Erik Reimhult

List of Publications by Citations

132 papers	7,473 citations	38 h-index	85 g-index
137 ext. papers	8,200 ext. citations	5.7 avg, IF	6.19 L-index

#	Paper	IF	Citations
132	Electrochemical Biosensors - Sensor Principles and Architectures. *Sensors*, **2008**, 8, 1400-1458	3.8	1160
131	Intact Vesicle Adsorption and Supported Biomembrane Formation from Vesicles in Solution: Influence of Surface Chemistry, Vesicle Size, Temperature, and Osmotic Pressure *Langmuir*, **2003**, 19, 1681-1691	4	535
130	Electrochemical Biosensors - Sensor Principles and Architectures. *Sensors*, **2008**, 8, 1400-1458	3.8	524
129	Ultrastable iron oxide nanoparticle colloidal suspensions using dispersants with catechol-derived anchor groups. *Nano Letters*, **2009**, 9, 4042-8	11.5	371
128	Stabilization and functionalization of iron oxide nanoparticles for biomedical applications. *Nanoscale*, **2011**, 3, 2819-43	7.7	314
127	Triggered release from liposomes through magnetic actuation of iron oxide nanoparticle containing membranes. *Nano Letters*, **2011**, 11, 1664-70	11.5	309
126	Simultaneous surface plasmon resonance and quartz crystal microbalance with dissipation monitoring measurements of biomolecular adsorption events involving structural transformations and variations in coupled water. *Analytical Chemistry*, **2004**, 76, 7211-20	7.8	256
125	Vesicle adsorption on SiO2 and TiO2: Dependence on vesicle size. *Journal of Chemical Physics*, **2002**, 117, 7401-7404	3.9	231
124	A multitechnique study of liposome adsorption on Au and lipid bilayer formation on SiO2. *Langmuir* , **2006**, 22, 3313-9	4	217
123	Surface functionalization of single superparamagnetic iron oxide nanoparticles for targeted magnetic resonance imaging. *Small*, **2009**, 5, 1334-42	11	191
122	Membrane biosensor platforms using nano- and microporous supports. *Trends in Biotechnology*, **2008**, 26, 82-9	15.1	181
121	Optical anisotropy of supported lipid structures probed by waveguide spectroscopy and its application to study of supported lipid bilayer formation kinetics. *Analytical Chemistry*, **2008**, 80, 3666-76	7.8	142
120	Measuring single-nanoparticle wetting properties by freeze-fracture shadow-casting cryo-scanning electron microscopy. *Nature Communications*, **2011**, 2, 438	17.4	141
119	Particle lithography from colloidal self-assembly at liquid-liquid interfaces. *ACS Nano*, **2010**, 4, 5665-70	16.7	128
118	Influence of Electronegative Substituents on the Binding Affinity of Catechol-Derived Anchors to Fe3O4 Nanoparticles. *Journal of Physical Chemistry C*, **2011**, 115, 683-691	3.8	125
117	Switching transport through nanopores with pH-responsive polymer brushes for controlled ion permeability. *ACS Applied Materials & Interfaces*, **2013**, 5, 1400-7	9.5	78
116	Temperature dependence of formation of a supported phospholipid bilayer from vesicles on SiO2. *Physical Review E*, **2002**, 66, 051905	2.4	77

115	Adsorption of core-shell nanoparticles at liquid–liquid interfaces. *Soft Matter*, **2011**, 7, 7663	3.6	75
114	Nanoparticle actuated hollow drug delivery vehicles. *Nanomedicine*, **2012**, 7, 145-64	5.6	73
113	Understanding ligand binding effects on the conformation of estrogen receptor alpha-DNA complexes: a combinational quartz crystal microbalance with dissipation and surface plasmon resonance study. *Biophysical Journal*, **2007**, 92, 4415-23	2.9	73
