Giancarlo Ruocco

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425 papers

13,145 citations

60 h-index

95 g-index

476 ext. papers

14,509 ext. citations

avg, IF

6.35 L-index

#	Paper	IF	Citations
425	Bacterial ratchet motors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 9541-5	11.5	425
424	The Widom line as the crossover between liquid-like and gas-like behaviour in supercritical fluids. <i>Nature Physics</i> , 2010 , 6, 503-507	16.2	308
423	Dynamics of Glasses and Glass-Forming Liquids Studied by Inelastic X-ray Scattering. <i>Science</i> , 1998 , 280, 1550-1555	33.3	286
422	Computer generation of optimal holograms for optical trap arrays. <i>Optics Express</i> , 2007 , 15, 1913-22	3.3	276
421	Microscopic dynamics in liquid metals: The experimental point of view. <i>Reviews of Modern Physics</i> , 2005 , 77, 881-933	40.5	254
420	Is the fragility of a liquid embedded in the properties of its glass?. Science, 2003, 302, 849-52	33.3	254
419	Acoustic attenuation in glasses and its relation with the boson peak. <i>Physical Review Letters</i> , 2007 , 98, 025501	7.4	215
418	Collective dynamics in water by high energy resolution inelastic X-ray scattering. <i>Physical Review Letters</i> , 1995 , 75, 850-853	7.4	214
417	Saddles in the energy landscape probed by supercooled liquids. <i>Physical Review Letters</i> , 2000 , 85, 5356	-97.4	195
416	Self-starting micromotors in a bacterial bath. <i>Physical Review Letters</i> , 2009 , 102, 048104	7.4	189
415	Evidence of High Frequency Propagating Modes in Vitreous Silica. <i>Physical Review Letters</i> , 1996 , 77, 383	3 <i>5</i> 7-3 <mark>4</mark> 83	8182
414	Shocks in nonlocal media. <i>Physical Review Letters</i> , 2007 , 99, 043903	7.4	171
413	Transition from Normal to Fast Sound in Liquid Water. <i>Physical Review Letters</i> , 1996 , 77, 83-86	7.4	155
412	Viscoelastic behavior of water in the terahertz-frequency range: an inelastic x-ray scattering study. <i>Physical Review E</i> , 1999 , 60, 5505-21	2.4	147
411	Amorphous silica-like carbon dioxide. <i>Nature</i> , 2006 , 441, 857-60	50.4	138
410	A perfect crystal X-ray analyser with meV energy resolution. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1996 , 111, 181-186	1.2	130
409	Routes to gelation in a clay suspension. <i>Physical Review Letters</i> , 2004 , 93, 258301	7.4	125

Mixing of Longitudinal and Transverse Dynamics in Liquid Water. Physical Review Letters, 1997, 79, 1678-1.681 122 408 More on the phase diagram of Laponite. Langmuir, 2006, 22, 1106-11 407 121 4 Connected Network of Minima as a Model Glass: Long Time Dynamics. Physical Review Letters, 1998 406 7.4 121 , 81, 4648-4651 X-ray Monochromator with 2 x 10(8) Energy Resolution. Journal of Synchrotron Radiation, 1996, 3, 62-4 2.4 118 405 Observation of a gradient catastrophe generating solitons. *Physical Review Letters*, **2009**, 102, 083902 7.4 116 404 Dynamically correlated regions and configurational entropy in supercooled liquids. Journal of 115 403 3.4 Physical Chemistry B, 2008, 112, 10652-8 Heterogeneous shear elasticity of glasses: the origin of the boson peak. Scientific Reports, 2013, 3, 1407 4.9 113 402 401 Equivalence of the sound velocity in water and ice at mesoscopic wavelengths. Nature, 1996, 379, 521-523.4 110 Comparison of FaxE's correction for a microsphere translating or rotating near a surface. Physical 400 2.4 104 Review E, 2009, 79, 026301 Relaxation processes in harmonic glasses?. Physical Review Letters, 2000, 84, 5788-91 399 7.4 101 Brillouin microscopy: an emerging tool for mechanobiology. Nature Methods, 2019, 16, 969-977 398 21.6 99 Low-frequency atomic motion in a model glass. Europhysics Letters, 1996, 34, 681-686 1.6 98 397 The high-frequency dynamics of liquid water. Journal of Physics Condensed Matter, 1999, 11, R259-R293 1.8 396 97 Observation of large momentum phononlike modes in glasses. Physical Review Letters, 1996, 76, 3356-3359 395 97 High-frequency longitudinal and transverse dynamics in water. Physical Review E, 2005, 71, 011501 394 2.4 90 Evidence for a crossover in the frequency dependence of the acoustic attenuation in vitreous silica. 86 7.4 393 Physical Review Letters, 2006, 97, 035501 A perfect crystal X-ray analyser with 1.5 meV energy resolution. Nuclear Instruments & Methods in 1.2 85 392 Physics Research B, 1996, 117, 339-340 Glass-glass transition during aging of a colloidal clay. Nature Communications, 2014, 5, 4049 391 84 17.4

390	Liquidlike behavior of supercritical fluids. <i>Physical Review Letters</i> , 2006 , 97, 245702	7.4	81
389	Optical spatial solitons in soft matter. <i>Physical Review Letters</i> , 2005 , 95, 183902	7.4	81
388	Off-equilibrium effective temperature in monatomic Lennard-Jones glass. <i>Physical Review Letters</i> , 2000 , 84, 6054-7	7.4	80
387	Nondynamic Origin of the High-Frequency Acoustic Attenuation in Glasses. <i>Physical Review Letters</i> , 1999 , 83, 5583-5586	7.4	80
386	Landscapes and fragilities. Journal of Chemical Physics, 2004, 120, 10666-80	3.9	79
385	Condensation in disordered lasers: theory, 3D+1 simulations, and experiments. <i>Physical Review Letters</i> , 2008 , 101, 143901	7.4	78
384	Evidence of two viscous relaxation processes in the collective dynamics of liquid lithium. <i>Physical Review Letters</i> , 2000 , 85, 4076-9	7.4	78
383	The Raman coupling function in amorphous silica and the nature of the long-wavelength excitations in disordered systems. <i>Europhysics Letters</i> , 1999 , 47, 56-62	1.6	78
382	Density fluctuations in molten lithium: inelastic x-ray scattering study. <i>Journal of Physics Condensed Matter</i> , 2000 , 12, 8009-8034	1.8	76
381	Inflammation, neurodegeneration and protein aggregation in the retina as ocular biomarkers for Alzheimer's disease in the 3xTg-AD mouse model. <i>Cell Death and Disease</i> , 2018 , 9, 685	9.8	75
380	Fast sound in liquid water. <i>Physical Review E</i> , 1993 , 47, 1677-1684	2.4	74
379	Analysis of the network topology in liquid water and hydrogen sulphide by computer simulation. <i>Journal of Chemical Physics</i> , 1992 , 96, 6167-6176	3.9	72
378	Competing interactions in arrested States of colloidal clays. <i>Physical Review Letters</i> , 2010 , 104, 085701	7.4	71
377	High-resolution low-frequency Raman spectra of liquid H2O and D2O. <i>Journal of Chemical Physics</i> , 1990 , 93, 7767-7773	3.9	70
376	High Frequency Sound Waves in Vitreous Silica. <i>Physical Review Letters</i> , 1998 , 80, 1236-1239	7.4	69
375	Theoretical and computer-simulation study of the density fluctuations in liquid water. <i>Physical Review A</i> , 1989 , 40, 7226-7238	2.6	69
374	Nature of the short wavelength excitations in vitreous silica: An X-Ray brillouin scattering study. <i>Physical Review Letters</i> , 2000 , 85, 2136-9	7.4	66
373	High-frequency vibrational dynamics in glasses. <i>Journal of Physics Condensed Matter</i> , 2001 , 13, 9141-916	54 .8	66

