

Matthias Karg

List of Publications by Year in Descending Order

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Version: 2024-04-25

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

98
papers

4,400
citations

39
h-index

65
g-index

109
ext. papers

4,914
ext. citations

6.6
avg, IF

5.71
L-index

#	Paper	IF	Citations
98	Controlling the shell structure of hard core/hydrogel shell microspheres. <i>Colloid and Polymer Science</i> , 2022 , 300, 333	2.4	0
97	Temperature-Jump Spectroscopy of Gold-Poly(N-isopropylacrylamide) Core-Shell Microgels. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 4118-4131	3.8	1
96	The fuzzy sphere morphology is responsible for the increase in light scattering during the shrinkage of thermoresponsive microgels.. <i>Soft Matter</i> , 2021 ,	3.6	3
95	Surface Lattice Resonances in Self-Templated Plasmonic Honeycomb and Moiré Lattices. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2100317	4.6	1
94	Elucidating the Nucleation Event in the C ₆₀ Cross-Coupling Step-Growth Dispersion Polymerization. <i>Macromolecules</i> , 2021 , 54, 6085-6089	5.5	2
93	Synthesis and self-assembly of amphiphilic precision glycomacromolecules. <i>Polymer Chemistry</i> , 2021 , 12, 4795-4802	4.9	1
92	Translational and rotational diffusion coefficients of gold nanorods functionalized with a high molecular weight, thermoresponsive ligand: a depolarized dynamic light scattering study. <i>Soft Matter</i> , 2021 , 17, 4019-4026	3.6	1
91	Polymer ligand binding to surface-immobilized gold nanoparticles: a fluorescence-based study on the adsorption kinetics. <i>Soft Matter</i> , 2021 , 17, 7487-7497	3.6	0
90	Versatile Route toward Hydrophobically Polymer-Grafted Gold Nanoparticles from Aqueous Dispersions. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 8225-8237	3.4	4
89	Structural Insights into Polymethacrylamide-Based LCST Polymers in Solution: A Small-Angle Neutron Scattering Study. <i>Macromolecules</i> , 2021 , 54, 7632-7641	5.5	1
88	Tuning Sugar-Based Chiral and Flower-Like Microparticles. <i>Small</i> , 2021 , 17, e2102938	11	1
87	Tuning Sugar-Based Chiral and Flower-Like Microparticles (Small 38/2021). <i>Small</i> , 2021 , 17, 2170198	11	
86	Surface Lattice Resonances in Self-Assembled Gold Nanoparticle Arrays: Impact of Lattice Period, Structural Disorder, and Refractive Index on Resonance Quality. <i>Langmuir</i> , 2020 , 36, 13601-13612	4	12
85	Poly- <i>n</i> -isopropylacrylamide Nanogels and Microgels at Fluid Interfaces. <i>Accounts of Chemical Research</i> , 2020 , 53, 414-424	24.3	46
84	Mechanotunable Plasmonic Properties of Colloidal Assemblies. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1901678	4.6	24
83	Chiral Surface Lattice Resonances. <i>Advanced Materials</i> , 2020 , 32, e2001330	24	34
82	Silver Nanoparticle Gradient Arrays: Fluorescence Enhancement of Organic Dyes. <i>Langmuir</i> , 2019 , 35, 8776-8783	4	3

