Andreas Schönhals

List of Publications by Year in descending order

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84 papers

2,396 citations

201674 27 h-index 223800 46 g-index

86 all docs

86 docs citations

86 times ranked 2118 citing authors

#	Article	IF	Citations
1	Microscopic dynamics of highly permeable super glassy polynorbornenes revealed by quasielastic neutron scattering. Journal of Membrane Science, 2022, 642, 119972.	8.2	3
2	Structure of plasmaâ€deposited copolymer films prepared from acrylic acid and styrene: Part III sulfonation and electrochemical properties. Plasma Processes and Polymers, 2022, 19, .	3.0	3
3	Multiple glassy dynamics of a homologous series of triphenylene-based columnar liquid crystals – A study by broadband dielectric spectroscopy and advanced calorimetry. Journal of Molecular Liquids, 2022, 358, 119212.	4.9	2
4	Graphene Oxide/Polyvinyl Alcohol–Formaldehyde Composite Loaded by Pb Ions: Structure and Electrochemical Performance. Polymers, 2022, 14, 2303.	4.5	3
5	Side Chain Length-Dependent Dynamics and Conductivity in Self-Assembled Ion Channels. Journal of Physical Chemistry C, 2022, 126, 10995-11006.	3.1	4
6	Spatial inhomogeneity, interfaces and complex vitrification kinetics in a network forming nanocomposite. Soft Matter, 2021, 17, 2775-2790.	2.7	20
7	Calorimetric and Dielectric Investigations of Epoxy-Based Nanocomposites with Halloysite Nanotubes as Nanofillers. Polymers, 2021, 13, 1634.	4.5	15
8	Molecular dynamics and electrical conductivity of Guanidinium based ionic liquid crystals: Influence of cation headgroup configuration. Journal of Molecular Liquids, 2021, 330, 115666.	4.9	10
9	Modified polyvinyl chloride membrane grafted with an ultra-thin polystyrene film: structure and electrochemical properties. Journal of Materials Research and Technology, 2021, 12, 2273-2284.	5 . 8	6
10	Characterization of Polymer Nanocomposites. Research Topics in Aerospace, 2021, , 55-77.	0.7	2
11	Energy dependent XPS measurements on thin films of a poly(vinyl methyl ether)/polystyrene blend concentration profile on a nanometer resolution to understand the behavior of nanofilms. Soft Matter, 2021, 17, 6985-6994.	2.7	2
12	Do Interfacial Layers in Thin Films Act as an Independent Layer within Thin Films?. Macromolecules, 2021, 54, 509-519.	4.8	9
13	Electrospun Nanocomposite Fibers of Polycarbonate- and Taurine-Modified Boehmite Nanoparticles: What Can Be Learned from Structural and Thermal Investigations?. ACS Applied Polymer Materials, 2021, 3, 6572-6585.	4.4	5
14	Low Frequency Vibrations and Diffusion in Disordered Polymers Bearing an Intrinsic Microporosity as Revealed by Neutron Scattering. Crystals, 2021, 11, 1482.	2.2	2
15	Plasma Polymerization of Acrylic Acid for the Tunable Synthesis of Glassy and Carboxylated Nanoparticles. Journal of Physical Chemistry B, 2020, 124, 668-678.	2.6	12
16	Effect of Silver Nanoparticles on the Dielectric Properties and the Homogeneity of Plasma Poly(acrylic acid) Thin Films. Journal of Physical Chemistry C, 2020, 124, 22817-22826.	3.1	14
17	Molecular Mobility of a Polymer of Intrinsic Microporosity Revealed by Quasielastic Neutron Scattering. Macromolecules, 2020, 53, 6731-6739.	4.8	10
18	Low frequency vibrational density of state of highly permeable super glassy polynorbornenes – the Boson peak. Physical Chemistry Chemical Physics, 2020, 22, 18381-18387.	2.8	7