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372	Evidence of anomalous dispersion of the generalized sound velocity in glasses. <i>Physical Review B</i> , 2004 , 69,	3.3	65	
371	Glassy behavior of light. <i>Physical Review Letters</i> , 2006 , 96, 065702	7.4	64	
370	Experimental Determination of the Structural Relaxation in Liquid Water. <i>Physical Review Letters</i> , 1999 , 82, 775-778	7.4	64	
369	Collective dynamics of liquid aluminum probed by inelastic x-ray scattering. <i>Physical Review E</i> , 2000 , 63,	2.4	63	
368	Dynamics and Thermodynamics beyond the critical point. Scientific Reports, 2013, 3, 1203	4.9	61	
367	Colloidal attraction induced by a temperature gradient. <i>Langmuir</i> , 2009 , 25, 4247-50	4	60	
366	Inelastic x-ray scattering study of the collective dynamics in liquid sodium. <i>Physical Review E</i> , 2002 , 65, 031205	2.4	60	
365	Molecular dynamics simulation of the fragile glass-former orthoterphenyl: A flexible molecule model. <i>Physical Review E</i> , 2000 , 62, 612-30	2.4	60	
364	Computer simulation of polarizable fluids: a consistent and fast way for dealing with polarizability and hyperpolarizability. <i>Molecular Physics</i> , 1994 , 82, 875-886	1.7	60	
363	Topological signature of first-order phase transitions in a mean-field model. <i>Europhysics Letters</i> , 2003 , 62, 775-781	1.6	59	
362	High Frequency Dynamics of Glass Forming Liquids at the Glass Transition. <i>Physical Review Letters</i> , 1998 , 80, 544-547	7.4	59	
361	Arrested state of clay-water suspensions: gel or glass?. <i>Physical Review E</i> , 2008 , 77, 020402	2.4	58	
360	High-frequency propagating modes in vitreous silica at 295 K. <i>Physical Review B</i> , 1997 , 55, 8049-8051	3.3	56	
359	Dichotomic aging behaviour in a colloidal glass. <i>Soft Matter</i> , 2013 , 9, 10955	3.6	54	
358	Multipoint holographic optical velocimetry in microfluidic systems. <i>Physical Review Letters</i> , 2006 , 96, 134502	7.4	54	
357	Glass transition and density fluctuations in the fragile glass former orthoterphenyl. <i>Physical Review E</i> , 2001 , 63, 061502	2.4	54	
356	Phase diagram and complexity of mode-locked lasers: from order to disorder. <i>Physical Review Letters</i> , 2009 , 102, 083901	7.4	53	
355	Vibrational excitations in systems with correlated disorder. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008 , 5, 862-866		53	

354	Pressure evolution of the high-frequency sound velocity in liquid water. <i>Physical Review Letters</i> , 2002 , 89, 125502	7.4	53
353	Transport of self-propelling bacteria in micro-channel flow. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 065101	1.8	50
352	High-frequency dynamics in metallic glasses. <i>Physical Review Letters</i> , 2006 , 96, 135501	7.4	50
351	Parametric resonance of optically trapped aerosols. <i>Physical Review Letters</i> , 2007 , 99, 010601	7.4	50
350	Molecular dynamics results for stretched water. <i>Journal of Chemical Physics</i> , 1993 , 99, 8095-8104	3.9	50
349	The low energy excess of vibrational states in v-SiO2: the role of transverse dynamics. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, 8519-8530	1.8	49
348	Structural relaxation in liquid water by inelastic UV scattering. <i>Physical Review Letters</i> , 2004 , 92, 255507	7.4	48
347	Size effects and quasilocalized vibrations. <i>Philosophical Magazine</i> , 2004 , 84, 1361-1372	1.6	48
346	Determination of the Infinite Frequency Sound Velocity in the Glass Former o-Terphenyl. <i>Physical Review Letters</i> , 1998 , 80, 2161-2164	7.4	48
345	3D models in the new era of immune oncology: focus on T cells, CAF and ECM. <i>Journal of Experimental and Clinical Cancer Research</i> , 2019 , 38, 117	12.8	47
344	Numerical study of Raman scattering from fractals. <i>Physical Review Letters</i> , 1990 , 65, 1136-1139	7.4	47
343	A new class of multiple dispersion grating spectrometers. <i>Journal of Physics E: Scientific Instruments</i> , 1988 , 21, 798-804		47
342	On the analysis of the vibrational Boson peak and low-energy excitations in glasses. <i>Journal of Non-Crystalline Solids</i> , 2006 , 352, 4541-4551	3.9	46
341	Quasisaddles as relevant points of the potential energy surface in the dynamics of supercooled liquids. <i>Journal of Chemical Physics</i> , 2002 , 116, 10297-10306	3.9	46
340	Neuroinflammatory Processes, A1 Astrocyte Activation and Protein Aggregation in the Retina of Alzheimer's Disease Patients, Possible Biomarkers for Early Diagnosis. <i>Frontiers in Neuroscience</i> , 2019 , 13, 925	5.1	45
339	Kinetics of formation of supramolecular tubules of a sodium cholate derivative. <i>Soft Matter</i> , 2009 , 5, 3018	3.6	45
338	High-frequency dynamics of glass-forming polybutadiene. <i>Physical Review E</i> , 1999 , 59, 4470-4475	2.4	45
337	Single-molecule imaging with x-ray free-electron lasers: dream or reality?. <i>Physical Review Letters</i> , 2011 , 106, 105504	7.4	44

336	General features of the energy landscape in Lennard-Jones-like model liquids. <i>Journal of Chemical Physics</i> , 2003 , 119, 2120-2126	3.9	44	
335	High-frequency acoustic modes in liquid gallium at the melting point. <i>Physical Review Letters</i> , 2002 , 89, 255506	7.4	44	
334	Contrasting behaviour of acoustic modes in network and non-network glasses. <i>Europhysics Letters</i> , 2001 , 54, 77-83	1.6	44	
333	Collective excitations in supercritical fluids: analytical and molecular dynamics study of "positive" and "negative" dispersion. <i>Journal of Chemical Physics</i> , 2010 , 133, 024502	3.9	43	
332	Elastic properties of permanently densified silica: A Raman, Brillouin light, and x-ray scattering study. <i>Physical Review B</i> , 2010 , 81,	3.3	43	
331	Fast Relaxational Dynamics in the o-Terphenyl Glass. <i>Physical Review Letters</i> , 1999 , 82, 1776-1779	7.4	43	
330	Free-energy transition in a gas of noninteracting nonlinear wave particles. <i>Physical Review Letters</i> , 2008 , 101, 044101	7.4	42	
329	High frequency dynamics in a monatomic glass. <i>Physical Review Letters</i> , 2004 , 92, 025503	7.4	42	
328	Microscopic relaxation in supercritical and liquid neon. <i>Journal of Chemical Physics</i> , 2001 , 114, 2259-226	5 7 3.9	42	
327	Spatio-temporal anomalous diffusion in heterogeneous media by nuclear magnetic resonance. <i>Journal of Chemical Physics</i> , 2011 , 135, 034504	3.9	41	
326	Potential energy landscape and long-time dynamics in a simple model glass. <i>Physical Review E</i> , 2000 , 61, 1681-91	2.4	41	
325	Diffraction-free light droplets for axially-resolved volume imaging. <i>Scientific Reports</i> , 2017 , 7, 17	4.9	40	
324	Acoustic dynamics of network-forming glasses at mesoscopic wavelengths. <i>Nature Communications</i> , 2013 , 4, 1793	17.4	40	
323	Raman spectra of water in the translational and librational regions. <i>Molecular Physics</i> , 1989 , 67, 19-31	1.7	39	
322	Glassy behavior of light in random lasers. <i>Physical Review B</i> , 2006 , 74,	3.3	38	
321	Raman spectra of water in the translational and librational regions. <i>Molecular Physics</i> , 1987 , 61, 1199-1	2127	38	
320	Eigenmodes of a hydrodynamically coupled micron-size multiple-particle ring. <i>Physical Review E</i> , 2007 , 76, 061402	2.4	37	
319	In-Silico evidence for two receptors based strategy of SARS-CoV-2		37	