112	Next-Generation Polymer Shells for Inorganic Nanoparticles are Highly Compact, Ultra-Dense, and Long-Lasting Cyclic Brushes. *Angewandte Chemie - International Edition*, **2017**, 56, 4507-4511	16.4	70
111	Design of surface modifications for nanoscale sensor applications. *Sensors*, **2015**, 15, 1635-75	3.8	66
110	Formation of supported bacterial lipid membrane mimics. *Biointerphases*, **2008**, 3, FA41	1.8	66
109	Monodisperse Iron Oxide Nanoparticles by Thermal Decomposition: Elucidating Particle Formation by Second-Resolved in Situ Small-Angle X-ray Scattering. *Chemistry of Materials*, **2017**, 29, 4511-4522	9.6	63
108	Core–shell nanoparticle monolayers at planar liquid–liquid interfaces: effects of polymer architecture on the interface microstructure. *Soft Matter*, **2013**, 9, 3789	3.6	54
107	Complete Exchange of the Hydrophobic Dispersant Shell on Monodisperse Superparamagnetic Iron Oxide Nanoparticles. *Langmuir*, **2015**, 31, 9198-204	4	53
106	Synthesis and Magneto-Thermal Actuation of Iron Oxide Core-PNIPAM Shell Nanoparticles. *ACS Applied Materials & Interfaces*, **2015**, 7, 19342-52	9.5	53
105	Rupture pathway of phosphatidylcholine liposomes on silicon dioxide. *International Journal of Molecular Sciences*, **2009**, 10, 1683-96	6.3	52
104	Using complementary acoustic and optical techniques for quantitative monitoring of biomolecular adsorption at interfaces. *Biosensors*, **2012**, 2, 341-76	5.9	51
103	Analysis of stable self-trapping of laser beams in cubic-quintic nonlinear media. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1998**, 248, 369-376	2.3	50
102	Core-Shell Structure of Monodisperse Poly(ethylene glycol)-Grafted Iron Oxide Nanoparticles Studied by Small-Angle X-ray Scattering. *Chemistry of Materials*, **2015**, 27, 4763-4771	9.6	49
101	Sequence controlled self-knotting colloidal patchy polymers. *Physical Review Letters*, **2013**, 110, 075501	7.4	45
100	Single cell 3-D platform to study ligand mobility in cell-cell contact. *Lab on A Chip*, **2011**, 11, 2876-83	7.2	43
99	Nanoparticle-triggered release from lipid membrane vesicles. *New Biotechnology*, **2015**, 32, 665-72	6.4	42
98	Poly(methacrylic acid) Grafts Grown from Designer Surfaces: The Effect of Initiator Coverage on Polymerization Kinetics, Morphology, and Properties. *Macromolecules*, **2009**, 42, 1640-1647	5.5	42

97	Individually Stabilized, Superparamagnetic Nanoparticles with Controlled Shell and Size Leading to Exceptional Stealth Properties and High Relaxivities. *ACS Applied Materials & Interfaces*, **2017**, 9, 3343-3353	9.5	41
96	A detailed investigation of the formation kinetics and layer structure of poly(ethylene glycol) tether supported lipid bilayers. *Soft Matter*, **2009**, 5, 2804	3.6	41
95	Poly(vinyl alcohol) physical hydrogels: noncryogenic stabilization allows nano- and microscale materials design. *Langmuir*, **2011**, 27, 10216-23	4	39
94	Melt-grafting for the synthesis of core-shell nanoparticles with ultra-high dispersant density. *Nanoscale*, **2015**, 7, 11216-25	7.7	38
93	Formation of nanopore-spanning lipid bilayers through liposome fusion. *Langmuir*, **2011**, 27, 10920-8	4	38
92	From particle self-assembly to functionalized sub-micron protein patterns. *Nanotechnology*, **2008**, 19, 075301	3.4	37
91	Simulations of temperature dependence of the formation of a supported lipid bilayer via vesicle adsorption. *Colloids and Surfaces B: Biointerfaces*, **2004**, 39, 77-86	6	37
