

Barbara Ruzicka

List of Publications by Year in descending order

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69
papers

2,309
citations

257450
24
h-index

206112
48
g-index

70
all docs

70
docs citations

70
times ranked

2418
citing authors

#	ARTICLE	IF	CITATIONS
1	A fresh look at the Laponite phase diagram. <i>Soft Matter</i> , 2011, 7, 1268.	2.7	348
2	Observation of empty liquids and equilibrium gels in a colloidal clay. <i>Nature Materials</i> , 2011, 10, 56-60.	27.5	307
3	Routes to Gelation in a Clay Suspension. <i>Physical Review Letters</i> , 2004, 93, 258301.	7.8	136
4	More on the Phase Diagram of Laponite. <i>Langmuir</i> , 2006, 22, 1106-1111.	3.5	131
5	Optical and dc conductivity study of potassium-doped single-walled carbon nanotube films. <i>Physical Review B</i> , 2000, 61, R2468-R2471.	3.2	126
6	Glass-glass transition during aging of a colloidal clay. <i>Nature Communications</i> , 2014, 5, 4049.	12.8	101
7	Competing Interactions in Arrested States of Colloidal Clays. <i>Physical Review Letters</i> , 2010, 104, 085701.	7.8	78
8	Evidence of anomalous dispersion of the generalized sound velocity in glasses. <i>Physical Review B</i> , 2004, 69, .	3.2	71
9	Dichotomic aging behaviour in a colloidal glass. <i>Soft Matter</i> , 2013, 9, 10955.	2.7	63
10	Arrested state of clay-water suspensions: Gel or glass?. <i>Physical Review E</i> , 2008, 77, 020402.	2.1	59
11	Microglia-Derived Microvesicles Affect Microglia Phenotype in Glioma. <i>Frontiers in Cellular Neuroscience</i> , 2019, 13, 41.	3.7	52
12	Fano effect in the ab plane of $\text{Nd}_{1.96}\text{Ce}_{0.04}\text{CuO}_{4+y}$: Evidence of phonon interaction with a polaronic background. <i>Physical Review B</i> , 1998, 57, 1248-1252.	3.2	43
13	Scaling between magnetization and Drude weight in EuB_6 . <i>Physical Review B</i> , 2002, 65, .	3.2	42
14	Fourier transform infrared microscopy: some advances in techniques for characterisation and structure-property elucidations of industrial material. <i>Analyst</i> , 1998, 123, 579-586.	3.5	39
15	Structural and microscopic relaxations in a colloidal glass. <i>Soft Matter</i> , 2015, 11, 466-471.	2.7	39
16	Dynamical behavior of microgels of interpenetrated polymer networks. <i>Soft Matter</i> , 2017, 13, 5185-5193.	2.7	39
17	Chemical and physical hydrogels: two casesystems studied by quasi elastic light scattering. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 304, 119-128.	2.6	35
18	Ergodic to non-ergodic transition in low concentration Laponite. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S4993-S5002.	1.8	35

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19	Study of network composition in interpenetrating polymer networks of poly(N isopropylacrylamide) microgels: The role of poly(acrylic acid). Journal of Colloid and Interface Science, 2019, 545, 210-219.	9.4	32
20	Charge Dynamics of 2H-TaSe ₂ along the Less-Conducting c-Axis. Physical Review Letters, 2001, 86, 4136-4139.	7.8	31
21	Optical properties of the quasi-two-dimensional dichalcogenides 2H-TaSe ₂ and 2H-NbSe ₂ . European Physical Journal B, 2003, 33, 15-23.	1.5	28
22	High-frequency transverse dynamics in glasses. Journal of Physics Condensed Matter, 2003, 15, S1269-S1278.	1.8	28
23	Ageing dynamics in Laponite dispersions at various salt concentrations. Philosophical Magazine, 2007, 87, 449-458.	1.6	28
24	Temperature dependence of the anisotropic electrodynamics in the ladder compounds. European Physical Journal B, 1998, 6, 301-305.	1.5	25
25	Gellan Gum Microgels as Effective Agents for a Rapid Cleaning of Paper. ACS Applied Polymer Materials, 2020, 2, 2791-2801.	4.4	24
26	Relaxation Dynamics, Softness, and Fragility of Microgels with Interpenetrated Polymer Networks. Macromolecules, 2020, 53, 1596-1603.	4.8	24
27	Influence of an adsorbing polymer on the aging dynamics of Laponite clay suspensions. Philosophical Magazine, 2008, 88, 4213-4221.	1.6	23
28	Dynamic light scattering study of temperature and pH sensitive colloidal microgels. Journal of Non-Crystalline Solids, 2015, 407, 361-366.	3.1	23
29	Swelling of responsive-microgels: experiments versus models. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 532, 389-396.	4.7	23
30	Low-temperature transport, thermal, and optical properties of single-grain quasicrystals of icosahedral phases in the Y-Mg-Zn and Tb-Mg-Zn alloy systems. Physical Review B, 2000, 62, 262-272.	3.2	20
31	Molecular mechanisms driving the microgels behaviour: A Raman spectroscopy and dynamic light scattering study. Journal of Molecular Liquids, 2019, 284, 718-724.	4.9	19
32	Dual aging behaviour in a clay-polymer dispersion. Soft Matter, 2014, 10, 4513.	2.7	16
33	Aging behavior of the localization length in a colloidal glass. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 460, 118-122.	4.7	16
34	Local structure of temperature and pH-sensitive colloidal microgels. Journal of Chemical Physics, 2015, 143, 114904.	3.0	15
35	Chemical-Physical Behaviour of Microgels Made of Interpenetrating Polymer Networks of PNIPAM and Poly(acrylic Acid). Polymers, 2021, 13, 1353.	4.5	15
36	Isotopic effect on the aging dynamics of a charged colloidal system. RSC Advances, 2012, 2, 11111.	3.6	14

