

Stephan Schmidt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4482028/publications.pdf>

Version: 2024-02-01

72
papers

2,617
citations

172386

29
h-index

189801

50
g-index

74
all docs

74
docs citations

74
times ranked

3374
citing authors

#	ARTICLE	IF	CITATIONS
1	Adhesion and Mechanical Properties of PNIPAM Microgel Films and Their Potential Use as Switchable Cell Culture Substrates. <i>Advanced Functional Materials</i> , 2010, 20, 3235-3243.	7.8	329
2	Thermoresponsive surfaces by spin-coating of PNIPAM-co-PAA microgels: A combined AFM and ellipsometry study. <i>Polymer</i> , 2008, 49, 749-756.	1.8	164
3	Packing Density Control in P(NIPAM-co-AAc) Microgel Monolayers: Effect of Surface Charge, pH, and Preparation Technique. <i>Langmuir</i> , 2008, 24, 12595-12602.	1.6	127
4	Carbohydrate-Lectin Recognition of Sequence-Defined Heteromultivalent Glycooligomers. <i>Journal of the American Chemical Society</i> , 2014, 136, 2008-2016.	6.6	114
5	One-Step Formulation of Protein Microparticles with Tailored Properties: Hard Templating at Soft Conditions. <i>Advanced Functional Materials</i> , 2012, 22, 1914-1922.	7.8	77
6	Characterization of adhesion phenomena and contact of surfaces by soft colloidal probe AFM. <i>Soft Matter</i> , 2010, 6, 1432.	1.2	76
7	Control of Cell Adhesion by Mechanical Reinforcement of Soft Polyelectrolyte Films with Nanoparticles. <i>Langmuir</i> , 2012, 28, 7249-7257.	1.6	75
8	Metal-Mediated Molecular Self-Healing in Histidine-Rich Mussel Peptides. <i>Biomacromolecules</i> , 2014, 15, 1644-1652.	2.6	75
9	A novel contact model for AFM indentation experiments on soft spherical cell-like particles. <i>Soft Matter</i> , 2014, 10, 6732.	1.2	71
10	Composite Colloidal Gels Made of Bisphosphonate-Functionalized Gelatin and Bioactive Glass Particles for Regeneration of Osteoporotic Bone Defects. <i>Advanced Functional Materials</i> , 2017, 27, 1703438.	7.8	71
11	Mechanobiology: Correlation Between Mechanical Stability of Microcapsules Studied by AFM and Impact of Cell-Induced Stresses. <i>Small</i> , 2010, 6, 2858-2862.	5.2	69
12	Microparticulate biomolecules by mild CaCO ₃ templating. <i>Journal of Materials Chemistry B</i> , 2013, 1, 1210-1218.	2.9	69
13	Thermoresponsive PEG-Based Polymer Layers: Surface Characterization with AFM Force Measurements. <i>Langmuir</i> , 2010, 26, 3462-3467.	1.6	64
14	Mesoporous Protein Particles Through Colloidal CaCO ₃ Templates. <i>Advanced Functional Materials</i> , 2013, 23, 116-123.	7.8	59
15	Single-Step Electrospinning to Bioactive Polymer Nanofibers. <i>Macromolecules</i> , 2011, 44, 453-461.	2.2	54
16	3d localization and diffusion of proteins in polyelectrolyte multilayers. <i>Soft Matter</i> , 2012, 8, 11786.	1.2	54
17	Molecular weight specific impact of soluble and immobilized hyaluronan on CD44 expressing melanoma cells in 3D collagen matrices. <i>Acta Biomaterialia</i> , 2017, 50, 259-270.	4.1	53
18	Mechanical strength and intracellular uptake of CaCO ₃ -templated LbL capsules composed of biodegradable polyelectrolytes: the influence of the number of layers. <i>Journal of Materials Chemistry B</i> , 2013, 1, 1175.	2.9	51