90	Controlled magnetosomes: Embedding of magnetic nanoparticles into membranes of monodisperse lipid vesicles. *Journal of Colloid and Interface Science*, **2016**, 466, 62-71	9.3	35
89	Interaction of Size-Tailored PEGylated Iron Oxide Nanoparticles with Lipid Membranes and Cells. *ACS Biomaterials Science and Engineering*, **2017**, 3, 249-259	5.5	33
88	Controlled aggregation and cell uptake of thermoresponsive polyoxazoline-grafted superparamagnetic iron oxide nanoparticles. *Nanoscale*, **2017**, 9, 2793-2805	7.7	32
87	Optimization of Magneto-thermally Controlled Release Kinetics by Tuning of Magnetoliposome Composition and Structure. *Scientific Reports*, **2017**, 7, 7474	4.9	32
86	Electrically driven nanopillars for THz quantum cascade lasers. *Optics Express*, **2013**, 21, 10917-23	3.3	32
85	Evaluation of High-Yield Purification Methods on Monodisperse PEG-Grafted Iron Oxide Nanoparticles. *Langmuir*, **2016**, 32, 4259-69	4	32
84	Lipogels: surface-adherent composite hydrogels assembled from poly(vinyl alcohol) and liposomes. *Nanoscale*, **2013**, 5, 6758-66	7.7	29
83	Surface-active ionic liquids for palladium-catalysed cross coupling in water: effect of ionic liquid concentration on the catalytically active species. *RSC Advances*, **2017**, 7, 41144-41151	3.7	29
82	Liposomes tethered to omega-functional PEG brushes and induced formation of PEG brush supported planar lipid bilayers. *Langmuir*, **2009**, 25, 13534-9	4	29
81	pH- and Electro-Responsive Properties of Poly(acrylic acid) and Poly(acrylic acid)-block-poly(acrylic acid-grad-styrene) Brushes Studied by Quartz Crystal Microbalance with Dissipation Monitoring. *Langmuir*, **2015**, 31, 7684-94	4	28
80	Formation of supported lipid bilayers on indium tin oxide for dynamically-patterned membrane-functionalized microelectrode arrays. *Lab on A Chip*, **2009**, 9, 718-25	7.2	28

79	Understanding self-assembled amphiphilic peptide supramolecular structures from primary structure helix propensity. *Langmuir*, **2008**, 24, 7645-7	4	28
78	Electrochemically Stimulated Release from Liposomes Embedded in a Polyelectrolyte Multilayer. *Advanced Functional Materials*, **2011**, 21, 1666-1672	15.6	27
77	Advances in nanopatterned and nanostructured supported lipid membranes and their applications. *Biotechnology and Genetic Engineering Reviews*, **2010**, 27, 185-216	4.1	27
76	Lipid redistribution in phosphatidylserine-containing vesicles adsorbing on titania. *Biointerphases*, **2008**, 3, FA90	1.8	27
75	Fabrication of nanoporous silicon nitride and silicon oxide films of controlled size and porosity for combined electrochemical and waveguide measurements. *Nanotechnology*, **2007**, 18, 275303	3.4	27
74	Design and folding of colloidal patchy polymers. *Soft Matter*, **2013**, 9, 938-944	3.6	26
73	Supported lipopolysaccharide bilayers. *Langmuir*, **2012**, 28, 12199-208	4	26
72	Stealth Nanoparticles Grafted with Dense Polymer Brushes Display Adsorption of Serum Protein Investigated by Isothermal Titration Calorimetry. *Journal of Physical Chemistry B*, **2018**, 122, 5820-5834	3.4	25
71	Embedded plasmonic nanomenhirs as location-specific biosensors. *Nano Letters*, **2013**, 13, 6122-9	11.5	25
70	Mechanical properties of mushroom and brush poly(ethylene glycol)-phospholipid membranes. *Soft Matter*, **2011**, 7, 9267	3.6	25
69	Simple method for the synthesis of inverse patchy colloids. *Journal of Physics Condensed Matter*, **2015**, 27, 234105	1.8	24
