Klaus Huber

List of Publications by Year
in descending order

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102 papers	5,174 citations	147801 31 h-index	88630 70 g-index
105 all docs	105 docs citations	105 times ranked	6294 citing authors

#	Article	IF	Citations
1	Rapid Room-Temperature Synthesis and Characterization of Nanocrystals of a Prototypical Zeolitic Imidazolate Framework. Chemistry of Materials, 2009, 21, 1410-1412.	6.7	1,069
2	Controlling Zeolitic Imidazolate Framework Nano- and Microcrystal Formation: Insight into Crystal Growth by Time-Resolved In Situ Static Light Scattering. Chemistry of Materials, 2011, 23, 2130-2141.	6.7	747
3	Trapping Metal-Organic Framework Nanocrystals:Â Anin-SituTime-Resolved Light Scattering Study on the Crystal Growth of MOF-5 in Solution. Journal of the American Chemical Society, 2007, 129, 5324-5325.	13.7	273
4	Upper Critical Solution Temperature of Poly(N-acryloyl glycinamide) in Water: A Concealed Property. Macromolecules, 2012, 45, 374-384.	4.8	208
5	Fast Nucleation and Growth of ZIFâ€8 Nanocrystals Monitored by Timeâ€Resolved In Situ Smallâ€Angle and Wideâ€Angle Xâ€Ray Scattering. Angewandte Chemie - International Edition, 2011, 50, 8067-8071.	13.8	198
6	Lactide Polymerisation with Airâ€Stable and Highly Active Zinc Complexes with Guanidineâ€“Pyridine Hybrid Ligands. Chemistry - A European Journal, 2009, 15, 2362-2376.	3.3	148
7	Hydrodynamic and thermodynamic behavior of short-chain polystyrene in toluene and cyclohexane at 34.5.degree.C. Macromolecules, 1985, 18, 1461-1467.	4.8	128
8	Nanocrystals of [Cu3(btc)2] (HKUST-1): a combined time-resolved light scattering and scanning electron microscopy study. Chemical Communications, 2009, , 1031.	4.1	106
9	Calcium-induced shrinking of polyacrylate chains in aqueous solution. The Journal of Physical Chemistry, 1993, 97, 9825-9830.	2.9	98
10	Dynamic light scattering from regular star-branched molecules. Macromolecules, 1984, 17, 541-548.	4.8	93
11	Ca2+and Cu2+Induced Conformational Changes of Sodium Polymethacrylate in Dilute Aqueous Solution. Macromolecules, 1998, 31, 728-733.	4.8	76
12	Calcium Induced Shrinking of NaPA Chains:Â A SANS Investigation of Single Chain Behavior. Macromolecules, 2003, 36, 9564-9573.	4.8	76
13	[Bis(guanidine)]zinc Complexes and Their Application in Lactide Polymerisation. European Journal of Inorganic Chemistry, 2007, 2007, 5645-5651.	2.0	73
14	Dilute solution behaviour of sodium polyacrylate chains in aqueous NaCl solutions. Polymer, 2003, 44, 7131-7141.	3.8	68
15	Shift of the photonic band gap in two photonic crystal/liquid crystal composites. Applied Physics Letters, 2002, 80, 1885-1887.	3.3	67
16	The distribution of Sr 2+ counterions around polyacrylate chains analyzed by anomalous small-angle X-ray scattering. Europhysics Letters, 2004, 66, 331-337.	2.0	67
17	Structureâ^'Property Relationship in Stimulus-Responsive Bolaamphiphile Hydrogels. Langmuir, 2007, 23, 7715-7723.	3.5	61
18	Evaluation of the Particle Growth of Amorphous Calcium Carbonate in Water by Means of the Porod Invariant from SAXS. Langmuir, 2010, 26, 17405-17412.	3.5	57

