Giancarlo Ruocco

List of Publications by Year
in descending order

459 papers	15,854 citations	16451 64 h-index	28297 105 g-index
476 all docs	476 docs citations	476 times ranked	9476 citing authors

#	Article	IF	Citations
1	Bacterial ratchet motors. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9541-9545.	7.1	559
2	The Widom line as the crossover between liquid-like and gas-like behaviour in supercriticalÂfluids. Nature Physics, 2010, 6, 503-507.	16.7	418
3	Computer generation of optimal holograms for optical trap arrays. Optics Express, 2007, 15, 1913.	3.4	406
4	Dynamics of Glasses and Glass-Forming Liquids Studied by Inelastic X-ray Scattering. Science, 1998, 280, 1550-1555.	12.6	315
5	Microscopic dynamics in liquid metals: The experimental point of view. Reviews of Modern Physics, 2005, 77, 881-933.	45.6	288
6	Is the Fragility of a Liquid Embedded in the Properties of Its Glass?. Science, 2003, 302, 849-852.	12.6	274
7	Acoustic Attenuation in Glasses and its Relation with the Boson Peak. Physical Review Letters, 2007, 98, 025501.	7.8	261
8	Brillouin microscopy: an emerging tool for mechanobiology. Nature Methods, 2019, 16, 969-977.	19.0	244
9	Collective Dynamics in Water by High Energy Resolution Inelastic X-Ray Scattering. Physical Review Letters, 1995, 75, 850-853.	7.8	241
10	Self-Starting Micromotors in a Bacterial Bath. Physical Review Letters, 2009, 102, 048104.	7.8	227
11	Saddles in the Energy Landscape Probed by Supercooled Liquids. Physical Review Letters, 2000, 85, 5356-5359.	7.8	211
12	Shocks in Nonlocal Media. Physical Review Letters, 2007, 99, 043903.	7.8	194
13	Evidence of High Frequency Propagating Modes in Vitreous Silica. Physical Review Letters, 1996, 77, 3835-3838.	7.8	191
14	Transition fromNormaltoFastSound in Liquid Water. Physical Review Letters, 1996, 77, 83-86.	7.8	175
15	Viscoelastic behavior of water in the terahertz-frequency range: An inelastic x-ray scattering study. Physical Review E, 1999, 60, 5505-5521.	2.1	159
16	Amorphous silica-like carbon dioxide. Nature, 2006, 441, 857-860.	27.8	153
17	Heterogeneous shear elasticity of glasses: the origin of the boson peak. Scientific Reports, 2013, 3, 1407.	3.3	151
18	A perfect crystal X-ray analyser with meV energy resolution. Nuclear Instruments & Methods in Physics Research B, 1996, 111, 181-186.	1.4	141

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19	Mixing of Longitudinal and Transverse Dynamics in Liquid Water. Physical Review Letters, 1997, 79, 1678-1681.	7.8	138
20	Comparison of FaxÃ©nâ€™s correction for a microsphere translating or rotating near a surface. Physical Review E, 2009, 79, 026301.	2.1	137
21	Routes to Gelation in a Clay Suspension. Physical Review Letters, 2004, 93, 258301.	7.8	136
22	Observation of a Gradient Catastrophe Generating Solitons. Physical Review Letters, 2009, 102, 083902.	7.8	136
23	More on the Phase Diagram of Laponite. Langmuir, 2006, 22, 1106-1111.	3.5	131
24	X-ray Monochromator with 2 Ã— 108 Energy Resolution. Journal of Synchrotron Radiation, 1996, 3, 62-64.	2.4	126
25	Dynamically Correlated Regions and Configurational Entropy in Supercooled Liquids. Journal of Physical Chemistry B, 2008, 112, 10652-10658.	2.6	126
26	Connected Network of Minima as a Model Glass: Long Time Dynamics. Physical Review Letters, 1998, 81, 4648-4651.	7.8	124
27	Equivalence of the sound velocity in water and ice at mesoscopic wavelengths. Nature, 1996, 379, 521-523.	27.8	120
28	Inflammation, neurodegeneration and protein aggregation in the retina as ocular biomarkers for Alzheimerâ€™s disease in the 3xTg-AD mouse model. Cell Death and Disease, 2018, 9, 685.	6.3	120
29	Low-frequency atomic motion in a model glass. Europhysics Letters, 1996, 34, 681-686.	2.0	108
30	The high-frequency dynamics of liquid water. Journal of Physics Condensed Matter, 1999, 11, R259-R293.	1.8	108
31	High-frequency longitudinal and transverse dynamics in water. Physical Review E, 2005, 71, 011501.	2.1	106
32	Relaxation Processes in Harmonic Glasses?. Physical Review Letters, 2000, 84, 5788-5791.	7.8	103
33	Observation of Large Momentum Phononlike Modes in Glasses. Physical Review Letters, 1996, 76, 3356-3359.	7.8	102
34	Glassâ€“glass transition during aging of a colloidal clay. Nature Communications, 2014, 5, 4049.	12.8	101
35	Evidence for a Crossover in the Frequency Dependence of the Acoustic Attenuation in Vitreous Silica. Physical Review Letters, 2006, 97, 035501.	7.8	100
36	Liquidlike Behavior of Supercritical Fluids. Physical Review Letters, 2006, 97, 245702.	7.8	98