81	Nanogels and Microgels: From Model Colloids to Applications, Recent Developments, and Future Trends. <i>Langmuir</i> , 2019 , 35, 6231-6255	4	220
80	In-Plane Surface Lattice and Higher Order Resonances in Self-Assembled Plasmonic Monolayers: From Substrate-Supported to Free-Standing Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 16096-16106	9.5	12
79	Moiré and honeycomb lattices through self-assembly of hard-core/soft-shell microgels: experiment and simulation. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 19153-19162	3.6	18
78	The Next Generation of Colloidal Probes: A Universal Approach for Soft and Ultra-Small Particles. <i>Small</i> , 2019 , 15, e1902976	11	9
77	Synthesis of Nano/Microsized MIL-101Cr Through Combination of Microwave Heating and Emulsion Technology for Mixed-Matrix Membranes. <i>Frontiers in Chemistry</i> , 2019 , 7, 777	5	2
76	Electrokinetics in Micro-channeled Cantilevers: Extending the Toolbox for Reversible Colloidal Probes and AFM-Based Nanofluidics. <i>Scientific Reports</i> , 2019 , 9, 20294	4.9	2
75	From normal diffusion to superdiffusion: Photothermal heating of plasmonic core-shell microgels. <i>Physical Review E</i> , 2019 , 100, 052605	2.4	2
74	Ordered Particle Arrays via a Langmuir Transfer Process: Access to Any Two-Dimensional Bravais Lattice. <i>Langmuir</i> , 2019 , 35, 973-979	4	18
73	Magnetic and Electric Resonances in Particle-to-Film-Coupled Functional Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 3133-3141	9.5	23
72	Stable in Bulk and Aggregating at the Interface: Comparing Core-Shell Nanoparticles in Suspension and at Fluid Interfaces. <i>Langmuir</i> , 2018 , 34, 886-895	4	20
71	Synthesis and Optical Properties of Phenanthroline-Derived Schiff Base-Like Dinuclear Ru -Ni Complexes. <i>Chemistry - A European Journal</i> , 2018 , 24, 5100-5111	4.8	13
70	Role of Absorbing Nanocrystal Cores in Soft Photonic Crystals: A Spectroscopy and SANS Study. <i>Langmuir</i> , 2018 , 34, 854-867	4	5
69	Tunable 2D binary colloidal alloys for soft nanotemplating. <i>Nanoscale</i> , 2018 , 10, 22189-22195	7.7	37
68	Dynamics and Wetting Behavior of Core-Shell Soft Particles at a Fluid-Fluid Interface. <i>Langmuir</i> , 2018 , 34, 15370-15382	4	13
67	Acidochromic Turn-on 2,4-Diarylpyrano[2, 3-b]indole Luminophores with Solubilizing Groups for A Broad Range of Polarity. <i>ChemistrySelect</i> , 2018 , 3, 10345-10351	1.8	1
66	Plasmonic and colloidal stability behaviours of Au-acrylic core-shell nanoparticles with thin pH-responsive shells. <i>Nanoscale</i> , 2018 , 10, 18565-18575	7.7	8
65	Splitting and separation of colloidal streams in sinusoidal microchannels. <i>Lab on A Chip</i> , 2018 , 18, 3163-3171	7.7	7
64	Strategies for the selective loading of patchy worm-like micelles with functional nanoparticles. <i>Nanoscale</i> , 2018 , 10, 18257-18268	7.7	16

63	Plasmonic nanomeshes: their ambivalent role as transparent electrodes in organic solar cells. <i>Scientific Reports</i> , 2017 , 7, 42530	4.9	140
62	Bottom-up trifft auf Top-down: Patch-artig strukturierte Hybridfasermatten als effiziente Katalyseplattform. <i>Angewandte Chemie</i> , 2017 , 129, 416-419	3.6	10
61	Reversible Tuning of Visible Wavelength Surface Lattice Resonances in Self-Assembled Hybrid Monolayers. <i>Advanced Optical Materials</i> , 2017 , 5, 1600971	8.1	44
60	Bottom-Up Meets Top-Down: Patchy Hybrid Nonwovens as an Efficient Catalysis Platform. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 405-408	16.4	58
59	Fully Reversible Quantitative Phase Transfer of Gold Nanoparticles Using Bifunctional PNIPAM Ligands. <i>Langmuir</i> , 2017 , 33, 253-261	4	16
58	Plasmon resonance coupling phenomena in self-assembled colloidal monolayers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600947	1.6	9
57	Simple and High Yield Synthesis of Metal-Polymer Nanocomposites: The Role of Theta-Centrifugation as an Essential Purification Step. <i>Polymers</i> , 2017 , 9,	4.5	7
56	Presenting Precision Glycomacromolecules on Gold Nanoparticles for Increased Lectin Binding. <i>Polymers</i> , 2017 , 9,	4.5	23
55	Salt-induced cluster formation of gold nanoparticles followed by stopped-flow SAXS, DLS and extinction spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 16348-16357	3.6	14
54	Multi-Shell Hollow Nanogels with Responsive Shell Permeability. <i>Scientific Reports</i> , 2016 , 6, 22736	4.9	70
53	Laser Flash Photolysis of Au-PNIPAM Core-Shell Nanoparticles: Dynamics of the Shell Response. <i>Langmuir</i> , 2016 , 32, 12497-12503	4	29
52	Binary plasmonic honeycomb structures: High-resolution EDX mapping and optical properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016 , 510, 198-204	5.1	11
51	Patchy Wormlike Micelles with Tailored Functionality by Crystallization-Driven Self-Assembly: A Versatile Platform for Mesostructured Hybrid Materials. <i>Macromolecules</i> , 2016 , 49, 2761-2771	5.5	65
50	Seeded precipitation polymerization for the synthesis of gold-hydrogel core-shell particles: the role of surface functionalization and seed concentration. <i>Colloid and Polymer Science</i> , 2016 , 294, 37-47	2.4	30
49	Compression of hard core-soft shell nanoparticles at liquid-liquid interfaces: influence of the shell thickness. <i>Soft Matter</i> , 2016 , 13, 158-169	3.6	62
48	Influence of Temperature on the Colloidal Stability of Polymer-Coated Gold Nanoparticles in Cell Culture Media. <i>Small</i> , 2016 , 12, 1723-31	11	44
47	Functional Materials Design through Hydrogel Encapsulation of Inorganic Nanoparticles: Recent Developments and Challenges. <i>Macromolecular Chemistry and Physics</i> , 2016 , 217, 242-255	2.6	19
46	Monodisperse hollow silica spheres: An in-depth scattering analysis. <i>Nano Research</i> , 2016 , 9, 1366-1376	10	18