318	Structural disorder and anomalous diffusion in random packing of spheres. <i>Scientific Reports</i> , 2013 , 3, 2631	4.9	36
317	Hydrodynamic interactions in two dimensions. <i>Physical Review E</i> , 2008 , 78, 031406	2.4	36
316	Three-dimensional ab initio investigation of light-matter interaction in Mie lasers. <i>Physical Review A</i> , 2008 , 78,	2.6	36
315	Disorder-induced light scattering in solids: Microscopic theory and applications to some model systems. <i>Physical Review B</i> , 1991 , 44, 11734-11742	3.3	36
314	Hard-sphere-like dynamics in a non-hard-sphere liquid. <i>Physical Review Letters</i> , 2005 , 94, 155301	7.4	35
313	Theory of vibrational anomalies in glasses. <i>Journal of Non-Crystalline Solids</i> , 2015 , 407, 133-140	3.9	34
312	Heterogeneous Viscoelasticity: A Combined Theory of Dynamic and Elastic Heterogeneity. <i>Physical Review Letters</i> , 2015 , 115, 015901	7.4	34
311	Temperature evolution of single particle correlation functions of liquid water. <i>Journal of Chemical Physics</i> , 1990 , 92, 2540-2547	3.9	34
310	Behavior of Supercritical Fluids across the "Frenkel Line". <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 4995-5001	6.4	33
309	Visualizing coherent phonon propagation in the 100 GHz range: A broadband picosecond acoustics approach. <i>Applied Physics Letters</i> , 2011 , 98, 011901	3.4	33
308	Very-long-range nature of capillary interactions in liquid films. <i>Physical Review Letters</i> , 2008 , 100, 1061	0 3 ⁄4	33
307	Raman scattering from fractals: Simulation on large structures by the method of moments. <i>Physical Review B</i> , 1995 , 52, 3346-3355	3.3	33
306	Background-deflection Brillouin microscopy reveals altered biomechanics of intracellular stress granules by ALS protein FUS. <i>Communications Biology</i> , 2018 , 1, 139	6.7	33
305	Structural and microscopic relaxations in a colloidal glass. <i>Soft Matter</i> , 2015 , 11, 466-71	3.6	32
304	Origin of the lambda transition in liquid sulfur. <i>Physical Review Letters</i> , 2007 , 99, 025701	7.4	32
303	Acoustic nature of the boson peak in vitreous silica. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1999 , 79, 2013-2	020	32
302	Low-frequency Raman spectra of liquid water: A molecular dynamics simulation. <i>Chemical Physics Letters</i> , 1989 , 159, 383-387	2.5	32
301	The history of the "fast sound" in liquid water. <i>Condensed Matter Physics</i> , 2008 , 11, 29	1.3	32

(2007-2006)

300	Adiabatic and isothermal sound waves: The case of supercritical nitrogen. <i>Europhysics Letters</i> , 2006 , 75, 70-76	1.6	31
299	Aging after shear rejuvenation in a soft glassy colloidal suspension: evidence for two different regimes. <i>Physical Review E</i> , 2007 , 75, 011408	2.4	31
298	Ergodic to non-ergodic transition in low concentration Laponite. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, S4993-S5002	1.8	31
297	Structural and dynamical consequences of density variation in vitreous silica. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, S995-S1005	1.8	31
296	Collective dynamics in water by inelastic x-rays scattering. <i>Physica Scripta</i> , 1996 , T66, 48-56	2.6	31
295	Universal relation between viscous flow and fast dynamics in glass-forming materials. <i>Physical Review B</i> , 2010 , 81,	3.3	30
294	High frequency dynamics in liquids and supercritical fluids: A comparative inelastic x-ray scattering study. <i>Journal of Chemical Physics</i> , 2009 , 130, 064501	3.9	30
293	High-frequency dynamics of liquid and supercritical water. <i>Physical Review E</i> , 2007 , 75, 051202	2.4	30
292	Phonon-like and single-particle dynamics in liquid lithium. <i>Europhysics Letters</i> , 2000 , 50, 189-195	1.6	30
291	Topological description of the aging dynamics in simple glasses. <i>Physical Review Letters</i> , 2001 , 87, 0555	50 2 .4	30
290	Vibrational dynamics and Raman scattering in fractals: A numerical study. <i>Physical Review B</i> , 1992 , 45, 2126-2137	3.3	30
289	Collective dynamical properties of liquid water. <i>Physical Review Letters</i> , 1988 , 61, 1958-1961	7.4	30
288	Relation among optical, thermal and thermo-optical properties and niobium concentration in tellurite glasses. <i>Journal of Non-Crystalline Solids</i> , 2010 , 356, 2146-2150	3.9	29
287	Ultrashort pulse propagation and the Anderson localization. Optics Letters, 2009, 34, 130-2	3	29
286	Thermal conductivity and terahertz vibrational dynamics of vitreous silica. <i>Physical Review B</i> , 2008 , 77,	3.3	29
285	Raman spectra of water in the translational and librational region. <i>Molecular Physics</i> , 1987 , 62, 1467-14	81.7	29
284	Perspectives on cavitation enhanced endothelial layer permeability. Colloids and Surfaces B:	6	28
	Biointerfaces, 2018 , 168, 83-93		

282	Structural and microscopic relaxation processes in liquid hydrogen fluoride. <i>Physical Review Letters</i> , 2002 , 88, 255503	7.4	28
281	Induced contributions in the rayleigh spectra of water: A molecular dynamics simulation. <i>Chemical Physics Letters</i> , 1987 , 141, 297-300	2.5	28
280	Evidence of short-time dynamical correlations in simple liquids. <i>Physical Review E</i> , 2002 , 66, 031205	2.4	27
279	Pressure-Induced In-Glass Structural Transformation in the Amorphous Polymer Poly(methylmethacrylate). <i>Physical Review Letters</i> , 1998 , 80, 4205-4208	7.4	27
278	Microglia-Derived Microvesicles Affect Microglia Phenotype in Glioma. <i>Frontiers in Cellular Neuroscience</i> , 2019 , 13, 41	6.1	26
277	Vibrational dynamics and surface structure of amorphous selenium. <i>Nature Communications</i> , 2011 , 2, 195	17.4	26
276	Aging under shear: structural relaxation of a non-Newtonian fluid. <i>Physical Review E</i> , 2005 , 71, 011505	2.4	26
275	Frustration and sound attenuation in structural glasses. <i>Physical Review Letters</i> , 2000 , 84, 4874-7	7·4	25
274	Generalized fluctuation-dissipation relation and effective temperature in off-equilibrium colloids. <i>Physical Review B</i> , 2010 , 81,	3.3	24
273	Light diffusion and localization in three-dimensional nonlinear disordered media. <i>Physical Review A</i> , 2007 , 75,	2.6	24
272	Dynamics of Dense Supercritical Neon at the Transition from Hydrodynamical to Single-Particle Regimes. <i>Physical Review Letters</i> , 1998 , 80, 3515-3518	7.4	24
271	Disorder-induced single-mode transmission. <i>Nature Communications</i> , 2017 , 8, 14571	17.4	23
270	Probing the non-Debye low-frequency excitations in glasses through random pinning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 8700-8704	11.5	23
269	Dynamical crossover at the liquid-liquid transformation of a compressed molten alkali metal. <i>Physical Review Letters</i> , 2013 , 111, 077801	7·4	23
268	Coherent potential approximation for diffusion and wave propagation in topologically disordered systems. <i>Physical Review B</i> , 2013 , 88,	3.3	23
267	Topological properties of the mean-field phi4 model. <i>Physical Review E</i> , 2004 , 70, 041101	2.4	23
266	Topology and phase transitions: from an exactly solvable model to a relation between topology and thermodynamics. <i>Physical Review E</i> , 2005 , 71, 036152	2.4	23
265	Experimental evidence of the acousticlike character of the high frequency excitations in glasses. <i>Physical Review Letters</i> , 2000 , 85, 1266-9	7.4	23