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37	Neuroinflammatory Processes, A1 Astrocyte Activation and Protein Aggregation in the Retina of Alzheimerâ€™s Disease Patients, Possible Biomarkers for Early Diagnosis. Frontiers in Neuroscience, 2019, 13, 925.	2.8	98
38	Optical Spatial Solitons in Soft Matter. Physical Review Letters, 2005, 95, 183902.	7.8	97
39	The history of the "fast sound" in liquid water. Condensed Matter Physics, 2008, 11, 29.	0.7	96
40	The Raman coupling function in amorphous silica and the nature of the long-wavelength excitations in disordered systems. Europhysics Letters, 1999, 47, 56-62.	2.0	88
41	Off-Equilibrium Effective Temperature in Monatomic Lennard-Jones Glass. Physical Review Letters, 2000, 84, 6054-6057.	7.8	87
42	Condensation in Disordered Lasers: Theory,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>3</mml:mn><mml:mi mathvariant="normal">D</mml:mi><mml:mo>+</mml:mo><mml:mn>1</mml:mn></mml:math>Simulations, and Experiments. Physical Review Letters, 2008, 101, 143901.	7.8	87
43	A perfect crystal X-ray analyser with 1.5 meV energy resolution. Nuclear Instruments & Methods in Physics Research B, 1996, 117, 339-340.	1.4	86
44	Nondynamic Origin of the High-Frequency Acoustic Attenuation in Glasses. Physical Review Letters, 1999, 83, 5583-5586.	7.8	86
45	Landscapes and fragilities. Journal of Chemical Physics, 2004, 120, 10666-10680.	3.0	85
46	Density fluctuations in molten lithium: inelastic x-ray scattering study. Journal of Physics Condensed Matter, 2000, 12, 8009-8034.	1.8	83
47	Analysis of the network topology in liquid water and hydrogen sulphide by computer simulation. Journal of Chemical Physics, 1992, 96, 6167-6176.	3.0	82
48	Evidence of Two Viscous Relaxation Processes in the Collective Dynamics of Liquid Lithium. Physical Review Letters, 2000, 85, 4076-4079.	7.8	80
49	Glassy Behavior of Light. Physical Review Letters, 2006, 96, 065702.	7.8	80
50	Highâ€resolution lowâ€frequency Raman spectra of liquid H2O and D2O. Journal of Chemical Physics, 1990, 93, 7767-7773.	3.0	79
51	Competing Interactions in Arrested States of Colloidal Clays. Physical Review Letters, 2010, 104, 085701.	7.8	78
52	3D models in the new era of immune oncology: focus on T cells, CAF and ECM. Journal of Experimental and Clinical Cancer Research, 2019, 38, 117.	8.6	78
53	Fast sound in liquid water. Physical Review E, 1993, 47, 1677-1684.	2.1	77
54	Diffraction-free light droplets for axially-resolved volume imaging. Scientific Reports, 2017, 7, 17.	3.3	73