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19	A comparative experimental study of the aggregation of Acid Red 266 in aqueous solution by use of 19F-NMR, UV/Vis spectroscopy and static light scattering. Physical Chemistry Chemical Physics, 2000, 2, 3687-3695.	2.8	52
20	Zeolitic imidazolate framework-71 nanocrystals and a novel SOD-type polymorph: solution mediated phase transformations, phase selection via coordination modulation and a density functional theory derived energy landscape. Dalton Transactions, 2014, 43, 3528.	3.3	52
21	Osmotic second virial coefficient and two-parameter theories. Macromolecules, 1987, 20, 1400-1402.	4.8	47
22	Shrinking of anionic polyacrylate coils induced by Ca2+, Sr2+ and Ba2+: A combined light scattering and ASAXS study. European Physical Journal E, 2006, 21, 99-110.	1.6	46
23	Controlled Formation of Ag Nanoparticles by Means of Long-Chain Sodium Polyacrylates in Dilute Solution. Journal of the American Chemical Society, 2007, 129, 1089-1094.	13.7	46
24	Probing the extent of the Sr2+ ion condensation to anionic polyacrylate coils: A quantitative anomalous small-angle x-ray scattering study. Journal of Chemical Physics, 2007, 127, 154908.	3.0	42
25	Analysis of the Nucleation and Growth of Amorphous CaCO₃by Means of Time-Resolved Static Light Scattering. Langmuir, 2008, 24, 8262-8271.	3.5	42
26	Particle scattering factor of pearl necklace chains. Macromolecular Symposia, 2004, 211, 25-42.	0.7	40
27	Insight into Fast Nucleation and Growth of Zeolitic Imidazolate Framework-71 by In Situ Time-Resolved Light and X-ray Scattering Experiments. Crystal Growth and Design, 2016, 16, 2002-2010.	3.0	38
28	Remarks on A2, hydrodynamic coil expansion, and concentration dependence of the diffusion coefficient for polystyrene in toluene. Macromolecules, 1985, 18, 2743-2747.	4.8	37
29	A Novel Lubricant Based on Covalent Functionalized Graphene Oxide Quantum Dots. Scientific Reports, 2018, 8, 5843.	3.3	34
30	Formation of Ca²⁺-Induced Intermediate Necklace Structures of Polyacrylate Chains. Macromolecules, 2009, 42, 4288-4299.	4.8	33
31	Coil-Collapse and Coil-Aggregation due to the Interaction of Cu²⁺ and Ca²⁺ Ions with Anionic Polyacylate Chains in Dilute Solution. Macromolecules, 2010, 43, 3027-3035.	4.8	32
32	Modulated Formation of MOF-5 Nanoparticlesâ€"A SANS Analysis. Journal of Physical Chemistry C, 2012, 116, 6127-6135.	3.1	31
33	Lateral association and elongation of vimentin intermediate filament proteins: A time-resolved light-scattering study. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11152-11157.	7.1	31
34	Characterization of Worm-like Micelles Containing Solubilized Dye-Molecules by Light Scattering Techniques. Journal of Colloid and Interface Science, 1994, 164, 370-381.	9.4	30
35	Self-localization of polyacrylic acid molecules on polar ZnO(0001)â€"Zn surfaces. Physical Chemistry Chemical Physics, 2011, 13, 12959.	2.8	30
36	On Protein Folding in Crowded Conditions. Journal of Physical Chemistry Letters, 2019, 10, 7650-7656.	4.6	29

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37	Coil Dimensions of Polystyrene Chains in Colloidâ^'Polymer Mixtures at the Protein Limit:Â A SANS Study. Macromolecules, 2005, 38, 9783-9793.	4.8	27
38	Scattering behavior of wormlike star macromolecules. Macromolecules, 1989, 22, 3332-3336.	4.8	26
39	Insight into the Final Step of the Supramolecular Buildup of Eumelanin. Langmuir, 2017, 33, 6895-6901.	3.5	26
40	New experiments for the quantification of counterion condensation. Current Opinion in Colloid and Interface Science, 2012, 17, 64-73.	7.4	25
41	Contraction and Coagulation of Spherical Polyelectrolyte Brushes in the Presence of Ag⁺, Mg²⁺, and Ca²⁺ Cations. Macromolecules, 2016, 49, 7460-7468.	4.8	25
42	Mixtures of Polyacrylic Acid and Nonionic Surfactants at the Water/Air Interface. Journal of Colloid and Interface Science, 1994, 164, 463-470.	9.4	24
43	Silsesquioxane Molecules and Polystyrene Chains as a Model System for Colloidâ^'Polymer Mixtures in the Protein Limit. Macromolecules, 2005, 38, 151-159.	4.8	24
44	In situ static and dynamic light scattering and scanning electron microscopy study on the crystallization of the dense zinc imidazolate framework ZIF-zni. Physical Chemistry Chemical Physics, 2012, 14, 511-521.	2.8	24
45	Formfactors of Hollow and Massive Rectangular Parallelepipeds at Variable Degree of Anisometry. Zeitschrift Fur Physikalische Chemie, 2012, 226, 837-854.	2.8	23
46	The Molecular Mechanism of Polymer Formation of Farnesylated Human Guanylate-binding Protein 1. Journal of Molecular Biology, 2020, 432, 2164-2185.	4.2	23
47	Small-angle neutron scattering of dilute polystyrene chains at the protein limit of a colloid-polymer mixture. Journal of Chemical Physics, 2005, 123, 014903.	3.0	22
48	SAXS and ASAXS on Dilute Sodium Polyacrylate Chains Decorated with Lead Ions. Macromolecules, 2013, 46, 3570-3580.	4.8	22
49	Time-Resolved Recording of Ionic Dyestuff Aggregation by Static Light Scatteringâ€. Langmuir, 2000, 16, 3010-3018.	3.5	21
50	Mechanistic Studies of Silica Polymerization from Supersaturated Aqueous Solutions by Means of Time-Resolved Light Scattering. Langmuir, 2014, 30, 12664-12674.	3.5	21
51	Monitoring the Coordination Modulator Shell at MOF Nanocrystals. Crystal Growth and Design, 2014, 14, 4859-4863.	3.0	21
52	Monte Carlo calculations in comparison to neutron scattering studies: 1. Linear chains. Polymer, 1987, 28, 863-872.	3.8	20
53	Aggregation of a Pseudoisocyanine Chloride in Aqueous NaCl Solution. Langmuir, 2003, 19, 5223-5232.	3.5	19
54	Impact of Sodium Polyacrylate on the Amorphous Calcium Carbonate Formation from Supersaturated Solution. Langmuir, 2012, 28, 3593-3605.	3.5	19