264	Evolution from ordinary to fast sound in water at room temperature. <i>Chemical Physics Letters</i> , 1993 , 209, 408-416	2.5	23
263	Pressure-induced emergence of unusually high-frequency transverse excitations in a liquid alkali metal: Evidence of two types of collective excitations contributing to the transverse dynamics at high pressures. <i>Journal of Chemical Physics</i> , 2015 , 143, 104502	3.9	22
262	Dynamic light scattering study of temperature and pH sensitive colloidal microgels. <i>Journal of Non-Crystalline Solids</i> , 2015 , 407, 361-366	3.9	22
261	Nonergodicity factor, fragility, and elastic properties of polymeric glassy sulfur. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 14052-63	3.4	22
260	Influence of an adsorbing polymer on the aging dynamics of Laponite clay suspensions. <i>Philosophical Magazine</i> , 2008 , 88, 4213-4221	1.6	22
259	Ageing dynamics in Laponite dispersions at various salt concentrations. <i>Philosophical Magazine</i> , 2007 , 87, 449-458	1.6	22
258	Laser beam filamentation in fractal aggregates. <i>Physical Review Letters</i> , 2006 , 97, 123903	7.4	22
257	High-frequency transverse dynamics in glasses. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, S1269-S ²	12:788	22
256	Molecular dynamics simulation of the fragile glass former orthoterphenyl: a flexible molecule model. II. Collective dynamics. <i>Physical Review E</i> , 2001 , 64, 021511	2.4	22
255	Brillouin and Umklapp scattering in polybutadiene: comparison of neutron and x-ray scattering. <i>Physical Review E</i> , 1999 , 60, R2464-7	2.4	22
254	Line broadening in the collective dynamics of liquid and solid water. <i>Physical Review B</i> , 1996 , 54, 14892-	-134895	22
253	Collective thermal diffusion of silica colloids studied by nonlinear optics. <i>Langmuir</i> , 2009 , 25, 12495-500	04	21
252	Benassi et al. Reply. <i>Physical Review Letters</i> , 1997 , 78, 4670-4670	7.4	21
251	Collective dynamics in molten potassium: an inelastic x-ray scattering study. <i>Journal of Chemical Physics</i> , 2004 , 120, 8089-94	3.9	21
250	Intramolecular origin of the fast relaxations observed in the brillouin light scattering spectra of molecular glass formers. <i>Physical Review E</i> , 2000 , 62, R7595-8	2.4	21
249	Collective excitations in soft-sphere fluids. <i>Physical Review E</i> , 2014 , 90, 042301	2.4	20
248	The potential energy landscape in the Lennard-Jones binary mixture model. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, S1227-S1236	1.8	20
247	Energy landscape, two-level systems, and entropy barriers in Lennard-Jones clusters. <i>Physical Review B</i> , 1999 , 60, 3200-3205	3.3	20

246	On the connection between low frequency vibrational and relaxational motion in glasses. <i>Journal of Non-Crystalline Solids</i> , 1996 , 203, 12-18	3.9	20
245	Low frequency polarized and depolarized light scattering in H-bonded liquids: CH3(CH2)nIIOH (n=1,,5). <i>Journal of Chemical Physics</i> , 1989 , 91, 6752-6757	3.9	20
244	Evaluation of brillouin scattering intensities from rare gas crystals. <i>Molecular Physics</i> , 1987 , 61, 1391-14	41 <u>4</u> 7	20
243	Isotropic induced scattering in liquid H2S. <i>Molecular Physics</i> , 1983 , 50, 1083-1087	1.7	20
242	Theoretical model for the temperature dependence of Raman scattering in Agl. <i>Physical Review B</i> , 1982 , 26, 2216-2223	3.3	20
241	Computer simulation study of thermodynamic scaling of dynamics of 2Ca(NO3)2BKNO3. <i>Journal of Chemical Physics</i> , 2011 , 135, 164510	3.9	19
240	Time-dependent nonlinear optical susceptibility of an out-of-equilibrium soft material. <i>Physical Review Letters</i> , 2009 , 102, 038303	7.4	19
239	Shear-banding phenomena and dynamical behavior in a Laponite suspension. <i>Physical Review E</i> , 2008 , 77, 031406	2.4	19
238	Generalized fluctuation relation and effective temperatures in a driven fluid. <i>Physical Review E</i> , 2005 , 71, 020101	2.4	19
237	The Raman coupling function in disordered solids: a light and neutron scattering study on glasses of different fragility. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 205145	1.8	18
236	Microscopic dynamics and relaxation processes in liquid hydrogen fluoride. <i>Physical Review B</i> , 2004 , 70,	3.3	18
235	Numerical study of the low-frequency atomic dynamics in a Lennard-Jones glass. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1998 , 77, 473-484		18
234	Elasto-optic constants in silicate glasses: Experiment and theory. <i>Physical Review B</i> , 1993 , 48, 5987-599	63.3	18
233	High frequency viscous relaxation from the Brillouin spectra of n-pentanol. <i>Journal of Chemical Physics</i> , 1990 , 93, 7751-7755	3.9	18
232	In-Silico Evidence for a Two Receptor Based Strategy of SARS-CoV-2. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 690655	5.6	18
231	Molecular Mechanisms Behind Anti SARS-CoV-2 Action of Lactoferrin. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 607443	5.6	18
230	MLL4-associated condensates counterbalance Polycomb-mediated nuclear mechanical stress in Kabuki syndrome. <i>Nature Genetics</i> , 2020 , 52, 1397-1411	36.3	17
229	On the Maximum Storage Capacity of the Hopfield Model. <i>Frontiers in Computational Neuroscience</i> , 2016 , 10, 144	3.5	17

228	Acoustic-phonon dispersion in CdTe at 7.5 GPa. <i>Physical Review B</i> , 1997 , 56, 8691-8694	3.3	17
227	Fluctuations of Entropy Production in the Isokinetic Ensemble. <i>Journal of Statistical Physics</i> , 2004 , 115, 1655-1668	1.5	17
226	Determination of the short-wavelength propagation threshold in the collective excitations of liquid ammonia. <i>Physical Review Letters</i> , 2000 , 84, 4136-9	7.4	17
225	Cancellation of Bessel beam side lobes for high-contrast light sheet microscopy. <i>Scientific Reports</i> , 2018 , 8, 17178	4.9	17
224	Microscopic Structure in Liquid Hydrogen and Deuterium: An X-Ray Scattering Study. <i>Journal of Low Temperature Physics</i> , 2002 , 129, 117-131	1.3	16
223	Breaking the Contrast Limit in Single-Pass Fabry-Pfot Spectrometers. <i>Physical Review Applied</i> , 2016 , 6,	4.3	16
222	Phase diagram of a solution undergoing inverse melting. <i>Physical Review E</i> , 2008 , 78, 020502	2.4	15
221	Inelastic X-ray scattering and the high-frequency dynamics of disordered systems. <i>Physica B: Condensed Matter</i> , 2002 , 318, 341-349	2.8	15
220	Brillouin scattering investigations of fast dynamics in glass forming systems. <i>Journal of Non-Crystalline Solids</i> , 2002 , 307-310, 148-153	3.9	15
219	Effect of dilution in asymmetric recurrent neural networks. <i>Neural Networks</i> , 2018 , 104, 50-59	9.1	14
218	What is the Right Theory for Anderson Localization of Light? An Experimental Test. <i>Physical Review Letters</i> , 2018 , 120, 067401	7.4	14
217	Biophysical modeling of C. elegans neurons: Single ion currents and whole-cell dynamics of AWCon and RMD. <i>PLoS ONE</i> , 2019 , 14, e0218738	3.7	14
216	Inelastic x-ray scattering from high pressure fluids in a diamond anvil cell. <i>Applied Physics Letters</i> , 2009 , 94, 074102	3.4	14
215	Comment on "glass-specific behavior in the damping of acousticlike vibrations". <i>Physical Review Letters</i> , 2007 , 98, 079601; author reply 079602	7.4	14
214	High frequency dynamics and structural relaxation process in liquid ammonia. <i>Journal of Chemical Physics</i> , 2007 , 127, 084508	3.9	14
213	Relationship between phase transitions and topological changes in one-dimensional models. <i>Physical Review E</i> , 2005 , 72, 016122	2.4	14
212	Cusp-like temperature behavior of the nonergodicity factor in polybutadiene revealed by a joint light and x-ray Brillouin scattering investigation. <i>Physical Review B</i> , 2002 , 65,	3.3	14
211	Collision induced light scattering in gaseous H2S. <i>Molecular Physics</i> , 1983 , 49, 1179-1186	1.7	14