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55	Experimental Determination of the Structural Relaxation in Liquid Water. Physical Review Letters, 1999, 82, 775-778.	7.8	71
56	Topological signature of first-order phase transitions in a mean-field model. Europhysics Letters, 2003, 62, 775-781.	2.0	71
57	Evidence of anomalous dispersion of the generalized sound velocity in glasses. Physical Review B, 2004, 69, .	3.2	71
58	High Frequency Sound Waves in Vitreous Silica. Physical Review Letters, 1998, 80, 1236-1239.	7.8	70
59	Colloidal Attraction Induced by a Temperature Gradient. Langmuir, 2009, 25, 4247-4250.	3.5	70
60	Theoretical and computer-simulation study of the density fluctuations in liquid water. Physical Review A, 1989, 40, 7226-7238.	2.5	69
61	High-frequency vibrational dynamics in glasses. Journal of Physics Condensed Matter, 2001, 13, 9141-9164.	1.8	69
62	Dynamics and Thermodynamics beyond the critical point. Scientific Reports, 2013, 3, 1203.	3.3	69
63	Nature of the Short Wavelength Excitations in Vitreous Silica: An X-Ray Brillouin Scattering Study. Physical Review Letters, 2000, 85, 2136-2139.	7.8	68
64	Collective dynamics of liquid aluminum probed by inelastic x-ray scattering. Physical Review E, 2000, 63, .	2.1	67
65	Multipoint Holographic Optical Velocimetry in Microfluidic Systems. Physical Review Letters, 2006, 96, 134502.	7.8	64
66	Dichotomic aging behaviour in a colloidal glass. Soft Matter, 2013, 9, 10955.	2.7	63
67	Computer simulation of polarizable fluids: a consistent and fast way for dealing with polarizability and hyperpolarizability. Molecular Physics, 1994, 82, 875-886.	1.7	62
68	High Frequency Dynamics of Glass Forming Liquids at the Glass Transition. Physical Review Letters, 1998, 80, 544-547.	7.8	62
69	Inelastic x-ray scattering study of the collective dynamics in liquid sodium. Physical Review E, 2002, 65, 031205.	2.1	62
70	Vibrational excitations in systems with correlated disorder. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 862-866.	0.8	61
71	Phase Diagram and Complexity of Mode-Locked Lasers: From Order to Disorder. Physical Review Letters, 2009, 102, 083901.	7.8	61
72	Molecular dynamics simulation of the fragile glass-former orthoterphenyl: A flexible molecule model. Physical Review E, 2000, 62, 612-630.	2.1	60

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73	Pressure Evolution of the High-Frequency Sound Velocity in Liquid Water. Physical Review Letters, 2002, 89, 125502.	7.8	60
74	Parametric Resonance of Optically Trapped Aerosols. Physical Review Letters, 2007, 99, 010601.	7.8	60
75	Glass transition and density fluctuations in the fragile glass former orthoterphenyl. Physical Review E, 2001, 63, 061502.	2.1	59
76	Arrested state of clay-water suspensions: Gel or glass?. Physical Review E, 2008, 77, 020402.	2.1	59
77	High-frequency propagating modes in vitreous silica at 295 K. Physical Review B, 1997, 55, 8049-8051.	3.2	58
78	High-Frequency Dynamics in Metallic Glasses. Physical Review Letters, 2006, 96, 135501.	7.8	57
79	In-Silico Evidence for a Two Receptor Based Strategy of SARS-CoV-2. Frontiers in Molecular Biosciences, 2021, 8, 690655.	3.5	57
80	Size effects and quasilocalized vibrations. Philosophical Magazine, 2004, 84, 1361-1372.	1.6	55
81	Molecular dynamics results for stretched water. Journal of Chemical Physics, 1993, 99, 8095-8104.	3.0	54
82	Transport of self-propelling bacteria in micro-channel flow. Journal of Physics Condensed Matter, 2012, 24, 065101.	1.8	54
83	MLL4-associated condensates counterbalance Polycomb-mediated nuclear mechanical stress in Kabuki syndrome. Nature Genetics, 2020, 52, 1397-1411.	21.4	53
84	The low energy excess of vibrational states in ν-SiO2: the role of transverse dynamics. Journal of Physics Condensed Matter, 2004, 16, 8519-8530.	1.8	52
85	Microglia-Derived Microvesicles Affect Microglia Phenotype in Glioma. Frontiers in Cellular Neuroscience, 2019, 13, 41.	3.7	52
86	Determination of the Infinite Frequency Sound Velocity in the Glass Formero-Terphenyl. Physical Review Letters, 1998, 80, 2161-2164.	7.8	51
87	Collective excitations in supercritical fluids: Analytical and molecular dynamics study of â€œpositiveâ€• and â€œnegativeâ€•dispersion. Journal of Chemical Physics, 2010, 133, 024502.	3.0	51
88	Single-Molecule Imaging with X-Ray Free-Electron Lasers: Dream or Reality?. Physical Review Letters, 2011, 106, 105504.	7.8	51
89	Acoustic dynamics of network-forming glasses at mesoscopic wavelengths. Nature Communications, 2013, 4, 1793.	12.8	51
90	Quasisaddles as relevant points of the potential energy surface in the dynamics of supercooled liquids. Journal of Chemical Physics, 2002, 116, 10297-10306.	3.0	50