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55	Interactions in mixed interfaces of binary surfactant solutions. Journal of Colloid and Interface Science, 1991, 147, 321-332.	9.4	18
56	Formation of Branched Calixarene AggregatesA Time-Resolved Static Light Scattering Study. Journal of the American Chemical Society, 2004, 126, 9276-9282.	13.7	18
57	Self-Assembly of Fibrinogen in Aqueous, Thrombin-Free Solutions of Variable Ionic Strengths. Langmuir, 2019, 35, 12113-12122.	3.5	18
58	Colloidâ€“polymer mixtures in solution with refractive index matched acrylate colloids. Journal of Colloid and Interface Science, 2004, 279, 447-457.	9.4	16
59	Monte Carlo calculations in comparison to neutron scattering studies: 2. Global dimensions of 12-arm stars. Polymer, 1987, 28, 1990-1996.	3.8	15
60	Monte Carlo calculations in comparison to neutron scattering studies: 3. On the structure of 12-arm star molecules. Polymer, 1987, 28, 1997-2003.	3.8	15
61	Specific Interactions of Ag⁺ Ions with Anionic Polyacrylate Chains in Dilute Solution. Macromolecules, 2014, 47, 8002-8011.	4.8	14
62	Liquid-liquid phase separation in dilute solutions of poly(styrene sulfonate) with multivalent cations: Phase diagrams, chain morphology, and impact of temperature. Journal of Chemical Physics, 2018, 148, 014901.	3.0	14
63	Time resolved structure analysis of growing Î²-amyloid fibers. Journal of Structural Biology, 2007, 159, 71-81.	2.8	13
64	Temperature-Induced Collapse of Alkaline Earth Cationâ^'Polyacrylate Anion Complexes. Journal of Physical Chemistry B, 2007, 111, 10431-10437.	2.6	13
65	Effect of ionic strength on the structure and elongational kinetics of vimentin filaments. Soft Matter, 2018, 14, 8445-8454.	2.7	13
66	Hydrogen-Bond-Induced Heteroassembly in Binary Colloidal Systems. Langmuir, 2010, 26, 13815-13822.	3.5	12
67	Co-Aggregation of Two Anionic Azo Dyestuffs at a Well-Defined Stoichiometry. Journal of Physical Chemistry B, 2013, 117, 8611-8619.	2.6	11
68	Morphology of Blends with Cross-Linked PMMA Microgels and Linear PMMA Chains. Macromolecules, 2013, 46, 9091-9103.	4.8	11
69	Silica Polymerization from Supersaturated Dilute Aqueous Solutions in the Presence of Alkaline Earth Salts. Langmuir, 2017, 33, 6071-6083.	3.5	11
70	Reaction enthalpy from the binding of multivalent cations to anionic polyelectrolytes in dilute solutions. Journal of Chemical Physics, 2018, 148, 114906.	3.0	11
71	Controlling Self-Assembly with Light and Temperature. Langmuir, 2020, 36, 223-231.	3.5	11
72	Static and dynamic scattering from block copolymeric ring molecules. Macromolecules, 1988, 21, 1305-1309.	4.8	10