68	Supported lipid bilayers, tethered lipid vesicles, and vesicle fusion investigated using gravimetric, plasmonic, and microscopy techniques. *Biointerphases*, **2008**, 3, FA108	1.8	22
67	Pleckstrin homology-phospholipase C-δ1 interaction with phosphatidylinositol 4,5-bisphosphate containing supported lipid bilayers monitored in situ with dual polarization interferometry. *Analytical Chemistry*, **2011**, 83, 6267-74	7.8	21
66	Triggered Release from Thermoresponsive Polymersomes with Superparamagnetic Membranes. *Materials*, **2016**, 9,	3.5	21
65	Phospholipase A-Induced Degradation and Release from Lipid-Containing Polymersomes. *Langmuir*, **2018**, 34, 395-405	4	21
64	Design Principles for Thermoresponsive Core-Shell Nanoparticles: Controlling Thermal Transitions by Brush Morphology. *Langmuir*, **2019**, 35, 7092-7104	4	20
63	Self-assembly of iron oxide-poly(ethylene glycol) core-shell nanoparticles at liquid-liquid interfaces. *Chimia*, **2010**, 64, 145-9	1.3	20
62	Characterization of supported lipid bilayers incorporating the phosphoinositides phosphatidylinositol 4,5-biphosphate and phosphoinositol-3,4,5-triphosphate by complementary techniques. *Biointerphases*, **2010**, 5, 114-9	1.8	20

61	Aggregation of thermoresponsive core-shell nanoparticles: Influence of particle concentration, dispersant molecular weight and grafting. *Journal of Colloid and Interface Science*, **2017**, 500, 321-332	9.3	19
60	Magneto-Thermal Release from Nanoscale Unilamellar Hybrid Vesicles. *ChemNanoMat*, **2016**, 2, 1111-1120	3.3	19
59	Nonspecific Colloidal-Type Interaction Explains Size-Dependent Specific Binding of Membrane-Targeted Nanoparticles. *ACS Nano*, **2016**, 10, 9974-9982	16.7	18
58	Supported lipid bilayer microarrays created by non-contact printing. *Lab on A Chip*, **2011**, 11, 2403-10	7.2	18
57	Polymer Topology Determines the Formation of Protein Corona on Core-Shell Nanoparticles. *ACS Nano*, **2020**, 14, 12708-12718	16.7	18
56	Biofilm formation at oil-water interfaces is not a simple function of bacterial hydrophobicity. *Colloids and Surfaces B: Biointerfaces*, **2020**, 194, 111163	6	17
55	The Role of Chain Molecular Weight and Hofmeister Series Ions in Thermal Aggregation of Poly(2-Isopropyl-2-Oxazoline) Grafted Nanoparticles. *Polymers*, **2018**, 10,	4.5	16
54	Whole Genome Sequencing-Based Comparison of Food Isolates of. *Frontiers in Microbiology*, **2019**, 10, 1464	5.7	15
53	Direct C-S bond formation via C-O bond activation of phenols in a crossover Pd/Cu dual-metal catalysis system. *Organic and Biomolecular Chemistry*, **2019**, 17, 4491-4497	3.9	15
52	Remotely Triggered Liquefaction of Hydrogel Materials. *ACS Nano*, **2020**, 14, 9145-9155	16.7	14
51	Quantitative Determination of Dark and Light-Activated Antimicrobial Activity of Poly(Phenylene Ethynylene), Polythiophene, and Oligo(Phenylene Ethynylene) Electrolytes. *ACS Applied Materials & Interfaces*, **2020**, 12, 21322-21329	9.5	14
50	Immunogold Nanoparticles for Rapid Plasmonic Detection of. *Sensors*, **2018**, 18,	3.8	14
49	Selective (bio)functionalization of solid-state nanopores. *ACS Applied Materials & Interfaces*, **2015**, 7, 6030-5	9.5	13
48	Thermoresponsive Core-Shell Nanoparticles: Does Core Size Matter?. *Materials*, **2018**, 11,	3.5	13
47	Thermoresponsive Polypeptoid-Coated Superparamagnetic Iron Oxide Nanoparticles by Surface-Initiated Polymerization. *Macromolecular Chemistry and Physics*, **2017**, 218, 1700116	2.6	12
