **2004**, 84, 1333-1340	1.6	4
6	Key experiments in highly viscous liquids. *Journal of Non-Crystalline Solids*, **2011**, 357, 274-278	3.9	3
5	Structural relaxation and highly viscous flow. *Journal of Chemical Physics*, **2018**, 148, 064502	3.9	2
4	Shear and dielectric spectra in highly viscous liquids. *Physical Review B*, **2011**, 83,	3.3	1
3	An Eshelby model for highly viscous flow. *Journal of Physics Condensed Matter*, **2008**, 20, 244108	1.8	1
2	Relaxations in the glass phase of silica and of poly(methyl methacrylate)		1
1	Dielectric and thermal relaxation in the energy landscape. *Philosophical Magazine*, **2007**, 87, 389-400	1.6	