

List of publications of W.Schärtl

(most important publications have been highlighted)

A)	Journal articles	Web-of-Science, last updated: 11-2025			<u>cit.</u>
1	Schaertl, W; Sillescu, H Dynamics of colloidal hard-spheres in thin aqueous suspension layers – particle tracking by digital image- processing and Brownian dynamics computer simulations JOURNAL OF COLLOID AND INTERFACE SCIENCE	155	313-318	1993	39
2	Schaertl, W; Sillescu, H Brownian dynamics simulations of colloidal hard-spheres – effects of sample dimensionality on selfdiffusion JOURNAL OF STATISTICAL PHYSICS	74	687-703	1994	34
3	Schaertl, W; Sillescu, H Brownian dynamics of polydisperse colloidal hard-spheres – equilibrium structures and random close packings JOURNAL OF STATISTICAL PHYSICS	77	1007-1025	1994	144
4	Schaertl, W Brownian dynamics of colloidal hard-spheres .3. extended investigations at the phase-transition regime JOURNAL OF STATISTICAL PHYSICS	79	299-312	1995	6
5	Schaertl, W; Tsutsumi, K; Hashimoto, T Self-diffusion of spherical block-copolymer micelles ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY	209	356	PHYS 1995	0
6	Kirsch, S; Frenz, V; Schartl, W; Bartsch, E; Sillescu, H Multispeckle autocorrelation spectroscopy and its application to the investigation of ultraslow dynamical processes JOURNAL OF CHEMICAL PHYSICS	104	1758-1761	1996	89

7	Smalley, MV; Scharl, W; Hashimoto, T				
	Sogami potential and membrane equilibria				
	LANGMUIR	12	1331-1335	1996	3
8	Smalley, MV; Scharl, W; Hashimoto, T				
	Salt fractionation effect for spherical macroions				
	LANGMUIR	12	2340-2347	1996	6
9	Schaertl, W; Tsutsumi, K; Kimishima, K; Hashimoto, T				
	FRS study of diffusional processes in block copolymer/homopolymer blends containing glassy spherical micelles				
	MACROMOLECULES	29	5297-5305	1996	17
10	Bartsch, E; Frenz, V; Baschnagel, J; Scharl, W; Sillescu, H				
	The glass transition dynamics of polymer micronetwork colloids. A mode coupling analysis				
	JOURNAL OF CHEMICAL PHYSICS	106	3743-3756	1997	82
11	Scharl, WG; Roos, C; Gohr, K				
	Oscillating time correlation functions from dynamic light scattering of gold-labeled tracers				
	JOURNAL OF CHEMICAL PHYSICS	108	9594-9597	1998	7
12	Scharl, W				
	Structure and diffusion of copolymer micelles in entangled homopolymer chains				
	MACROMOLECULAR CHEMISTRY AND PHYSICS 200	481	500	1999	10
13	Graf, C; Scharl, W; Fischer, K; Hugenberg, N; Schmidt, M				
	Core-shell organosilicone-mu-networks with a dye labeled core				
	ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY 217	U449		1999	0
14	Schaertl, W; Roos, C				
	Convection and thermodiffusion of colloidal gold tracers by laser light scattering				
	PHYSICAL REVIEW E	60	2020-2028	1999	41

15	Graf, C; Scharrtl, W; Fischer, K; Hugenberg, N; Schmidt, M Dye-labeled poly(organosiloxane) microgels with core-shell architecture	LANGMUIR	15	6170-6180	1999	74
16	Gohr, K; Pakula, T; Tsutsumi, K; Scharrtl, W Dynamics of copolymer micelles in an entangled homopolymer matrix	MACROMOLECULES	32	7156-7165	1999	40
17	Graf, C; Scharrtl, W; Maskos, M; Schmidt, M Tracer diffusion of polyorganosiloxane nanoparticles in solution: Effects of tracer topology and particle concentration	JOURNAL OF CHEMICAL PHYSICS	112	3031-3039	2000	24
18	Gohr, K; Scharrtl, W Dynamics of copolymer micelles in a homopolymer melt: Influence of the matrix molecular weight	MACROMOLECULES	33	2129-2135	2000	33
19	Graf, C; Scharrtl, W; Hugenberg, N Photoinduced cluster formation of coumarin-labeled organosilicon micronetworks	ADVANCED MATERIALS	12	1353-1356	2000	14
20	Wurthner, F; Thalacker, C; Sautter, A; Scharrtl, W; Ibach, W; Hollricher, O Hierarchical self-organization of perylene bisimide-melamine assemblies to fluorescent mesoscopic superstructures	CHEMISTRY-A EUROPEAN JOURNAL	6	3871-3886	2000	241
21	Spill, R; Kohler, W; Lindenblatt, G; Schaertl, W Thermal diffusion and Soret feedback of gold-doped polyorganosiloxane nanospheres in toluene	PHYSICAL REVIEW E	62	8361-8368	2000	29
22	Lindenblatt, G; Scharrtl, W; Pakula, T; Schmidt, M Synthesis of polystyrene-grafted polyorganosiloxane microgels and their compatibility with linear polystyrene chains	MACROMOLECULES	33	9340 9347	2000	71