46	Next-Generation Polymer Shells for Inorganic Nanoparticles are Highly Compact, Ultra-Dense, and Long-Lasting Cyclic Brushes. *Angewandte Chemie*, **2017**, 129, 4578-4582	3.6	11
45	Automated time-resolved analysis of bacteria-substrate interactions using functionalized microparticles and flow cytometry. *Biomaterials*, **2011**, 32, 4347-57	15.6	11
44	Magnetic decoupling of surface Fe3+ in magnetite nanoparticles upon nitrocatechol-anchored dispersant binding. *Chemistry - A European Journal*, **2011**, 17, 7396-8	4.8	11

43	Formation and Characteristics of Lipid-Blended Block Copolymer Bilayers on a Solid Support Investigated by Quartz Crystal Microbalance and Atomic Force Microscopy. *Langmuir*, **2019**, 35, 739-749	4	10
42	Influence of Grafted Block Copolymer Structure on Thermoresponsiveness of Superparamagnetic Core-Shell Nanoparticles. *Biomacromolecules*, **2018**, 19, 1435-1444	6.9	10
41	Affinity Purification and Single-Molecule Analysis of Integral Membrane Proteins from Crude Cell-Membrane Preparations. *Nano Letters*, **2018**, 18, 381-385	11.5	10
40	Real-time analysis of protein and protein mixture interaction with lipid bilayers. *Biochimica Et Biophysica Acta - Biomembranes*, **2018**, 1860, 319-328	3.8	9
39	COMPARATIVE PHYSIOCHEMICAL ANALYSIS OF HYDROPHOBINS PRODUCED IN ESCHERICHIA COLI AND PICHIA PASTORIS. *Colloids and Surfaces B: Biointerfaces*, **2017**, 159, 913-923	6	8
38	Biocompatible Glyconanoparticles by Grafting Sophorolipid Monolayers on Monodispersed Iron Oxide Nanoparticles.. *ACS Applied Bio Materials*, **2019**, 2, 3095-3107	4.1	7
37	Patterning of supported lipid bilayers and proteins using material selective nitrodopamine-mPEG. *Biomaterials Science*, **2015**, 3, 94-102	7.4	6
36	Nanoporous thin films in optical waveguide spectroscopy for chemical analytics. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 3299-3315	4.4	6
35	Microarray spotting of nanoparticles. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2009**, 346, 61-65	5.1	6
34	Previous Homologous and Heterologous Stress Exposure Induces Tolerance Development to Pulsed Light in Listeria monocytogenes. *Frontiers in Microbiology*, **2016**, 7, 490	5.7	6
33	Thermoresponsive Core-Shell Nanoparticles and Their Potential Applications **2019**, 145-170		6
32	Synthesis of short-range ordered aluminosilicates at ambient conditions. *Scientific Reports*, **2021**, 11, 4207	4.9	6
31	Host-guest driven ligand replacement on monodisperse inorganic nanoparticles. *Nanoscale*, **2017**, 9, 8925-8929	7.7	5
30	Nanoparticle Risks and Identification in a World Where Small Things Do Not Survive. *NanoEthics*, **2017**, 11, 283-290	1	5
29	Fluorescent Magnetopolymersomes: A Theranostic Platform to Track Intracellular Delivery. *Materials*, **2017**, 10,	3.5	5
28	Characterization of Biofilm Formation by Cronobacter spp. Isolates of Different Food Origin under Model Conditions. *Journal of Food Protection*, **2019**, 82, 65-77	2.5	4
27	Self-Assembled Multifunctional Polymers for Biointerfaces **2011**, 855-905		4
26	Nitrocatechol dispersants to tailor superparamagnetic Fe3O4 nanoparticles. *Chimia*, **2010**, 64, 826	1.3	4

25	Minimal Reconstitution of Membranous Web Induced by a Vesicle-Peptide Sol-Gel Transition. *Biomacromolecules*, **2019**, 20, 1709-1718	6.9	3
24	Poly(ethylene glycol) Grafting of Nanoparticles Prevents Uptake by Cells and Transport Through Cell Barrier Layers Regardless of Shear Flow and Particle Size. *ACS Biomaterials Science and Engineering*, **2019**, 5, 4355-4365	5.5	3