#	ARTICLE	IF	CITATIONS
19	Synthesis of Porous PEG Microgels Using CaCO ₃ Microspheres as Hard Templates. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1049-1054.	2.0	46
20	Magnetic Porous Sugar-Functionalized PEG Microgels for Efficient Isolation and Removal of Bacteria from Solution. <i>Biomacromolecules</i> , 2013, 14, 1927-1935.	2.6	44
21	Patchiness of Embedded Particles and Film Stiffness Control Through Concentration of Gold Nanoparticles. <i>Advanced Materials</i> , 2012, 24, 1095-1100.	11.1	43
22	Mechanical Carbohydrate Sensors Based on Soft Hydrogel Particles. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6084-6087.	7.2	41
23	Release Properties of Pressurized Microgel Templated Capsules. <i>Advanced Functional Materials</i> , 2011, 21, 1411-1418.	7.8	38
24	Swelling and mechanical properties of polymer gels with cross-linking gradient. <i>Soft Matter</i> , 2010, 6, 3455.	1.2	36
25	Synthesis and functionalization of poly(ethylene glycol) microparticles as soft colloidal probes for adhesion energy measurements. <i>Soft Matter</i> , 2012, 8, 1664-1672.	1.2	35
26	Mechanoresponsive lipid-protein nanoglobules facilitate reversible fibre formation in velvet worm slime. <i>Nature Communications</i> , 2017, 8, 974.	5.8	35
27	Stability and cell uptake of calcium carbonate templated insulin microparticles. <i>Acta Biomaterialia</i> , 2014, 10, 1423-1430.	4.1	31
28	Nanomechanical Properties of Supramolecular Self-Assembled Whiskers Determined by AFM Force Mapping. <i>Langmuir</i> , 2010, 26, 3020-3023.	1.6	30
29	Microfluidics meets soft layer-by-layer films: selective cell growth in 3D polymer architectures. <i>Lab on A Chip</i> , 2012, 12, 1434.	3.1	30
30	Probing multivalency in ligand-receptor-mediated adhesion of soft, biomimetic interfaces. <i>Beilstein Journal of Organic Chemistry</i> , 2015, 11, 720-729.	1.3	30
31	Exploiting Bisphosphonate-Bioactive-Glass Interactions for the Development of Self-Healing and Bioactive Composite Hydrogels. <i>Macromolecular Rapid Communications</i> , 2016, 37, 1952-1959.	2.0	28
32	Shear-Induced Î²-Crystallite Unfolding in Condensed Phase Nanodroplets Promotes Fiber Formation in a Biological Adhesive. <i>ACS Nano</i> , 2019, 13, 4992-5001.	7.3	27
33	Elastic Modulus Dependence on the Specific Adhesion of Hydrogels. <i>Advanced Functional Materials</i> , 2017, 27, 1702040.	7.8	26
34	Novel high throughput mixed matrix membranes embracing poly ionic liquid-grafted biopolymer: Fabrication, characterization, permeation and antifouling performance. <i>Journal of Molecular Liquids</i> , 2018, 266, 484-494.	2.3	25
35	Fucose-Functionalized Precision Glycomacromolecules Targeting Human Norovirus Capsid Protein. <i>Biomacromolecules</i> , 2018, 19, 3714-3724.	2.6	25
36	Specific Adhesion of Carbohydrate Hydrogel Particles in Competition with Multivalent Inhibitors Evaluated by AFM. <i>Langmuir</i> , 2014, 30, 6142-6150.	1.6	23

#	ARTICLE	IF	CITATIONS
37	Gelatin Nanoparticles with Enhanced Affinity for Calcium Phosphate. <i>Macromolecular Bioscience</i> , 2016, 16, 717-729.	2.1	23
38	Non-Gaussian curvature distribution of actin-propelled biomimetic colloid trajectories. <i>European Biophysics Journal</i> , 2008, 37, 1361-1366.	1.2	22
39	Reversible Supramolecular Assembly of Velvet Worm Adhesive Fibers via Electrostatic Interactions of Charged Phosphoproteins. <i>Biomacromolecules</i> , 2018, 19, 4034-4043.	2.6	22
40	Multivalent Binding of Precision Glycooligomers on Soft Glycocalyx Mimicking Hydrogels. <i>Biomacromolecules</i> , 2018, 19, 3479-3488.	2.6	21
41	Thermosensitive Display of Carbohydrate Ligands on Microgels for Switchable Binding of Proteins and Bacteria. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26674-26683.	4.0	19
42	A Cell-Friendly Window for the Interaction of Cells with Hyaluronic Acid/Poly-L-lysine Multilayers. <i>Macromolecular Bioscience</i> , 2018, 18, 1700319.	2.1	18
43	Sequence-Controlled High Molecular Weight Glyco(oligoamide)-PEG Multiblock Copolymers as Ligands and Inhibitors in Lectin Binding. <i>Macromolecules</i> , 2018, 51, 5608-5619.	2.2	18
44	Multivalent Interactions of Polyamide Based Sequence-Controlled Glycomacromolecules with Concanavalin A. <i>Macromolecular Bioscience</i> , 2019, 19, e1900033.	2.1	17
45	Polymer hydrogel particles as biocompatible AFM probes to study CD44/hyaluronic acid interactions on cells. <i>Polymer</i> , 2016, 102, 342-349.	1.8	16
46	Sequence-defined positioning of amine and amide residues to control catechol driven wet adhesion. <i>Chemical Science</i> , 2020, 11, 9919-9924.	3.7	16
47	Temperature-Switchable Glycopolymers and Their Conformation-Dependent Binding to Receptor Targets. <i>Biomacromolecules</i> , 2020, 21, 2913-2921.	2.6	16
48	Interactive Polymer Gels as Biomimetic Sensors for Carbohydrate Interactions and Capture-Release Devices for Pathogens. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1900323.	1.1	15
49	Quantification of protein-materials interaction by soft colloidal probe spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 3014-3018.	1.3	14
50	Switchable Adhesion of <i>E. coli</i> to Thermosensitive Carbohydrate-Presenting Microgel Layers: A Single-Cell Force Spectroscopy Study. <i>Langmuir</i> , 2020, 36, 12555-12562.	1.6	13
51	Picomolar glyphosate sensitivity of an optical particle-based sensor utilizing biomimetic interaction principles. <i>Biosensors and Bioelectronics</i> , 2020, 165, 112262.	5.3	13
52	Fibers on the Fly: Multiscale Mechanisms of Fiber Formation in the Capture Slime of Velvet Worms. <i>Integrative and Comparative Biology</i> , 2019, 59, 1690-1699.	0.9	12
53	Comparative Animal Mucomics: Inspiration for Functional Materials from Ubiquitous and Understudied Biopolymers. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 5377-5398.	2.6	12
54	Hydrogel Microparticles as Sensors for Specific Adhesion: Case Studies on Antibody Detection and Soil Release Polymers. <i>Gels</i> , 2017, 3, 31.	2.1	10