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19	Electrical Conductivity and Multiple Glassy Dynamics of Crown Ether-Based Columnar Liquid Crystals. Journal of Physical Chemistry B, 2020, 124, 8728-8739.	2.6	8
20	Molecular Dynamics of Janus Polynorbornenes: Glass Transitions and Nanophase Separation. Macromolecules, 2020, 53, 7410-7419.	4.8	17
21	Competition of nanoparticle-induced mobilization and immobilization effects on segmental dynamics of an epoxy-based nanocomposite. Soft Matter, 2020, 16, 5406-5421.	2.7	27
22	Complex molecular dynamics of a symmetric model discotic liquid crystal revealed by broadband dielectric, thermal and neutron spectroscopy. Soft Matter, 2020, 16, 2005-2016.	2.7	9
23	Multiple glassy dynamics in dipole functionalized triphenylene-based discotic liquid crystals revealed by broadband dielectric spectroscopy and advanced calorimetry – assessment of the molecular origin. Physical Chemistry Chemical Physics, 2019, 21, 18265-18277.	2.8	12
24	Effect of Backbone Rigidity on the Glass Transition of Polymers of Intrinsic Microporosity Probed by Fast Scanning Calorimetry. ACS Macro Letters, 2019, 8, 1022-1028.	4.8	35
25	Confinement and localization effects revealed for thin films of the miscible blend poly(vinyl methyl) Tj ETQq $1\ 1\ C$).784314 1.6	rgBŢ /Overloc
26	Influence of interfaces on the crystallization behavior and the rigid amorphous phase of poly(I-lactide)-based nanocomposites with different layered doubled hydroxides as nanofiller. Polymer, 2019, 184, 121929.	3.8	21
27	Collective orientational order and phase behavior of a discotic liquid crystal under nanoscale confinement. Nanoscale Advances, 2019, 1, 1104-1116.	4.6	19
28	Dielectric and flash DSC investigations on an epoxy based nanocomposite system with MgAl layered double hydroxide as nanofiller. Thermochimica Acta, 2019, 677, 151-161.	2.7	17
29	Cu nanoparticles constrain segmental dynamics of cross-linked polyethers: a trade-off between non-fouling and antibacterial properties. Soft Matter, 2019, 15, 2884-2896.	2.7	15
30	Influence of Trimethylsilyl Side Groups on the Molecular Mobility and Charge Transport in Highly Permeable Glassy Polynorbornenes. ACS Applied Polymer Materials, 2019, 1, 844-855.	4.4	15
31	Molecular Dynamics of the Asymmetric Blend PVME/PS Revisited by Broadband Dielectric and Specific Heat Spectroscopy: Evidence of Multiple Glassy Dynamics. Macromolecules, 2019, 52, 1620-1631.	4.8	12
32	Nanoscale dipole dynamics of protein membranes studied by broadband dielectric microscopy. Nanoscale, 2019, 11, 4303-4309.	5.6	7
33	Self-assembly of liquid crystals in nanoporous solids for adaptive photonic metamaterials. Nanoscale, 2019, 11, 23304-23317.	5.6	23
34	Quantized Self-Assembly of Discotic Rings in a Liquid Crystal Confined in Nanopores. Physical Review Letters, 2018, 120, 067801.	7.8	42
35	Dynamics and ionic conductivity of ionic liquid crystals forming a hexagonal columnar mesophase. Physical Chemistry Chemical Physics, 2018, 20, 5626-5635.	2.8	31
36	First Clear-Cut Experimental Evidence of a Glass Transition in a Polymer with Intrinsic Microporosity: PIM-1. Journal of Physical Chemistry Letters, 2018, 9, 2003-2008.	4.6	67