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91	Structural Relaxation in Liquid Water by Inelastic UV Scattering. Physical Review Letters, 2004, 92, 255507.	7.8	50
92	On the analysis of the vibrational Boson peak and low-energy excitations in glasses. Journal of Non-Crystalline Solids, 2006, 352, 4541-4551.	3.1	50
93	Three-dimensionalab initioinvestigation of light-matter interaction in Mie lasers. Physical Review A, 2008, 78, .	2.5	50
94	A new class of multiple dispersion grating spectrometers. Journal of Physics E: Scientific Instruments, 1988, 21, 798-804.	0.7	49
95	High-frequency dynamics of glass-forming polybutadiene. Physical Review E, 1999, 59, 4470-4475.	2.1	49
96	General features of the energy landscape in Lennard-Jones-like model liquids. Journal of Chemical Physics, 2003, 119, 2120-2126.	3.0	49
97	Elastic properties of permanently densified silica: A Raman, Brillouin light, and x-ray scattering study. Physical Review B, 2010, 81, .	3.2	49
98	Numerical study of Raman scattering from fractals. Physical Review Letters, 1990, 65, 1136-1139.	7.8	48
99	Contrasting behaviour of acoustic modes in network and non-network glasses. Europhysics Letters, 2001, 54, 77-83.	2.0	47
100	High-Frequency Acoustic Modes in Liquid Gallium at the Melting Point. Physical Review Letters, 2002, 89, 255506.	7.8	47
101	Eigenmodes of a hydrodynamically coupled micron-size multiple-particle ring. Physical Review E, 2007, 76, 061402.	2.1	47
102	Spatio-temporal anomalous diffusion in heterogeneous media by nuclear magnetic resonance. Journal of Chemical Physics, 2011, 135, 034504.	3.0	47
103	Potential energy landscape and long-time dynamics in a simple model glass. Physical Review E, 2000, 61, 1681-1691.	2.1	46
104	Microscopic relaxation in supercritical and liquid neon. Journal of Chemical Physics, 2001, 114, 2259-2267.	3.0	46
105	High Frequency Dynamics in a Monatomic Glass. Physical Review Letters, 2004, 92, 025503.	7.8	46
106	Free-Energy Transition in a Gas of Noninteracting Nonlinear Wave Particles. Physical Review Letters, 2008, 101, 044101.	7.8	46
107	Kinetics of formation of supramolecular tubules of a sodium cholate derivative. Soft Matter, 2009, 5, 3018.	2.7	46
108	Theory of vibrational anomalies in glasses. Journal of Non-Crystalline Solids, 2015, 407, 133-140.	3.1	46