210	Analysis of the Raman spectral shape in Agl. <i>Physical Review B</i> , 1983 , 28, 7269-7276	3.3	14
209	Vibrational anomalies and marginal stability of glasses. <i>European Physical Journal: Special Topics</i> , 2013 , 216, 83-93	2.3	13
208	Aging of the nonlinear optical susceptibility in doped colloidal suspensions. <i>Physical Review B</i> , 2007 , 75,	3.3	13
207	Observation of Umklapp processes in noncrystalline materials. <i>Physical Review B</i> , 2001 , 64,	3.3	13
206	Quantum effects in the dynamics of He probed by inelastic x-ray scattering. <i>Physical Review E</i> , 2001 , 64, 021203	2.4	13
205	X-ray diffraction and Raman scattering measurements on silica xerogels. <i>Journal of Non-Crystalline Solids</i> , 2002 , 307-310, 135-141	3.9	13
204	Do social sciences and humanities behave like life and hard sciences?. Scientometrics, 2017, 112, 607-6.	53 3	12
203	Dual aging behaviour in a clay-polymer dispersion. <i>Soft Matter</i> , 2014 , 10, 4513-21	3.6	12
202	A quantitative measure to compare the disciplinary profiles of research systems and their evolution over time. <i>Journal of Informetrics</i> , 2014 , 8, 710-727	3.1	12
201	Generalised hydrodynamic description of the time correlation functions of liquid metals: ab initio molecular dynamics study. <i>Molecular Physics</i> , 2013 , 111, 3457-3464	1.7	12
200	Landau-Placzek ratio for heat density dynamics and its application to heat capacity of liquids. <i>Journal of Chemical Physics</i> , 2013 , 138, 034502	3.9	12
199	Prigogine-Defay ratio for an ionic glass-former: molecular dynamics simulations. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 3099-104	3.4	12
198	Nonlinear optics in the X-ray regime: nonlinear waves and self-action effects. <i>Optics Express</i> , 2008 , 16, 8324-31	3.3	12
197	Sound wave propagation and existence of a two step relaxation process in a glass-former melt. <i>Physical Review E</i> , 1998 , 57, 720-729	2.4	12
196	Elastic Constant Inhomogeneity and the Broadening of the Dynamic Structure Factor in One-Dimensional Disordered Systems. <i>Physical Review Letters</i> , 1999 , 83, 3450-3453	7.4	12
195	Perturbative approach to the dynamics of a linear chain with hierarchical coupling. <i>Physical Review B</i> , 1995 , 51, 11399-11405	3.3	12
194	Molecular dynamics simulations of liquid water: Voronoi polyhedra and network topology. <i>Journal of Molecular Structure</i> , 1991 , 250, 259-270	3.4	12
193	Does blood type affect the COVID-19 infection pattern?. <i>PLoS ONE</i> , 2021 , 16, e0251535	3.7	12

192	Aging behavior of the localization length in a colloidal glass. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014 , 460, 118-122	5.1	11
191	An empirical approach to compare the performance of heterogeneous academic fields. <i>Scientometrics</i> , 2013 , 97, 601-625	3	11
190	Bibliometric indicators: the origin of their log-normal distribution and why they are not a reliable proxy for an individual scholard talent. <i>Palgrave Communications</i> , 2017 , 3,	5.3	11
189	Dynamics and geometric properties of thek-trigonometric model. <i>Journal of Physics A</i> , 2003 , 36, 8565-8	3601	11
188	Saddles and softness in simple model liquids. <i>Journal of Chemical Physics</i> , 2004 , 121, 7533-4	3.9	11
187	Nonequilibrium thermodynamic description of the coupling between structural and entropic modes in supercooled liquids. <i>Physical Review E</i> , 2003 , 67, 015102	2.4	11
186	Crossover between equilibrium and shear-controlled dynamics in sheared liquids. <i>Physical Review E</i> , 2002 , 66, 061505	2.4	11
185	Quantifying cellular forces and biomechanical properties by correlative micropillar traction force and Brillouin microscopy. <i>Biomedical Optics Express</i> , 2019 , 10, 2202-2212	3.5	11
184	Reply to "Comment on 'Behavior of Supercritical Fluids across the Frenkel Line'". <i>Journal of Physical Chemistry B</i> , 2018 , 122, 6120-6123	3.4	10
183	Measurement of the four-point susceptibility of an out-of-equilibrium colloidal solution of nanoparticles using time-resolved light scattering. <i>Physical Review Letters</i> , 2012 , 109, 097401	7.4	10
182	Viscosity measurements in a solution undergoing inverse melting. <i>Philosophical Magazine</i> , 2007 , 87, 55	3 - Б 6 8	10
181	Mode-locking transitions in nanostructured weakly disordered lasers. <i>Physical Review B</i> , 2007 , 76,	3.3	10
180	Aging and flow in a complex fluid. Journal of Non-Crystalline Solids, 2006, 352, 4928-4933	3.9	10
179	X-ray and neutron scattering studies in vitreous silica: Acoustic nature of vibrational dynamics in the mesoscopic range. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002 , 82, 223-232		9
178	Molecular dynamics simulation study of the high frequency sound waves in the fragile glass former orthoterphenyl. <i>Journal of Chemical Physics</i> , 2002 , 116, 1077-1084	3.9	9
177	Brillouin light and X-ray study of glass-forming polybutadiene. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002 , 82, 273-2	281	9
176	Inelastic X-ray scattering determination of the dynamic structure factor of liquid lithium. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1999 , 79, 2027-2035		9
175	Brillouin scattering intensities in glasses: Theory and experiment. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1989 , 59, 3-15		9

174	Rovibrational Raman spectra and polarizability constants of the H2S molecule. <i>Molecular Physics</i> , 1985 , 54, 1229-1240	1.7	9
173	Sound attenuation and anharmonic damping in solids with correlated disorder. <i>Condensed Matter Physics</i> , 2010 , 13, 23606	1.3	9
172	Exploring the Association Between Sialic Acid and SARS-CoV-2 Spike Protein Through a Molecular Dynamics-Based Approach <i>Frontiers in Medical Technology</i> , 2020 , 2, 614652	1.9	9
171	2D Zernike polynomial expansion: Finding the protein-protein binding regions. <i>Computational and Structural Biotechnology Journal</i> , 2021 , 19, 29-36	6.8	9
170	Comment on "Emergence and Evolution of the k Gap in Spectra of Liquid and Supercritical States". <i>Physical Review Letters</i> , 2018 , 120, 219601	7.4	9
169	A comparison of three multidisciplinarity indices based on the diversity of Scopus subject areas of authors documents, their bibliography and their citing papers. <i>Scientometrics</i> , 2020 , 125, 1145-1158	3	8
168	Sound damping in glasses: Interplay between anharmonicities and elastic heterogeneities. <i>Physical Review B</i> , 2020 , 101,	3.3	8
167	Hyperuniformity in amorphous speckle patterns. <i>Optics Express</i> , 2018 , 26, 15594-15608	3.3	8
166	Fragility and glassy dynamics of 2Ca(NO3)2.3KNO3 under pressure: molecular dynamics simulations. <i>Journal of Chemical Physics</i> , 2008 , 128, 191104	3.9	8
165	Mode competitions and dynamical frequency pulling in Mie nanolasers: 3D ab-initio Maxwell-Bloch computations. <i>Optics Express</i> , 2008 , 16, 8342-9	3.3	8
164	Crossover between hydrodynamic and kinetic modes in binary liquid alloys. <i>Physical Review B</i> , 2008 , 77,	3.3	8
163	Flow between rotating finite disks with a closed end condition studied by heterodyne photon-correlation. <i>Journal of Fluid Mechanics</i> , 2005 , 525, 27-36	3.7	8
162	Comment on "collective dynamics in liquid lithium, sodium, and aluminum". <i>Physical Review E</i> , 2004 , 70, 013201; author reply 013202	2.4	8
161	Fragility in p-spin models. <i>Physical Review E</i> , 2004 , 69, 061505	2.4	8
160	High frequency acoustic modes in vitreous beryllium fluoride probed by inelastic x-ray scattering. Journal of Chemical Physics, 2003 , 118, 311-316	3.9	8
159	Orientational and induced contributions to the depolarized Rayleigh spectra of liquid and supercooled ortho-terphenyl. <i>Journal of Chemical Physics</i> , 2002 , 117, 3289-3295	3.9	8
158	A stroll in the energy landscape. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties,</i> 2002 , 82, 151-161		8
157	Inelastic X-ray scattering study of the collective dynamics in simple liquid metals. <i>Journal of Non-Crystalline Solids</i> , 2002 , 312-314, 121-127	3.9	8