23	Schartl, W					
	Crosslinked spherical nanoparticles with core-shell topology					
	ADVANCED MATERIALS	12	1899	+	2000	254
24	Lindenblatt, G; Schartl, W; Pakula, T; Schmidt, M					
	Structure and dynamics of hairy spherical colloids in a matrix of nonentangled linear chains					
	MACROMOLECULES	34	1730-1736		2001	50
25	Hugenberg, N; Loske, S; Muller, AHE; Schartl, W; Schmidt, M; Simon, PFW; Strack, A; Wolf, BA					
	Synthesis and large scale fractionation of non-linear polymers: brushes and hyperbranched polymers					
	JOURNAL OF NON-CRYSTALLINE SOLIDS	307	765	771	2002	9
26	Gohr, K; Schartl, W; Willner, L; Pyckhout-Hintzen, W					
	SANS investigation of PS-PB block copolymer micelles in a short chain PB homopolymer matrix					
	MACROMOLECULES	35	9110-9116		2002	17
27	Yezek, L; Schartl, W; Chen, YM; Gohr, K; Schmidt, M					
	Influence of hair density and hair length on interparticle interactions of spherical polymer brushes in a homopolymer matrix					
	MACROMOLECULES	36	4226-4235		2003	49
28	Yuan, XF; Fischer, K; Schartl, W					
	Reversible cluster formation of colloidal nanospheres by interparticle photodimerization					
	ADVANCED FUNCTIONAL MATERIALS	14	457-463		2004	28
29	Yuan, XF; Fischer, K; Schartl, W					
	Photocleavable microcapsules built from photoreactive nanospheres					
	LANGMUIR	21	9374-9380		2005	66
30	Schaertl, Wolfgang					
	From photo-reactive nanoparticles to photo-cleavable microcapsules					
	ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY	231			2006	0

- 31** Berger, R.; Cheng, Y.; Foerch, R.; Gotsmann, B.; Gutmann, J. S.; Pakula, T.; Rietzler, U.; Schaertl, W.; Schmidt, M.; Strack, A.; Windeln, J.; Butt, H. -J.
Nanowear on polymer films of different architecture
LANGMUIR 23 3150-3156 **2007** **55**
- 32** Yuan, Xiaofeng; Schnell, Matthias; Muth, Sandra; Schaertl, Wolfgang
Cluster formation and rheology of photoreactive nanoparticle dispersions
LANGMUIR 24 5299-5305 **2008** **12**
- 33** Grimm, A.; Nowak, C.; Hoffmann, J.; Scharl, W.
Electrophoretic mobility of gold nanoparticles in thermoresponsive hydrogels
MACROMOLECULES 42 6231-6238 **2009** **18**
- 34** Schwaegler, M.; Nowak, C.; Hoffmann, J.; Schaertl, W.
Enhanced gold nanoparticle mobility in thermoresponsive hydrogels caused by localized light-to-heat conversion, leading to a superdiffusive particle transport
JOURNAL OF PHYSICAL CHEMISTRY C 113 15124-15132 **2009** **7**
- 35** Grosserueschkamp, Marc; Nowak, Christoph; Schach, Denise; Schaertl, Wolfgang; Knoll, Wolfgang; Naumann, Renate L. C.
Silver surfaces with optimized surface enhancement by self-assembly of silver nanoparticles for spectroelectrochemical applications
JOURNAL OF PHYSICAL CHEMISTRY C 113 17698-17704 **2009** **10**
- 36** Marksteiner, D.; Wasser, S.; Schaertl, W.
Photochemical gluing of colloidal particles by a simple interparticle polymerization route
LANGMUIR 25 12843-12846 **2009** **3**
- 37** Schaertl, Wolfgang; Xie, Renguo; Ren, Ting; Sejfic, Mirsada; Wenz, Gerhard; Heisel, Ronny; Scherer, Christian; Maskos, Michael; Fischer, Karl; Basche, Thomas
Water-soluble, cyclodextrin-functionalized semiconductor nanocrystals: Preparation and pH-dependent aggregation and emission properties
JOURNAL OF LUMINESCENCE 129 1428-1434 **2009** **7**