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37	Anomalies in the low frequency vibrational density of states for a polymer with intrinsic microporosity $\hat{a} \in \text{``the Boson peak of PIM-1. Physical Chemistry Chemical Physics, 2018, 20, 1355-1363.}$	2.8	17
38	Unveiling the Dynamics of Self-Assembled Layers of Thin Films of Poly(vinyl methyl ether) (PVME) by Nanosized Relaxation Spectroscopy. ACS Applied Materials & Samp; Interfaces, 2017, 9, 7535-7546.	8.0	38
39	Molecular mobility and gas transport properties of nanocomposites based on PIM-1 and polyhedral oligomeric phenethyl-silsesquioxanes (POSS). Journal of Membrane Science, 2017, 529, 274-285.	8.2	28
40	Dielectric analysis of the upper critical solution temperature behaviour of a poly(acrylamide-co-acrylonitrile) copolymer system in water. Soft Matter, 2017, 13, 2384-2393.	2.7	10
41	Hyperbranched poly(amidoamine)/kaolinite nanocomposites: Structure and charge carrier dynamics. Polymer, 2017, 121, 64-74.	3.8	29
42	Unexpected behavior of ultra-thin films of blends of polystyrene/poly(vinyl methyl ether) studied by specific heat spectroscopy. Journal of Chemical Physics, 2017, 146, 203321.	3.0	10
43	Decoupling of Dynamic and Thermal Glass Transition in Thin Films of a PVME/PS Blend. ACS Macro Letters, 2017, 6, 1156-1161.	4.8	15
44	Molecular Mobility and Physical Aging of a Highly Permeable Glassy Polynorbornene as Revealed by Dielectric Spectroscopy. ACS Macro Letters, 2017, 6, 813-818.	4.8	31
45	Structure–Property Relationships of Nanocomposites Based on Polylactide and Layered Double Hydroxides – Comparison of MgAl and NiAl LDH as Nanofiller. Macromolecular Chemistry and Physics, 2017, 218, 1700232.	2.2	26
46	Crystallization behavior of nanocomposites based on poly(I-lactide) and MgAl layered double hydroxides – Unbiased determination of the rigid amorphous phases due to the crystals and the nanofiller. Polymer, 2017, 108, 257-264.	3.8	54
47	Unraveling the Dynamics of Nanoscopically Confined PVME in Thin Films of a Miscible PVME/PS Blend. ACS Applied Materials & Discrete Samp; Interfaces, 2017, 9, 37289-37299.	8.0	15
48	Reaction of CO2Gas with (radicals in) Plasma-Polymerized Acrylic Acid (and Formation of COOH-Rich) Tj ETQq0 (OggBT/C)verlock 10 Tf
49	In Situ Nanocalorimetric Investigations of Plasma Assisted Deposited Poly(ethylene oxide)-like Films by Specific Heat Spectroscopy. Journal of Physical Chemistry B, 2016, 120, 3954-3962.	2.6	7
50	Molecular Mobility of the High Performance Membrane Polymer PIM-1 as Investigated by Dielectric Spectroscopy. ACS Macro Letters, 2016, 5, 528-532.	4.8	35
51	Inelastic neutron spectroscopy as a tool to investigate nanoconfined polymer systems. Polymer, 2016, 105, 393-406.	3.8	28
52	Dielectric investigations of nanocomposites based on Matrimid and polyhedral oligomeric phenethyl-silsesquioxanes (POSS). Polymer, 2016, 90, 89-101.	3.8	23
53	Quasi- and inelastic neutron scattering to investigate the molecular dynamics of discotic molecules in the bulk. EPJ Web of Conferences, 2015, 83, 02017.	0.3	2
54	High-resolution dielectric study reveals pore-size-dependent orientational order of a discotic liquid crystal confined in tubular nanopores. Physical Review E, 2015, 92, 012503.	2.1	8