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37	Small and large polarons in nickelates, manganites, and cuprates. Journal of Superconductivity and Novel Magnetism, 1997, 10, 293-297.	0.5	12
38	Probing bulky ligand entry in engineered archaeal ferritins. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 450-456.	2.4	12
39	Apparatus for simultaneous dynamic light scatteringâ€“small angle neutron scattering investigations of dynamics and structure in soft matter. Review of Scientific Instruments, 2021, 92, 023907.	1.3	12
40	Non-diffusive dynamics in a colloidal glass: Aging versus rejuvenation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 483, 316-320.	4.7	11
41	Glass and Jamming Rheology in Soft Particles Made of PNIPAM and Polyacrylic Acid. International Journal of Molecular Sciences, 2021, 22, 4032.	4.1	11
42	Volume fraction determination of microgel composed of interpenetrating polymer networks of PNIPAM and polyacrylic acid. Journal of Physics Condensed Matter, 2021, 33, 174004.	1.8	11
43	The structure of water near a charged crystalline surface. Journal of Non-Crystalline Solids, 2015, 407, 418-422.	3.1	9
44	Isotopic Effect on the Gel and Glass Formation of a Charged Colloidal Clay: Laponite. Journal of Physical Chemistry B, 2017, 121, 4576-4582.	2.6	9
45	Translational and rotational spectra in the fundamental infrared band of liquid and solid parahydrogen. Physical Review B, 1993, 47, 2590-2595.	3.2	7
46	Infrared spectroscopy and microscopy at the Daresbury synchrotron light source. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1998, 20, 439-448.	0.4	7
47	Neutron diffraction study of aqueous Laponite suspensions at the NIMROD diffractometer. Physical Review E, 2014, 90, 032301.	2.1	7
48	Weakly and tightly bound polarons in the infrared spectra of perovskites. Physica Scripta, 1996, T66, 215-219.	2.5	6
49	Dynamics of Laponite solutions: An interpretation within the coupling model scheme. Journal of Non-Crystalline Solids, 2007, 353, 3885-3890.	3.1	6
50	High-frequency transverse-like excitations in glassy glycerol. Philosophical Magazine, 2004, 84, 1453-1461.	1.6	5
51	Inelastic X-ray scattering and high-frequency dynamics of molecular liquids. Pure and Applied Chemistry, 2004, 76, 79-89.	1.9	5
52	Salt enhanced sedimentation of halloysite nanotubes for precise determination of DNA adsorption isotherm. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 605, 125400.	4.7	5
53	Observation of empty liquids and equilibrium gels in a colloidal clay. , 2013, , .		4
54	The role of polymer structure on water confinement in poly(N-isopropylacrylamide) dispersions. Journal of Molecular Liquids, 2022, 355, 118924.	4.9	4

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55	Optics in the ladder compounds $\text{Sr}_{14-x}\text{Ca}_x\text{Cu}_{24}\text{O}_{41}$. Physica B: Condensed Matter, 1999, 259-261, 1036-1037.	2.7	3
56	Polaronic optical absorption in semiconducting and superconducting oxides. European Physical Journal D, 1996, 46, 1247-1248.	0.4	2
57	Polarons in the infrared spectra of high-T _c materials. Journal of Superconductivity and Novel Magnetism, 1996, 9, 393-396.	0.5	2
58	Low-temperature softening of the polaron band in electron-doped cuprates. Physica B: Condensed Matter, 1998, 244, 41-48.	2.7	2
59	Optical properties of $\text{Sr}_{14-x}\text{Ca}_x\text{Cu}_{24}\text{O}_{41}$ and $\text{Sr}_{0.73}\text{CuO}_2$. Physica C: Superconductivity and Its Applications, 1999, 317-318, 282-285.	1.2	2
60	About the formation of C ₆₀ fine particles with reprecipitation method in ethanol/carbon disulfide mixture. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 187, 402-405.	3.9	2
61	Thermal Behaviour of Microgels Composed of Interpenetrating Polymer Networks of Poly(N-isopropylacrylamide) and Poly(acrylic acid): A Calorimetric Study. Polymers, 2022, 14, 115.	4.5	2
62	Vibron and roton bands in the first overtone of solid and liquid parahydrogen. Physical Review B, 1994, 49, 6672-6677.	3.2	1
63	Optical evidence for dimensionality crossover: The case of ladder systems and organic Bechgaard salts. Physica C: Superconductivity and Its Applications, 2000, 341-348, 359-362.	1.2	1
64	Ageing of the nonlinear optical susceptibility in soft matter. Journal of Physics Condensed Matter, 2007, 19, 205129.	1.8	1
65	<title>Synchrotron IR microspectroscopy of malignant tissue</title>. , 1999, , .		0
66	Transport and optical conductivity in. European Physical Journal B, 2000, 16, 205-208.	1.5	0
67	Pressure and doping dependence of electronic properties of carbon nanotube ropes. AIP Conference Proceedings, 2000, , .	0.4	0
68	Charge dynamics in low-dimensional quantum systems. Journal of Physics Condensed Matter, 2003, 15, S2501-S2511.	1.8	0
69	New Optical Setup for In Situ DLS-SANS Measurements on Soft Matter. Neutron News, 0, , 1-2.	0.2	0