45	Macromolecular Decoration of Nanoparticles for Guiding Self-Assembly in 2D and 3D 2016 , 159-192		7
44	Plasmonic gold-poly(N-isopropylacrylamide) core-shell colloids with homogeneous density profiles: a small angle scattering study. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 1354-67	3.6	42
43	LCST and UCST in One: Double Thermoresponsive Behavior of Block Copolymers of Poly(ethylene glycol) and Poly(acrylamide-co-acrylonitrile). <i>Langmuir</i> , 2015 , 31, 8940-6	4	62
42	Optically anisotropic substrates via wrinkle-assisted convective assembly of gold nanorods on macroscopic areas. <i>Faraday Discussions</i> , 2015 , 181, 243-60	3.6	53
41	Colloidal self-assembly concepts for light management in photovoltaics. <i>Materials Today</i> , 2015 , 18, 185-205	205	105
40	Core-shell-shell and hollow double-shell microgels with advanced temperature responsiveness. <i>Macromolecular Rapid Communications</i> , 2015 , 36, 159-64	4.8	51
39	Time-Controlled Colloidal Superstructures: Long-Range Plasmon Resonance Coupling in Particle Monolayers. <i>Advanced Materials</i> , 2015 , 27, 7332-7	24	53
38	Modulation of the ligand-based fluorescence of 3d metal complexes upon spin state change. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 7925-7935	7.1	28
37	Plasmonic library based on substrate-supported gradiental plasmonic arrays. <i>ACS Nano</i> , 2014 , 8, 9410-216.7	216.7	70
36	How Hollow Are Thermoresponsive Hollow Nanogels?. <i>Macromolecules</i> , 2014 , 47, 8700-8708	5.5	47
35	Interaction of gold nanoparticles with thermoresponsive microgels: influence of the cross-linker density on optical properties. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 15623-31	3.6	44
34	Poly-NIPAM Microgels with Different Cross-Linker Densities 2013 , 63-76		10
33	Thermoresponsive poly-(N-isopropylmethacrylamide) microgels: Tailoring particle size by interfacial tension control. <i>Polymer</i> , 2013 , 54, 5499-5510	3.9	49
32	Distance and wavelength dependent quenching of molecular fluorescence by Au@SiO ₂ core-shell nanoparticles. <i>ACS Nano</i> , 2013 , 7, 6636-48	16.7	181
31	Aligned Linear Arrays of Crystalline Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 1994-2001	2001	16
30	Ordering of polystyrene nanoparticles on substrates pre-coated with different polyelectrolyte architectures. <i>International Journal of Molecular Sciences</i> , 2013 , 14, 12893-913	6.3	3
29	Large-area organization of pNIPAM-coated nanostars as SERS platforms for polycyclic aromatic hydrocarbons sensing in gas phase. <i>Langmuir</i> , 2012 , 28, 9168-73	4	84
28	Smart Microgel/Nanoparticle Hybrids with Tunable Optical Properties 2012 , 257-279		2