156	Diffraction Studies of Liquid Deuterium Sulphide. <i>Europhysics Letters</i> , 1989 , 8, 441-446	1.6	8
155	Dynamical correlations in liquid hydrogenBulphide. <i>Journal of Chemical Physics</i> , 1990 , 93, 9012-9017	3.9	8
154	Comment on: Raman isosbestic points from liquid water and I emperature dependence of the low and high frequency Raman scattering from liquid water Journal of Chemical Physics, 1988, 88, 4553.	- 45 55	8
153	Isotopic Effect on the Gel and Glass Formation of a Charged Colloidal Clay: Laponite. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 4576-4582	3.4	7
152	Theory of elastic constants of athermal amorphous solids with internal stresses. <i>Granular Matter</i> , 2019 , 21, 1	2.6	7
151	Charge-density correlations in pressurized liquid lithium calculated using ab initio molecular dynamics. <i>Physical Review B</i> , 2014 , 90,	3.3	7
150	High frequency dynamics in liquid nickel: An inelastic x-ray scattering study. <i>Journal of Chemical Physics</i> , 2008 , 128, 234502	3.9	7
149	Reply to Comment on Quasisaddles as relevant points of the potential energy surface in the dynamics of supercooled liquids IIJ. Chem. Phys. 118, 5263 (2002)]. <i>Journal of Chemical Physics</i> , 2003 , 118, 5265-5266	3.9	7
148	Saddles and dynamics in a solvable mean-field model. <i>Journal of Chemical Physics</i> , 2003 , 118, 8301-8306	3.9	7
147	Vibrational origin of the fast relaxation processes in molecular glass formers. <i>Europhysics Letters</i> , 2002 , 60, 92-98	1.6	7
146	Computer Simulation of Polarizarle Fluids: On the Determination of the Induced Dipoles. <i>Molecular Simulation</i> , 1995 , 15, 281-300	2	7
145	Vibrational dynamics of percolating clusters: Fracton wavefunctions and Raman coupling coefficients. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1992 , 65, 243-250		7
144	The super-gratings: How to improve the limiting resolution of grating spectrometers. <i>Optics Communications</i> , 1990 , 76, 185-190	2	7
143	On the multiple grating spectrometers resolving power. <i>Optics Communications</i> , 1988 , 67, 399-403	2	7
142	Bioprinting stem cells: building physiological tissues one cell at a time. <i>American Journal of Physiology - Cell Physiology</i> , 2020 , 319, C465-C480	5.4	7
141	Demonstration of self-healing and scattering resilience of acoustic Bessel beams. <i>Applied Physics Letters</i> , 2019 , 114, 013502	3.4	7
140	Beyond the Maximum Storage Capacity Limit in Hopfield Recurrent Neural Networks. <i>Entropy</i> , 2019 , 21,	2.8	6
139	Relation between Heterogeneous Frozen Regions in Supercooled Liquids and Non-Debye Spectrum in the Corresponding Glasses. <i>Physical Review Letters</i> , 2019 , 123, 155502	7.4	6

138	6th International discussion meeting on relaxations in complex systems New results, directions and opportunities August 30thBeptember 5th 2009, Rome, Italy. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 241-242	3.9	6
137	Acoustic dissipation and density of states in liquid, supercooled, and glassy glycerol. <i>Physical Review Letters</i> , 2011 , 106, 155701	7.4	6
136	Generalized collective excitations in supercritical argon. <i>Molecular Physics</i> , 2011 , 109, 2929-2934	1.7	6
135	Shear thickening in a solution undergoing inverse melting. <i>Philosophical Magazine</i> , 2008 , 88, 4109-4116	1.6	6
134	Origin of light scattering from disordered systems. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1995 , 216, 32-44	3.3	6
133	Brillouin and Raman cross sections in silicate glasses. <i>Physical Review B</i> , 1995 , 52, 976-981	3.3	6
132	Microscopic model for the two-phonon Raman spectra of alkali halides. <i>Physical Review B</i> , 1993 , 47, 118	30311	8368
131	Evaluation of Brillouin scattering intensities from rare gas crystals. <i>Molecular Physics</i> , 1990 , 71, 97-108	1.7	6
130	A Microscopic Theory for the Brillouin Intensities Evaluation in Noble-Gas Crystals. <i>Europhysics Letters</i> , 1986 , 2, 877-881	1.6	6
129	Quenches and crunches: Does the system explore in ageing the same part of the configuration space explored in equilibrium?		6
128	Sources and uses of knowledge in a dynamic network technology. <i>International Transactions in Operational Research</i> , 2020 , 27, 1821-1844	2.9	6
127	Characterizing Hydropathy of Amino Acid Side Chain in a Protein Environment by Investigating the Structural Changes of Water Molecules Network. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 626837	5.6	6
126	On the number of limit cycles in asymmetric neural networks. <i>Journal of Statistical Mechanics:</i> Theory and Experiment, 2019 , 2019, 053402	1.9	5
125	Simulated Epidemics in 3D Protein Structures to Detect Functional Properties. <i>Journal of Chemical Information and Modeling</i> , 2020 , 60, 1884-1891	6.1	5
124	Pressure behavior of the sound velocity of liquid water at room temperature in the terahertz regime. <i>Physical Review B</i> , 2011 , 84,	3.3	5
123	Role of saddles in topologically driven phase transitions: the case of the d -dimensional spherical model. <i>Physical Review E</i> , 2008 , 77, 052101	2.4	5
122	Phase transitions and topology in 2+k XY mean-field models. <i>Physical Review E</i> , 2007 , 76, 051119	2.4	5
121	Dynamics of Laponite solutions: An interpretation within the coupling model scheme. <i>Journal of Non-Crystalline Solids</i> , 2007 , 353, 3885-3890	3.9	5

120	High frequency dynamics of an orientationally disordered molecular crystal. <i>Journal of Non-Crystalline Solids</i> , 2006 , 352, 4552-4555	3.9	5
119	High-frequency transverse-like excitations in glassy glycerol. <i>Philosophical Magazine</i> , 2004 , 84, 1453-14	1 61 .6	5
118	Inelastic X-ray scattering and high-frequency dynamics of molecular liquids. <i>Pure and Applied Chemistry</i> , 2004 , 76, 79-89	2.1	5
117	A recurrent neural network model of C. elegans responses to aversive stimuli. <i>Neurocomputing</i> , 2021 , 430, 1-13	5.4	5
116	Scattering Assisted Imaging. <i>Scientific Reports</i> , 2019 , 9, 4591	4.9	4
115	Theory of heterogeneous viscoelasticity. <i>Philosophical Magazine</i> , 2016 , 96, 620-635	1.6	4
114	Assessing the interdependencies between scientific disciplinary profiles. <i>Scientometrics</i> , 2018 , 116, 178	85 ₃ 180	3 4
113	Molecular dynamics beyonds the limits: Massive scaling on 72 racks of a BlueGene/P and supercooled glass dynamics of a 1 billion particles system. <i>Journal of Computational Physics</i> , 2012 , 231, 3432-3445	4.1	4
112	Real-Time Monitoring of Nanoscale Polarization Switching. <i>Physics Magazine</i> , 2017 , 10,	1.1	4
111	Low energy neutron production by inverse Edecay in metallic hydride surfaces. <i>European Physical Journal C</i> , 2012 , 72, 1	4.2	4
110	Reply to \square omment on \square hase diagram of a solution undergoing inverse melting \square <i>Physical Review E</i> , 2009 , 79,	2.4	4
109	Characterization of archeological human bone tissue by enhanced backscattering of light. <i>Applied Physics Letters</i> , 2009 , 94, 101101	3.4	4
108	Low-frequency Raman scattering in model disordered solids: percolators above threshold. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1997 , 247, 23-29	3.3	4
107	High frequency collective dynamics in liquid potassium. <i>Journal of Non-Crystalline Solids</i> , 2007 , 353, 315	5433j15	9 4
106	Scopigno et al. Reply:. <i>Physical Review Letters</i> , 2005 , 95,	7.4	4
105	Is there any evidence of a positive sound dispersion in the high frequency dynamics of noble gases?. <i>Journal of Physics and Chemistry of Solids</i> , 2000 , 61, 477-483	3.9	4
104	The fast [brocess in m-tricresyl phosphate and its possible connection with the boson peak: A light scattering analysis. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties,</i> 1998 , 77, 435-442		4
103	Longitudinal collective modes in liquid water. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics,</i> 1994 , 16, 817-824		4