#	ARTICLE	IF	CITATIONS
55	Elastic modulus distribution in poly(<i>N</i> -isopropylacrylamide) and oligo(ethylene glycol) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tj	0.2	7
56	Single-colloidal-particle microcontact printing. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 4967.	1.3	7
57	Force Generation of Curved Actin Gels Characterized by Combined AFM-Epifluorescence Measurements. <i>Biophysical Journal</i> , 2010, 98, 2246-2253.	0.2	7
58	Radial profile detection of multiple spherical particles in contact with interacting surfaces. <i>PLoS ONE</i> , 2019, 14, e0214815.	1.1	7
59	Effect of PEGylation on Receptor Anchoring and Steric Shielding at Interfaces: An Adhesion and Surface Plasmon Resonance Study with Precision Polymers. <i>Biomacromolecules</i> , 2020, 21, 4850-4856.	2.6	7
60	Quantifying Thermoswitchable Carbohydrate-Mediated Interactions via Soft Colloidal Probe Adhesion Studies. <i>Macromolecular Bioscience</i> , 2020, 20, 2000186.	2.1	7
61	Dual ionic liquid-based crosslinked chitosan for fine-tuning of antifouling, water throughput, and denitrification performance of polysulfone membrane. <i>International Journal of Biological Macromolecules</i> , 2021, 170, 572-582.	3.6	7
62	Selective Adhesion and Switchable Release of Breast Cancer Cells via Hyaluronic Acid Functionalized Dual Stimuli-Responsive Microgel Films. <i>ACS Applied Bio Materials</i> , 2021, 4, 6371-6380.	2.3	7
63	Biomimetic estrogen sensor based on soft colloidal probes. <i>Biosensors and Bioelectronics</i> , 2021, 192, 113506.	5.3	7
64	Temperature-Controlled Adhesion to Carbohydrate Functionalized Microgel Films: An <i>E. coli</i> and Lectin Binding Study. <i>Macromolecular Bioscience</i> , 2021, 21, e2000386.	2.1	4
65	Lectin and <i>E. coli</i> Binding to Carbohydrate-Functionalized Oligo(ethylene glycol)-Based Microgels: Effect of Elastic Modulus, Crosslinker and Carbohydrate Density. <i>Molecules</i> , 2021, 26, 263.	1.7	3
66	Take your Positions and Shine: Effects of Positioning Aggregation-Induced Emission Luminophores within Sequence-Defined Macromolecules. <i>Chemistry - A European Journal</i> , 2021, 27, 10186-10192.	1.7	2
67	BIOMIMETIC SYSTEMS SHED LIGHT ON ACTIN-BASED MOTILITY DOWN TO THE MOLECULAR SCALE. <i>Biophysical Reviews and Letters</i> , 2009, 04, 5-15.	0.9	1
68	Preparation of multivalent glycan micro- and nano-arrays: general discussion. <i>Faraday Discussions</i> , 2019, 219, 128-137.	1.6	1
69	Understanding Receptor Kinetics And Mechanics In Phagocytosis Uptake Using Deformable Polyelectrolyte Microcapsules As Force Sensors. <i>Biophysical Journal</i> , 2009, 96, 642a.	0.2	0
70	Multidimensional micro- and nano-printing technologies: general discussion. <i>Faraday Discussions</i> , 2019, 219, 73-76.	1.6	0
71	Glycan interactions on glycocalyx mimetic surfaces: general discussion. <i>Faraday Discussions</i> , 2019, 219, 183-188.	1.6	0
72	New directions in surface functionalization and characterization: general discussion. <i>Faraday Discussions</i> , 2019, 219, 252-261.	1.6	0