38	Schaertl, Wolfgang				
	Current directions in core-shell nanoparticle design				
	NANOSCALE	2	829-843	2010	293
39	Ren, Ting; Erker, Wolfgang; Basche, Thomas; Schartl, Wolfgang				
	Synthesis and spectroscopic properties of silica-dye-semiconductor nanocrystal hybrid particles				
	LANGMUIR	26	17981-17988	2010	2
40	Cardenas-Daw, Carlos; Kroeger, Anja; Schaertl, Wolfgang; Froimowicz, Pablo; Landfester, Katharina				
	Reversible photocycloadditions, a powerful tool for tailoring (nano)materials				
	MACROMOLECULAR CHEMISTRY AND PHYSICS	213	144-156	2012	44
41	Eckelt, Anja; Eckelt, John; Schaertl, Wolfgang; Wolf, Bernhard A.				
	On the incompatibility of dextran and pullulan in aqueous solutions and its modeling				
	MACROMOLECULAR CHEMISTRY AND PHYSICS	213	1206-1215	2012	3
42	Kurzbach, Dennis; Kattnig, Daniel R.; Pfaffenberger, Nane; Schaertl, Wolfgang; Hinderberger, Dariush				
	Highly defined, colloid-like ionic clusters in solution				
	CHEMISTRYOPEN	1	211-214	2012	9
43	Leukel, Sebastian; Panthoefer, Martin; Mondeshki, Mihail; Schaertl, Wolfgang; Plana-Ruiz, Sergi; Tremel, Wolfgang				
	Calcium sulfate nanoparticles with unusual dispersibility in organic solvents for transparent film processing				
	Langmuir	34	7096-7105	2018	10
44	Kunz, Simon; Pawlik, Maria; Schaertl, Wolfgang; Seiffert, Sebastian				
	Polymer- vs. colloidal-type viscoelastic mechanics of microgel pastes				
	Colloid and Polymer Science	1	1341-1352	2018	10

H-Index: 21

B) Books (single author):

1 Light Scattering from Polymer Solutions and Nanoparticle Dispersions

W.Schärtl

Springer Laboratory

Springer **2007**

2 Light Scattering from Polymer Solutions and Nanoparticle Dispersions

W.Schärtl

Springer Laboratory

Springer-Taschenbuch **2010**

3 Solution of polymer and nanoparticles light scattering

W.Schärtl

(see **1**, Chinese Edition)

Machinery Industry Press **2013**

4 Basic Physical Chemistry - A Complete Introduction on Bachelor of Science Level

W.Schärtl

Free ebook, Bookboon **2013**

5 Statistical Thermodynamics and Spectroscopy

W.Schärtl

Free ebook, Bookboon **2015**

C) Books (coauthor):

- 1 Physikalische Chemie Kapieren (Thermodynamik – Kinetik – Elektrochemie)**
S.Seiffert, W.Schärtl
De Gruyter 2021

- 2 Physikalische Chemie Kapieren (Quantenmechanik – Spektroskopie – Statistische Thermodynamik)**
S.Seiffert, W.Schärtl
De Gruyter 2024

D) Book Chapters:

- 1 Nanoparticles with Polymeric Surfaces – fillers and models for ultrasoft colloids**
W.Schärtl
in: **Nanoscale Materials**, eds. L.M.Liz-Marzán and P.V.Kamat
Kluwer Academic Publishers, Boston/Dordrecht/London **2003**

- 2 Nanoscopic Optical Tracers**
W.Schärtl and S.Schärtl
in: **Encyclopedia of Nanoscience**, ed. H.S.Nalwa
American Scientific Publishers **2004**

- 3 Forced Rayleigh Scattering – Principles and Application (Self Diffusion of Spherical Nanoparticles and Copolymer Micelles)**
W.Schärtl
in: **Soft-Matter Characterization**, eds. R.Borsali and R.Pecora
Springer **2008**