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109	Probing the non-Debye low-frequency excitations in glasses through random pinning. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8700-8704.	7.1	46
110	Glassy behavior of light in random lasers. Physical Review B, 2006, 74, .	3.2	45
111	Behavior of Supercritical Fluids across the â€œFrenkel Lineâ€• Journal of Physical Chemistry Letters, 2017, 8, 4995-5001.	4.6	45
112	Background-deflection Brillouin microscopy reveals altered biomechanics of intracellular stress granules by ALS protein FUS. Communications Biology, 2018, 1, 139.	4.4	45
113	Raman spectra of water in the translational and librational regions. Molecular Physics, 1989, 67, 19-31.	1.7	44
114	Fast Relaxational Dynamics in theo-Terphenyl Glass. Physical Review Letters, 1999, 82, 1776-1779.	7.8	43
115	Structural disorder and anomalous diffusion in random packing of spheres. Scientific Reports, 2013, 3, 2631.	3.3	41
116	Disorder-induced light scattering in solids: Microscopic theory and applications to some model systems. Physical Review B, 1991, 44, 11734-11742.	3.2	40
117	Hydrodynamic interactions in two dimensions. Physical Review E, 2008, 78, 031406.	2.1	40
118	Raman spectra of water in the translational and librational regions. Molecular Physics, 1987, 61, 1199-1212.	1.7	39
119	Low-frequency Raman spectra of liquid water: A molecular dynamics simulation. Chemical Physics Letters, 1989, 159, 383-387.	2.6	39
120	Origin of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î»</mml:mi></mml:math>Transition in Liquid Sulfur. Physical Review Letters, 2007, 99, 025701.	7.8	39
121	Structural and microscopic relaxations in a colloidal glass. Soft Matter, 2015, 11, 466-471.	2.7	39
122	Perspectives on cavitation enhanced endothelial layer permeability. Colloids and Surfaces B: Biointerfaces, 2018, 168, 83-93.	5.0	39
123	Molecular Mechanisms Behind Anti SARS-CoV-2 Action of Lactoferrin. Frontiers in Molecular Biosciences, 2021, 8, 607443.	3.5	39
124	Topological Description of the Aging Dynamics in Simple Glasses. Physical Review Letters, 2001, 87, 055502.	7.8	37
125	Visualizing coherent phonon propagation in the 100 GHz range: A broadband picosecond acoustics approach. Applied Physics Letters, 2011, 98, 011901.	3.3	37
126	Heterogeneous Viscoelasticity: A Combined Theory of Dynamic and Elastic Heterogeneity. Physical Review Letters, 2015, 115, 015901.	7.8	37

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127	Disorder-induced single-mode transmission. Nature Communications, 2017, 8, 14571.	12.8	37
128	Temperature evolution of single particle correlation functions of liquid water. Journal of Chemical Physics, 1990, 92, 2540-2547.	3.0	36
129	Very-Long-Range Nature of Capillary Interactions in Liquid Films. Physical Review Letters, 2008, 100, 106103.	7.8	36
130	Ultrashort pulse propagation and the Anderson localization. Optics Letters, 2009, 34, 130.	3.3	36
131	Ergodic to non-ergodic transition in low concentration Laponite. Journal of Physics Condensed Matter, 2004, 16, S4993-S5002.	1.8	35
132	Hard-Sphere-like Dynamics in a Non-Hard-Sphere Liquid. Physical Review Letters, 2005, 94, 155301.	7.8	35
133	Thermal conductivity and terahertz vibrational dynamics of vitreous silica. Physical Review B, 2008, 77, .	3.2	35
134	Cancellation of Bessel beam side lobes for high-contrast light sheet microscopy. Scientific Reports, 2018, 8, 17178.	3.3	35
135	Raman scattering from fractals: Simulation on large structures by the method of moments. Physical Review B, 1995, 52, 3346-3355.	3.2	34
136	Adiabatic and isothermal sound waves: The case of supercritical nitrogen. Europhysics Letters, 2006, 75, 70-76.	2.0	34
137	Universal relation between viscous flow and fast dynamics in glass-forming materials. Physical Review B, 2010, 81, .	3.2	34
138	Structural and dynamical consequences of density variation in vitreous silica. Journal of Physics Condensed Matter, 2003, 15, S995-S1005.	1.8	33
139	Collective dynamics in water by inelastic x-rays scattering. Physica Scripta, 1996, T66, 48-56.	2.5	33
140	Raman spectra of water in the translational and librational region. Molecular Physics, 1987, 62, 1467-1481.	1.7	32
141	Collective Dynamical Properties of Liquid Water. Physical Review Letters, 1988, 61, 1958-1961.	7.8	32
142	Vibrational dynamics and Raman scattering in fractals: A numerical study. Physical Review B, 1992, 45, 2126-2137.	3.2	32
143	Acoustic nature of the boson peak in vitreous silica. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 2013-2020.	0.6	32
144	High-frequency dynamics of liquid and supercritical water. Physical Review E, 2007, 75, 051202.	2.1	32