27	Wrinkle-assisted linear assembly of hard-core/soft-shell particles: impact of the soft shell on the local structure. <i>Nanoscale</i> , 2012 , 4, 2491-9	7.7	48
26	Single-photon emission and quantum characterization of zinc oxide defects. <i>Nano Letters</i> , 2012 , 12, 949-545	54.5	100
25	A solid-state plasmonic solar cell via metal nanoparticle self-assembly. <i>Advanced Materials</i> , 2012 , 24, 4750-5, 4729	24	200
24	Multifunctional inorganic/organic hybrid microgels. <i>Colloid and Polymer Science</i> , 2012 , 290, 673-688	2.4	51
23	Surface plasmon spectroscopy of gold-poly-N-isopropylacrylamide core-shell particles. <i>Langmuir</i> , 2011 , 27, 820-7	4	78
22	General pathway toward crystalline-core micelles with tunable morphology and corona segregation. <i>ACS Nano</i> , 2011 , 5, 9523-34	16.7	165
21	Effect of Defects on the Behavior of ZnO Nanoparticle FETs. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 8312-8315	3.8	25
20	Well defined hybrid PNIPAM core-shell microgels: size variation of the silica nanoparticle core. <i>Colloid and Polymer Science</i> , 2011 , 289, 699-709	2.4	44
19	Self-Assembly of Tunable Nanocrystal Superlattices Using Poly-(NIPAM) Spacers. <i>Advanced Functional Materials</i> , 2011 , 21, 4668-4676	15.6	68
18	Versatile phase transfer of gold nanoparticles from aqueous media to different organic media. <i>Chemistry - A European Journal</i> , 2011 , 17, 4648-54	4.8	72
17	Temperature dependence of the surfactant film bending elasticity in a bicontinuous sugar surfactant based microemulsion: a quasielastic scattering study. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 3092-9	3.6	22
16	2D assembly of gold-PNIPAM core-shell nanocrystals. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 5576-8	3.8	48
15	Au nanoparticle monolayers covered with sol-gel oxide thin films: optical and morphological study. <i>Langmuir</i> , 2011 , 27, 13739-47	4	26
14	Temperature-Dependent Gelation Behaviour of Double Responsive P2VP-b-PEO-b-P(GME-co-EGE) Triblock Terpolymers: A SANS Study. <i>Macromolecular Symposia</i> , 2011 , 306-307, 77-88	0.8	2
13	Flow-Induced Ordering in Cubic Gels Formed by P2VP-b-PEO-b-P(GME-co-EGE) Triblock Terpolymer Micelles: A Rheo-SANS Study. <i>Macromolecules</i> , 2010 , 43, 10045-10054	5.5	13
12	New "smart" poly(NIPAM) microgels and nanoparticle microgel hybrids: Properties and advances in characterisation. <i>Current Opinion in Colloid and Interface Science</i> , 2009 , 14, 438-450	7.6	176
11	Multiresponsive hybrid colloids based on gold nanorods and poly(NIPAM-co-allylacetic acid) microgels: temperature- and pH-tunable plasmon resonance. <i>Langmuir</i> , 2009 , 25, 3163-7	4	110
10	Smart inorganic/organic hybrid microgels: Synthesis and characterisation. <i>Journal of Materials Chemistry</i> , 2009 , 19, 8714		113

9	Smart hydrogels based on double responsive triblock terpolymers. <i>Soft Matter</i> , 2009 ,	3.6	16
8	Surface aggregate structure of nonionic surfactants on silica nanoparticles. <i>Soft Matter</i> , 2009 , 5, 2928	3.6	60
7	Temperature, pH, and ionic strength induced changes of the swelling behavior of PNIPAM-poly(allylacetic acid) copolymer microgels. <i>Langmuir</i> , 2008 , 24, 6300-6	4	155
6	Thermoresponsive core-shell microgels with silica nanoparticle cores: size, structure, and volume phase transition of the polymer shell. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 6708-16	3.6	35
5	Encapsulation and Growth of Gold Nanoparticles in Thermoresponsive Microgels. <i>Advanced Materials</i> , 2008 , 20, 1666-1670	24	234
4	Structure of biodiesel based bicontinuous microemulsions for environmentally compatible decontamination: A small angle neutron scattering and freeze fracture electron microscopy study. <i>Journal of Colloid and Interface Science</i> , 2008 , 325, 250-8	9.3	24
3	Nanorod-coated PNIPAM microgels: thermoresponsive optical properties. <i>Small</i> , 2007 , 3, 1222-9	11	240
2	A versatile approach for the preparation of thermosensitive PNIPAM core-shell microgels with nanoparticle cores. <i>ChemPhysChem</i> , 2006 , 7, 2298-301	3.2	129
1	Morphology Control of Multicompartment Micelles in Water through Hierarchical Self-Assembly of Amphiphilic Terpolymers. <i>Macromolecules</i> ,	5.5	3