102	Absolute two-phonon Raman cross section in potassium chloride. <i>Physical Review B</i> , 1991 , 43, 14268-14	237.3	4
101	Raman activity in the beta phase of silver iodide: Low-temperature ordered crystal. <i>Physical Review B</i> , 1988 , 38, 10883-10893	3.3	4
100	Study of the order-disorder transition in AgI by temperature dependence of the depolarization ratio. <i>Solid State Ionics</i> , 1981 , 5, 473-476	3.3	4
99	Reconstructing Nonparametric Productivity Networks. <i>Entropy</i> , 2020 , 22,	2.8	4
98	Investigation of the binding between olfactory receptors and odorant molecules in C. elegans organism. <i>Biophysical Chemistry</i> , 2019 , 255, 106264	3.5	3
97	Slow dynamics of liquid Se studied by Infrared Photon Correlation Spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 2009 , 355, 1797-1800	3.9	3
96	Saddles of the energy landscape and folding of model proteins. <i>Europhysics Letters</i> , 2009 , 87, 18002	1.6	3
95	Sette et al. Reply:. <i>Physical Review Letters</i> , 1997 , 78, 976-976	7.4	3
94	Some remarks on the low-energy excitations in glasses: interpretation of Boson peak data. <i>Philosophical Magazine</i> , 2007 , 87, 593-602	1.6	3
93	Brillouin ultraviolet light scattering on vitreous silica. <i>Journal of Non-Crystalline Solids</i> , 2005 , 351, 1919-	1 <u>9</u> .2 ₉ 3	3
92	Structural and entropic modes in supercooled liquids: experimental and theoretical investigation. Journal of Physics Condensed Matter, 2003 , 15, S1181-S1192	1.8	3
91	Spectroscopic cell for fast pressure jumps across the glass transition line. <i>Review of Scientific Instruments</i> , 2004 , 75, 2631-2637	1.7	3
90	Properties of the double well potential and relaxation processes in a model glass. <i>PhysChemComm</i> , 1999 , 2, 20		3
89	Sette et al. reply. <i>Physical Review Letters</i> , 1996 , 76, 3657	7.4	3
88	Non-Lorentzian depolarized Raman line shapes in n-pentanol. <i>Journal of Chemical Physics</i> , 1992 , 97, 613	6 5 .6914:	33
87	Emission spectroscopy of 15 kWe arcjet plumes 1990 ,		3
86	Rayleigh band of gaseous H2S. <i>Molecular Physics</i> , 1986 , 57, 1153-1162	1.7	3
85	Effects of correlations between silver ions in the Raman spectral shape of ⊞AgI. <i>Solid State Ionics</i> , 1983 , 9-10, 1377-1382	3.3	3

(2002-2020)

84	Optonongenetic enhancement of activity in primary cortical neurons. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2020 , 37, 643-652	1.8	3
83	Probing the Debye spectrum in glasses using small system sizes. <i>Physical Review Research</i> , 2020 , 2,	3.9	3
82	Heat capacity of liquids: A hydrodynamic approach. Condensed Matter Physics, 2015, 18, 13606	1.3	3
81	A novel strategy for molecular interfaces optimization: The case of Ferritin-Transferrin receptor interaction. <i>Computational and Structural Biotechnology Journal</i> , 2020 , 18, 2678-2686	6.8	3
80	Induced Light Scattering in Disordered Solids 1985 , 567-588		3
79	Collective Excitations in Supercritical Fluids. Springer Proceedings in Physics, 2015, 77-102	0.2	2
78	Period doubling induced by thermal noise amplification in genetic circuits. <i>Scientific Reports</i> , 2014 , 4, 7088	4.9	2
77	Self-consistent Euclidean-random-matrix theory. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019 , 52, 464002	2	2
76	Laser propulsion of nanobullets by adiabatic compression of surface plasmon polaritons. <i>Scientific Reports</i> , 2015 , 5, 17652	4.9	2
75	Optical trapping studies of colloidal interactions in liquid films. <i>Colloids and Surfaces A:</i> Physicochemical and Engineering Aspects, 2009 , 343, 133-136	5.1	2
74	Response to Comment on Visualizing coherent phonon propagation in the 100 GHz range: A broadband picosecond acoustic approach[Appl. Phys. Lett. 98, 246101 (2011)]. <i>Applied Physics Letters</i> , 2011 , 98, 246102	3.4	2
73	Dynamic structure factor of glassy o-terphenyl: a Brillouin light scattering study. <i>Journal of Non-Crystalline Solids</i> , 1998 , 235-237, 208-211	3.9	2
72	Nonlinear refraction of hard x rays. <i>Physical Review B</i> , 2008 , 77,	3.3	2
71	High-frequency dynamics of liquid and supercritical nitrogen. <i>Philosophical Magazine</i> , 2007 , 87, 665-671	1.6	2
70	Publisher Note: Parametric Resonance of Optically Trapped Aerosols [Phys. Rev. Lett. 99, 010601 (2007)]. <i>Physical Review Letters</i> , 2007 , 99,	7.4	2
69	Scopigno et al. Reply:. <i>Physical Review Letters</i> , 2007 , 98,	7.4	2
68	Quenches and crunches: Does the system explore in ageing the same part of the configuration space explored in equilibrium?. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002 , 82, 695-705		2
67	Off-equilibrium dynamics in the energy landscape of a simple model glass. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002 , 82, 163-169		2

66	The fluctuation origin of disorder-induced light scattering. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992 , 191, 348-351	3.3	2
65	Self-diffusion in liquid water: a geometrical approach. <i>Chemical Physics Letters</i> , 1992 , 188, 332-337	2.5	2
64	Disorder induced Raman scattering in EAgl. Solid State Ionics, 1986, 18-19, 883-887	3.3	2
63	Velocity autocorrelations across the molecular atomic fluid transformation in hydrogen under pressure. <i>Condensed Matter Physics</i> , 2020 , 23, 23607	1.3	2
62	Comment on "Universal Origin of Boson Peak Vibrational Anomalies in Ordered Crystals and in Amorphous Materials". <i>Physical Review Letters</i> , 2021 , 127, 179601	7.4	2
61	Microscopic structure and collective modes in liquid hydrogen: A preliminary inelastic X-ray scattering study		2
60	Brillouin light and X-ray study of glass-forming polybutadiene		2
59	Optical computation of a spin glass dynamics with tunable complexity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	2
58	Analytical description of the transverse Anderson localization of light. <i>Journal of Optics (United Kingdom)</i> , 2017 , 19, 045602	1.7	1
57	On the Number of Limit Cycles in Diluted Neural Networks. <i>Journal of Statistical Physics</i> , 2020 , 181, 230	4£2532°	1 1
56	Characterization of molecular-atomic transformation in fluid hydrogen under pressure via long-wavelength asymptote of charge density fluctuations. <i>Journal of Molecular Liquids</i> , 2020 , 312, 113	2 ⁶ 4	1
55	Moment-Preserving Theory of Vibrational Dynamics of Topologically Disordered Systems. <i>Frontiers in Physics</i> , 2017 , 5,	3.9	1
54	Longitudinal acoustic compliance and tagged particle susceptibility in liquid and supercooled glycerol. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 515-517	3.9	1
53	About the formation of C60 fine particles with reprecipitation method in ethanol/carbon disulfide mixture. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007 , 187, 402-405	4.7	1
52	Relaxation dynamics and acoustic properties in simple liquids. <i>Journal of Non-Crystalline Solids</i> , 2007 , 353, 3160-3163	3.9	1
51	Sample environment and experimental setup for inelastic x-ray scattering measurements of liquid hydrogen fluoride and (HF)x(H2O)1⊠ solutions. <i>Review of Scientific Instruments</i> , 2005 , 76, 013905	1.7	1
50	Short-time dynamics in simple disordered systems. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002 , 82, 233-241		1
49	Microscopic structure and collective modes in liquid hydrogen: A preliminary inelastic X-ray scattering study. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002 , 82, 305-312		1