23	Design of Intelligent Surface Modifications and Optimal Liquid Handling for Nanoscale Bioanalytical Sensors **2012**, 71-122		3
22	Nanoparticle interactions with blood proteins and what it means: a tutorial review **2019**, 3, 73-87		3
21	Polymer Brush-Grafted Nanoparticles Preferentially Interact with Opsonins and Albumin. *ACS Applied Bio Materials*, **2021**, 4, 795-806	4.1	3
20	Thermoresponsive Nanoparticles with Cyclic-Polymer-Grafted Shells Are More Stable than with Linear-Polymer-Grafted Shells: Effect of Polymer Topology, Molecular Weight, and Core Size. *Journal of Physical Chemistry B*, **2021**, 125, 7009-7023	3.4	3
19	DNA Polyelectrolyte Multilayer Coatings Are Antifouling and Promote Mammalian Cell Adhesion. *Materials*, **2021**, 14,	3.5	3
18	Hybrid lipopolymer vesicle drug delivery and release systems. *Journal of Biomedical Research*, **2021**, 35, 301-309	1.5	3
17	Preparation and dynamic patterning of supported lipid membranes mimicking cell membranes. *Methods in Molecular Biology*, **2011**, 751, 453-63	1.4	2
16	NANOSCALE BIOSENSORS AND BIOCHIPS. *Annual Review of Nano Research*, **2009**, 1-82		2
15	Enzymatic Biosensors towards a Multiplexed Electronic Detection System for Early Cancer Diagnostics **2007**,		2
14	Cellulosic biofilm formation of in kombucha at oil-water interfaces.. *Biofilm*, **2022**, 4, 100071	5.9	2
13	Crosslinking of floating colloidal monolayers. *Monatshefte F□ Chemie*, **2017**, 148, 1539-1546	1.4	1
12	Stabilization and Characterization of Iron Oxide Superparamagnetic Core-Shell Nanoparticles for Biomedical Applications **2014**, 355-387		1
11	Investigating retroviral envelope proteome plasticity. *Retrovirology*, **2013**, 10, P60	3.6	1
10	Understanding the Photochemical Properties of Polythiophene Polyelectrolyte Soft Aggregates with Sodium Dodecyl Sulfate for Antimicrobial Activity. *ACS Applied Materials & Interfaces*, **2021**, 13, 55953-55965	9.5	1
9	Cyclodextrin-Appended Superparamagnetic Iron Oxide Nanoparticles as Cholesterol-Mopping Agents. *Frontiers in Chemistry*, **2021**, 9, 795598	5	1
8	Modifying superparamagnetic iron oxide and silica nanoparticles surfaces for efficient (MA)LDI-MS analyses of peptides and proteins. *Rapid Communications in Mass Spectrometry*, **2022**, 36, e9212	2.2	1

7	Monitoring of Rolling Circle Amplification on a Solid Support by Surface Plasmon Resonance and Optical Waveguide Spectroscopy. *ACS Applied Materials & Interfaces*, **2021**, 13, 32352-32362	9.5	1
6	A microfluidic valve with bubble trap and zero dead volume.. *Review of Scientific Instruments*, **2022**, 93, 014105	1.7	0
5	Morpholinium-based ionic liquids show antimicrobial activity against clinical isolates of Pseudomonas aeruginosa. *Research in Microbiology*, **2021**, 172, 103817	4	0
4	Effect of deposition angle on fabrication of plasmonic gold nanocones and nanodiscs. *Microelectronic Engineering*, **2020**, 228, 111326	2.5	0
3	Theoretical and Experimental Design of Heavy Metal-Mopping Magnetic Nanoparticles. *ACS Applied Materials & Interfaces*, **2021**, 13, 1386-1397	9.5	0
2	Mobile and three-dimensional presentation of adhesion proteins within microwells. *Methods in Molecular Biology*, **2013**, 1046, 123-32	1.4	
1	Editorial commentary on the special issue of Advances in Nanomedicine. *Journal of Biomedical Research*, **2021**, 35, 253-254	1.5	