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55	Unambiguous Evidence for a Highly Mobile Surface Layer in Ultrathin Polymer Films by Specific Heat Spectroscopy on Blends. Macromolecules, 2015, 48, 4936-4941.	4.8	22
56	Structure–property relationships of nanocomposites based on polylactide and MgAl layered double hydroxides. European Polymer Journal, 2015, 68, 338-354.	5.4	59
57	Calorimetric evidence for a mobile surface layer in ultrathin polymeric films: poly(2-vinyl pyridine). Soft Matter, 2015, 11, 7942-7952.	2.7	34
58	Structure–Property Relationships of Hyperbranched Polymer/Kaolinite Nanocomposites. Macromolecules, 2015, 48, 6562-6573.	4.8	24
59	Comparison of thermal and dielectric spectroscopy for nanocomposites based on polypropylene and Layered Double Hydroxide – Proof of interfaces. European Polymer Journal, 2014, 55, 48-56.	5.4	69
60	Vibrational density of states of triphenylene based discotic liquid crystals: dependence on the length of the alkyl chain. Physical Chemistry Chemical Physics, 2014, 16, 7324-7333.	2.8	39
61	Thermotropic orientational order of discotic liquid crystals in nanochannels: an optical polarimetry study and a Landau–de Gennes analysis. Soft Matter, 2014, 10, 4522-4534.	2.7	33
62	Dynamics of Linear Poly(<i>N</i> -isopropylacrylamide) in Water around the Phase Transition Investigated by Dielectric Relaxation Spectroscopy. Journal of Physical Chemistry B, 2014, 118, 3750-3759.	2.6	66
63	Thermal properties and vibrational density of states of a nanoconfined discotic liquid crystal. Colloid and Polymer Science, 2014, 292, 1949-1960.	2.1	6
64	Phase Transitions and Molecular Mobility of a Discotic Liquid Crystal under Nanoscale Confinement. Journal of Physical Chemistry C, 2013, 117, 19712-19720.	3.1	20
65	Correlation of Activation Energies of Gas Diffusivity and Local Matrix Mobility in Polycarbonate/POSS Nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1593-1597.	2.1	15
66	Calorimetric glass transition of ultrathin poly(vinyl methyl ether) films. Polymer, 2013, 54, 2067-2070.	3.8	23
67	The dielectric signature of poly(N-isopropylacrylamide) microgels at the volume phase transition: dependence on the crosslinking density. Soft Matter, 2013, 9, 4464.	2.7	36
68	Combined FTIR and Dielectric Investigation of Poly(vinyl acetate) Adsorbed on Silica Particles. Macromolecules, 2013, 46, 4626-4632.	4.8	184
69	Glass transition and segmental dynamics in thin supported polystyrene films: The role of molecular weight and annealing. Thermochimica Acta, 2013, 566, 186-192.	2.7	42
70	Calorimetric glass transition of ultrathin poly(bisphenol A carbonate) films. Soft Matter, 2012, 8, 9132.	2.7	26
71	Tg depression and invariant segmental dynamics in polystyrene thin films. Soft Matter, 2012, 8, 5119.	2.7	173
72	Molecular dynamics of a discotic liquid crystal investigated by a combination of dielectric relaxation and specific heat spectroscopy. Soft Matter, 2012, 8, 11115.	2.7	24

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73	Molecular Mobility and Glass Transition of Thin Films of Poly(bisphenol A carbonate). Macromolecules, 2012, 45, 1652-1662.	4.8	89
74	Confinement Effects on the Molecular Dynamics of Liquidâ€Crystalline Polymethacrylatesâ€"A Broadband Dielectric Spectroscopy Study. Macromolecular Chemistry and Physics, 2012, 213, 2420-2431.	2.2	9
75	Structure and Phase Behavior of a Discotic Columnar Liquid Crystal Confined in Nanochannels. Journal of Physical Chemistry C, 2012, 116, 18990-18998.	3.1	45
76	Probing the phase transition of aqueous solutions of linear low molecular weight poly(N-isopropylacrylamide) by dielectric spectroscopy. Soft Matter, 2012, 8, 12116.	2.7	30
77	Surface and Bulk Structure of Thin Spin Coated and Plasma-Polymerized Polystyrene Films. Plasma Chemistry and Plasma Processing, 2012, 32, 767-780.	2.4	25
78	Structure of Plasmaâ€Deposited Poly(acrylic acid) Films. Plasma Processes and Polymers, 2011, 8, 147-159.	3.0	55
79	Dielectric relaxation of ultrathin films of supported polysulfone. Physical Review E, 2009, 79, 011801.	2.1	91
80	Broadband dielectric spectroscopy on the molecular dynamics in different generations of hyperbranched polyester. Journal of Applied Polymer Science, 2009, 113, 2477-2484.	2.6	37
81	Dielectric Properties of Nanocomposites Based on Polyethylene and Layered Double Hydroxide. Macromolecules, 2009, 42, 4165-4174.	4.8	79
82	Rotational Fluctuations of Water Confined to Layered Oxide Materials:  Nonmonotonous Temperature Dependence of Relaxation Times. Journal of Physical Chemistry A, 2007, 111, 5166-5175.	2.5	27
83	Dielectric Study of Molecular Mobility in Poly(propylene-graft-maleic anhydride)/Clay Nanocomposites. Macromolecules, 2005, 38, 2764-2774.	4.8	111
84	Molecular mobility in highâ€performance polynorbornenes: A combined broadband dielectric, advanced calorimetry, and neutron scattering investigation. Polymer Engineering and Science, 0, , .	3.1	2