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145	Relation among optical, thermal and thermo-optical properties and niobium concentration in tellurite glasses. Journal of Non-Crystalline Solids, 2010, 356, 2146-2150.	3.1	32
146	Vibrational dynamics and surface structure of amorphous selenium. Nature Communications, 2011, 2, 195.	12.8	32
147	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. Journal of Chemical Physics, 2015, 143, 104502.	3.0	32
148	Phonon-like and single-particle dynamics in liquid lithium. Europhysics Letters, 2000, 50, 189-195.	2.0	31
149	Topology and phase transitions: From an exactly solvable model to a relation between topology and thermodynamics. Physical Review E, 2005, 71, 036152.	2.1	31
150	Light diffusion and localization in three-dimensional nonlinear disordered media. Physical Review A, 2007, 75, .	2.5	31
151	Aging after shear rejuvenation in a soft glassy colloidal suspension: Evidence for two different regimes. Physical Review E, 2007, 75, 011408.	2.1	31
152	High frequency dynamics in liquids and supercritical fluids: A comparative inelastic x-ray scattering study. Journal of Chemical Physics, 2009, 130, 064501.	3.0	31
153	Coherent potential approximation for diffusion and wave propagation in topologically disordered systems. Physical Review B, 2013, 88, .	3.2	31
154	Induced contributions in the rayleigh spectra of water: A molecular dynamics simulation. Chemical Physics Letters, 1987, 141, 297-300.	2.6	30
155	On the Maximum Storage Capacity of the Hopfield Model. Frontiers in Computational Neuroscience, 2016, 10, 144.	2.1	30
156	Structural and Microscopic Relaxation Processes in Liquid Hydrogen Fluoride. Physical Review Letters, 2002, 88, 255503.	7.8	29
157	Structural and Collisional Relaxations in Liquids and Supercritical Fluids. Physical Review Letters, 2007, 98, 085501.	7.8	29
158	High-frequency transverse dynamics in glasses. Journal of Physics Condensed Matter, 2003, 15, S1269-S1278.	1.8	28
159	Ageing dynamics in Laponite dispersions at various salt concentrations. Philosophical Magazine, 2007, 87, 449-458.	1.6	28
160	Dynamical Crossover at the Liquid-Liquid Transformation of a Compressed Molten Alkali Metal. Physical Review Letters, 2013, 111, 077801.	7.8	28
161	Pressure-Induced In-Glass Structural Transformation in the Amorphous Polymer Poly(methylmethacrylate). Physical Review Letters, 1998, 80, 4205-4208.	7.8	27
162	Evidence of short-time dynamical correlations in simple liquids. Physical Review E, 2002, 66, 031205.	2.1	27

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163	Generalized fluctuation-dissipation relation and effective temperature in off-equilibrium colloids. Physical Review B, 2010, 81, .	3.2	27
164	Biophysical modeling of C. elegans neurons: Single ion currents and whole-cell dynamics of AWCon and RMD. PLoS ONE, 2019, 14, e0218738.	2.5	27
165	2D Zernike polynomial expansion: Finding the protein-protein binding regions. Computational and Structural Biotechnology Journal, 2021, 19, 29-36.	4.1	27
166	Experimental Evidence of the Acousticlike Character of the High Frequency Excitations in Glasses. Physical Review Letters, 2000, 85, 1266-1269.	7.8	26
167	Aging under shear: Structural relaxation of a non-Newtonian fluid. Physical Review E, 2005, 71, 011505.	2.1	26
168	Effect of dilution in asymmetric recurrent neural networks. Neural Networks, 2018, 104, 50-59.	5.9	26
169	Acoustic-phonon dispersion in CdTe at 7.5 GPa. Physical Review B, 1997, 56, 8691-8694.	3.2	25
170	Frustration and Sound Attenuation in Structural Glasses. Physical Review Letters, 2000, 84, 4874-4877.	7.8	25
171	Laser Beam Filamentation in Fractal Aggregates. Physical Review Letters, 2006, 97, 123903.	7.8	25
172	Nonergodicity Factor, Fragility, and Elastic Properties of Polymeric Glassy Sulfur. Journal of Physical Chemistry B, 2011, 115, 14052-14063.	2.6	25
173	Exploring the Association Between Sialic Acid and SARS-CoV-2 Spike Protein Through a Molecular Dynamics-Based Approach. Frontiers in Medical Technology, 2020, 2, 614652.	2.5	25
174	Characterizing Hydropathy of Amino Acid Side Chain in a Protein Environment by Investigating the Structural Changes of Water Molecules Network. Frontiers in Molecular Biosciences, 2021, 8, 626837.	3.5	25
175	On the connection between low frequency vibrational and relaxational motion in glasses. Journal of Non-Crystalline Solids, 1996, 203, 12-18.	3.1	24
176	Line broadening in the collective dynamics of liquid and solid water. Physical Review B, 1996, 54, 14892-14895.	3.2	24
177	Dynamics of Dense Supercritical Neon at the Transition from Hydrodynamical to Single-Particle Regimes. Physical Review Letters, 1998, 80, 3515-3518.	7.8	24
178	Topological properties of the mean-fieldÏ•4model. Physical Review E, 2004, 70, 041101.	2.1	24
179	Collective excitations in soft-sphere fluids. Physical Review E, 2014, 90, 042301.	2.1	24
180	Evolution from ordinary to fast sound in water at room temperature. Chemical Physics Letters, 1993, 209, 408-416.	2.6	23