(1991-1998)

48	Study of the longitudinal dynamics of glass-forming systems in the mesoscopic energy financial magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1998 , 77, 533-545		1
47	STATISTICAL BEHAVIOR OF CHARACTERISTIC LENGTHS OF VIBRATIONS ON TWO-DIMENSIONAL RANDOM FRACTALS. <i>Fractals</i> , 1993 , 01, 1044-1050	3.2	1
46	Geometrical aspects of self diffusion in liquid water. <i>Journal of Molecular Structure</i> , 1991 , 250, 171-179	3.4	1
45	On the self-consistent equation for the microscopic local electric field in dielectric systems. <i>Molecular Physics</i> , 1991 , 73, 745-756	1.7	1
44	Theory of Raman and Brillouin scattering in disordered solid. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1992 , 65, 161-172		1
43	Low-frequency light scattering from disordered hydrogen-bonded solids. <i>Physical Review B</i> , 1992 , 46, 2845-2852	3.3	1
42	Inferring the stabilization effects of SARS-CoV-2 variants on the binding with ACE2 receptor <i>Communications Biology</i> , 2022 , 5, 1421	6.7	1
41	Thermometer: a webserver to predict protein thermal stability Bioinformatics, 2022,	7.2	1
40	Alignment interactions drive structural transitions in biological tissues. <i>Physical Review E</i> , 2021 , 104, 044606	2.4	1
39	Molecular dynamics on hybrid memory machines. <i>Lecture Notes in Computer Science</i> , 1997 , 451-456	0.9	1
38	Non-hydrodynamic modes in viscoelastic behaviour of simple fluids. <i>Philosophical Magazine</i> , 2020 , 100, 2568-2581	1.6	1
37	Inferring the stabilization effects of SARS-CoV-2 variants on the binding with ACE2 receptor		1
36	Computational optimization of angiotensin-converting enzyme 2 for SARS-CoV-2 Spike molecular recognition. <i>Computational and Structural Biotechnology Journal</i> , 2021 , 19, 3006-3014	6.8	1
35	Do we understand the solid-like elastic properties of confined liquids?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	1
34	Comment on Collective modes and gapped momentum states in liquid Ga: Experiment, theory, and simulation (Physical Review B, 2021, 103,	3.3	1
33	The Mixing of Polarizations in the Acoustic Excitations of Disordered Media With Local Isotropy. <i>Frontiers in Physics</i> , 2018 , 6,	3.9	1
32	Ageing of the nonlinear optical susceptibility in soft matter. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 205129	1.8	O
31	A model for low frequency Raman scattering in hydrogen- bonded solids. <i>Journal of Molecular Structure</i> , 1991 , 250, 395-401	3.4	О

30	Binding site identification of G protein-coupled receptors through a 3D Zernike polynomials-based method: application to C. elegans olfactory receptors <i>Journal of Computer-Aided Molecular Design</i> , 2022 , 36, 11	4.2	O
29	Network dilution and asymmetry in an efficient brain. <i>Philosophical Magazine</i> , 2020 , 100, 2544-2555	1.6	Ο
28	Computational optimization of transcranial focused ultrasound stimulation: Toward noninvasive, selective stimulation of deep brain structures. <i>Applied Physics Letters</i> , 2021 , 118, 233702	3.4	O
27	Spatial coherence of light inside three-dimensional media. <i>Nature Communications</i> , 2021 , 12, 4199	17.4	O
26	C. elegans-based chemosensation strategy for the early detection of cancer metabolites in urine samples. <i>Scientific Reports</i> , 2021 , 11, 17133	4.9	0
25	Quantitative Description of Surface Complementarity of Antibody-Antigen Interfaces. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 749784	5.6	O
24	Supervised perceptron learning vs unsupervised Hebbian unlearning: Approaching optimal memory retrieval in Hopfield-like networks <i>Journal of Chemical Physics</i> , 2022 , 156, 104107	3.9	0
23	Rational design and synthesis of a novel BODIPY-based probe for selective imaging of tau tangles in human iPSC-derived cortical neurons <i>Scientific Reports</i> , 2022 , 12, 5257	4.9	O
22	Computational Modeling of the Thermodynamics of the Mesophilic and Thermophilic Mutants of Trp-Cage Miniprotein <i>ACS Omega</i> , 2022 , 7, 13448-13454	3.9	0
21	Lactoferrin Inhibition of the Complex Formation between ACE2 Receptor and SARS CoV-2 Recognition Binding Domain. <i>International Journal of Molecular Sciences</i> , 2022 , 23, 5436	6.3	O
20	A glassy model for random lasers. <i>Philosophical Magazine</i> , 2007 , 87, 587-592	1.6	
19	Contribution of the terahertz vibrations to the high-temperature thermal conductivity of vitreous silica. <i>Philosophical Magazine</i> , 2008 , 88, 3915-3923	1.6	
18	Study of the dynamic structure factor of hydrogen fluoride by inelastic X-ray scattering. <i>Philosophical Magazine</i> , 2004 , 84, 1507-1512	1.6	
17	Relaxation dynamics in (HF)x(H2O)1-x solutions. <i>Journal of Chemical Physics</i> , 2005 , 123, 34502	3.9	
16	Evidence of a submegahertz acoustic dispersion in liquid and glassy o-terphenyl. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002 , 82, 357-364		
15	Amorphous Materials: Inelastic X-ray Scattering 2001 , 201-204		
14	A model for the long time dynamics in a simple glass: Off-equilibrium properties. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1999 , 79, 1987-1992		
13	Low Frequency Light Scattering in Hydrogen Bonded Liquids 1991 , 357-368		

LIST OF PUBLICATIONS

12	Novel Approaches to the Development and Application of Informetric and Scientometric Tools. Journal of Data and Information Science, 2020 , 5, 1-4	1.2
11	Novel Approaches to the Development and Application of Informetric and Scientometric Tools. <i>Journal of Data and Information Science</i> , 2020 , 5, 1-4	1.2
10	Longitudinal and Transverse Brillouin Intensities in Glasses: Experiments and Interaction Induced Contributions. <i>Springer Proceedings in Physics</i> , 1989 , 225-230	0.2
9	Anomalous Sound Dispersion in Liquid Water 1994 , 81-84	
8	MD Simulations of Stretched TIP4P-Water in the Supercooled Regime 1994 , 77-80	
7	Molecular Dynamics on a Water Model with Polarizability and Hyperpolarizability 1994, 73-76	
6	Induced Light Scattering from Electrically Disordered Solids 1995 , 307-321	
5	Disorder-Induced Light Scattering in FAgl. Springer Series in Solid-state Sciences, 1984 , 437-439	0.4
4	Comment on "Universal Effect of Excitation Dispersion on the Heat Capacity and Gapped States in Fluids". <i>Physical Review Letters</i> , 2021 , 126, 229601	7.4
3	Mathematics of the Hexapod 2021 , 13-18	
2	A novel computational strategy for defining the minimal protein molecular surface representation <i>PLoS ONE</i> , 2022 , 17, e0266004	3.7
1	Direct Visualization and Identification of Membrane Voltage-Gated Sodium Channels from Human iPSC-Derived Neurons by Multiple Imaging and Light Enhanced Spectroscopy. <i>Small Methods</i> ,2200402	12.8