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73	Conformation and Interactions of Polystyrene and Fullerenes in Dilute to Semidilute Solutions. Macromolecules, 2014, 47, 6113-6120.	4.8	10
74	First cumulant of the dynamic structure factor for rigid rings. Polymer, 1987, 28, 1987-1989.	3.8	9
75	Model of Polydisperse Wormlike Stars and Its Application to Dyestuff Aggregates. Langmuir, 2002, 18, 7049-7056.	3.5	9
76	Metastable metal imidazolates: development of targeted syntheses by combining experimental and theoretical investigations of the formation mechanisms. Zeitschrift Fur Kristallographie - Crystalline Materials, 2014, 229, 807-822.	0.8	9
77	Block copolymers with rigid and flexible segments. Macromolecules, 1989, 22, 2750-2755.	4.8	8
78	Selfâ€Assembly of Pseudoâ€Isocyanine Chloride as a Sensor for Macromolecular Crowding In Vitro and In Vivo. Chemistry - A European Journal, 2020, 26, 7041-7050.	3.3	8
79	Multiresponsive Polymer Nanoparticles Based on Disulfide Bonds. Macromolecules, 2021, 54, 2899-2911.	4.8	8
80	The ZIF system zinc(II) 4,5-dichoroimidazolate: theoretical and experimental investigations of the polymorphism and crystallization mechanisms. Zeitschrift Fur Kristallographie - Crystalline Materials, 2017, 232, 77-90.	0.8	7
81	Secondary Particle Formation during the Nonaqueous Synthesis of Metal Oxide Nanocrystals. Langmuir, 2018, 34, 12834-12844.	3.5	7
82	Polyacrylates in the presence of an extraordinary monovalent cationâ€"Solution behavior and metal nanoparticle formation. Journal of Chemical Physics, 2018, 149, 163318.	3.0	7
83	Insight into Fast Nucleation and Growth of Zeolitic Imidazolate Framework-71 by In Situ Static Light Scattering at Variable Temperature and Kinetic Modeling. Crystal Growth and Design, 2018, 18, 4653-4661.	3.0	7
84	Self-Assembled Fibrinogen Hydro- and Aerogels with Fibrin-like 3D Structures. Biomacromolecules, 2021, 22, 4084-4094.	5.4	7
85	Quasi-elastic scattering by semiflexible rings. Polymer, 1990, 31, 1811-1815.	3.8	6
86	Molecular Recognition with 2,4-Diaminotriazine-Functionalized Colloids. Langmuir, 2011, 27, 12851-12858.	3.5	6
87	Invertible Micelles Based on Ion-Specific Interactions of Sr2+ and Ba2+ with Double Anionic Block Copolyelectrolytes. Macromolecules, 2019, 52, 8759-8770.	4.8	6
88	Contrast variation of micelles composed of Ca2+ and block copolymers of two negatively charged polyelectrolytes. Colloid and Polymer Science, 2020, 298, 663-679.	2.1	6
89	Preparation of Positively and Negatively Charged Organic Colloids from a Single Precursor. Macromolecular Chemistry and Physics, 2003, 204, 2204-2211.	2.2	5
90	Surface modification of epoxy-functionalized acrylate colloids. Polymers for Advanced Technologies, 2005, 16, 38-41.	3.2	5

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91	Ion-selective binding as a new trigger for micellization of block copolyelectrolytes with two anionic blocks. Soft Matter, 2019, 15, 8266-8271.	2.7	5
92	Kinetic and Structural Features of a Dyestuff Coaggregation Studied by Time-Resolved Static Light Scattering. Journal of Physical Chemistry B, 2013, 117, 15165-15175.	2.6	4
93	Mechanism and equilibrium thermodynamics of H- and J-aggregate formation from pseudo isocyanine chloride in water. Soft Matter, 2021, 17, 8140-8152.	2.7	4
94	Spatial Distribution of Intracellular Ion Concentrations in Aggregateâ€Forming HeLa Cells Analyzed by Î¼â€XRF Imaging. ChemistryOpen, 2022, 11, e202200024.	1.9	4
95	Coaggregation of Two Anionic Azo Dyestuffs: A Combined Static Light Scattering and Small-Angle X-ray Scattering Study. Journal of Physical Chemistry B, 2014, 118, 7618-7629.	2.6	3
96	Systematic Limitations in Concentration Analysis via Anomalous Small-Angle X-ray Scattering in the Small Structure Limit. Polymers, 2016, 8, 85.	4.5	3
97	Phase Transformation Behavior of Polylactide Probed by Small Angle Light Scattering and Calorimetry. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1483-1495.	2.1	3
98	Thermodynamic Analysis of the Selfâ€Assembly of Pseudo Isocyanine Chloride in the Presence of Crowding Agents. ChemSystemsChem, 2021, 3, e2000051.	2.6	3
99	Adsorption behavior of partially collapsed polyacrylate coils on mica surfaces: A reciprocal space approach. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1553-1561.	2.1	2
100	ZIF-8 Nanocrystal Formation: An In-Situ Synchrotron SAXS/WAXS Study. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2010, 636, 2072-2072.	1.2	0
101	Targeted Synthesis of the Type-A Particle Substructure from Enzymatically Produced Eumelanin. Biomacromolecules, 2022, , .	5.4	0
102	Synthesis and Functionalization of Monodisperse Nanoparticles with High Optical Density Based on Inorganic Networks. , 0, , 785-788.		0