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181	Brillouin and Umklapp scattering in polybutadiene: Comparison of neutron and x-ray scattering. Physical Review E, 1999, 60, R2464-R2467.	2.1	23
182	Molecular dynamics simulation of the fragile glass former orthoterphenyl: A flexible molecule model. II. Collective dynamics. Physical Review E, 2001, 64, 021511.	2.1	23
183	Collective dynamics in molten potassium:â€,An inelastic x-ray scattering study. Journal of Chemical Physics, 2004, 120, 8089-8094.	3.0	23
184	The Raman coupling function in disordered solids: a light and neutron scattering study on glasses of different fragility. Journal of Physics Condensed Matter, 2007, 19, 205145.	1.8	23
185	Influence of an adsorbing polymer on the aging dynamics of Laponite clay suspensions. Philosophical Magazine, 2008, 88, 4213-4221.	1.6	23
186	Dynamic light scattering study of temperature and pH sensitive colloidal microgels. Journal of Non-Crystalline Solids, 2015, 407, 361-366.	3.1	23
187	What is the Right Theory for Anderson Localization of Light? An Experimental Test. Physical Review Letters, 2018, 120, 067401.	7.8	23
188	Does blood type affect the COVID-19 infection pattern?. PLoS ONE, 2021, 16, e0251535.	2.5	23
189	Energy landscape, two-level systems, and entropy barriers in Lennard-Jones clusters. Physical Review B, 1999, 60, 3200-3205.	3.2	22
190	Intramolecular origin of the fast relaxations observed in the Brillouin light scattering spectra of molecular glass formers. Physical Review E, 2000, 62, R7595-R7598.	2.1	22
191	The potential energy landscape in the Lennard-Jones binary mixture model. Journal of Physics Condensed Matter, 2003, 15, S1227-S1236.	1.8	22
192	Collective Thermal Diffusion of Silica Colloids Studied by Nonlinear Optics. Langmuir, 2009, 25, 12495-12500.	3.5	22
193	Computer simulation study of thermodynamic scaling of dynamics of 2Ca(NO3)2Â·3KNO3. Journal of Chemical Physics, 2011, 135, 164510.	3.0	22
194	Do social sciences and humanities behave like life and hard sciences?. Scientometrics, 2017, 112, 607-653.	3.0	22
195	C. elegans-based chemosensation strategy for the early detection of cancer metabolites in urine samples. Scientific Reports, 2021, 11, 17133.	3.3	22
196	Isotropic induced scattering in liquid H2S. Molecular Physics, 1983, 50, 1083-1087.	1.7	21
197	Benassiet al.Reply. Physical Review Letters, 1997, 78, 4670-4670.	7.8	21
198	Generalized fluctuation relation and effective temperatures in a driven fluid. Physical Review E, 2005, 71, 020101.	2.1	21

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199	Vibrational anomalies and marginal stability of glasses. European Physical Journal: Special Topics, 2013, 216, 83-93.	2.6	21
200	Beyond the Maximum Storage Capacity Limit in Hopfield Recurrent Neural Networks. Entropy, 2019, 21, 726.	2.2	21
201	Spatial organization of hydrophobic and charged residues affects protein thermal stability and binding affinity. Scientific Reports, 2022, 12, .	3.3	21
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