T Pettersson

List of Publications by Year
in descending order

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66 papers	2,276 citations	257450 24 h-index	223800 46 g-index
67 all docs	67 docs citations	67 times ranked	3475 citing authors

#	Article	IF	Citations
1	Multifunctional Nanocomposites with High Strength and Capacitance Using 2D MXene and 1D Nanocellulose. Advanced Materials, 2019, 31, e1902977.	21.0	253
2	Understanding the Dispersive Action of Nanocellulose for Carbon Nanomaterials. Nano Letters, 2017, 17, 1439-1447.	9.1	219
3	Probing Protein Adsorption onto Mercaptoundecanoic Acid Stabilized Gold Nanoparticles and Surfaces by Quartz Crystal Microbalance and Î¶-Potential Measurements. Langmuir, 2007, 23, 6053-6062.	3.5	155
4	Lubrication Properties of Bottle-Brush Polyelectrolytes:â€‰ An AFM Study on the Effect of Side Chain and Charge Density. Langmuir, 2008, 24, 3336-3347.	3.5	100
5	Comparison of different methods to calibrate torsional spring constant and photodetector for atomic force microscopy friction measurements in air and liquid. Review of Scientific Instruments, 2007, 78, 093702.	1.3	96
6	Adhesive Layer-by-Layer Films of Carboxymethylated Cellulose Nanofibrilâ€“Dopamine Covalent Bioconjugates Inspired by Marine Mussel Threads. ACS Nano, 2012, 6, 4731-4739.	14.6	96
7	Oncogenes induce a vimentin filament collapse mediated by HDAC6 that is linked to cell stiffness. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1515-1520.	7.1	90
8	Normal and friction forces between mucin and mucinâ€“chitosan layers in absence and presence of SDS. Journal of Colloid and Interface Science, 2008, 324, 246-256.	9.4	77
9	The state of carboxymethylated nanofibrils after homogenization-aided dilution from concentrated suspensions: a rheological perspective. Cellulose, 2014, 21, 2357-2368.	4.9	68
10	On the mechanism behind freezing-induced chemical crosslinking in ice-templated cellulose nanofibril aerogels. Journal of Materials Chemistry A, 2018, 6, 19371-19380.	10.3	63
11	Water Drop Friction on Superhydrophobic Surfaces. Langmuir, 2013, 29, 9079-9089.	3.5	61
12	How to measure forces with atomic force microscopy without significant influence from nonlinear optical lever sensitivity. Review of Scientific Instruments, 2009, 80, 093701.	1.3	53
13	Zero-Dimensional and Highly Oxygenated Graphene Oxide for Multifunctional Poly(lactic acid) Bionanocomposites. ACS Sustainable Chemistry and Engineering, 2016, 4, 5618-5631.	6.7	50
14	Mucinâ^'Electrolyte Interactions at the Solidâ^'Liquid Interface Probed by QCM-D. Langmuir, 2008, 24, 3348-3357.	3.5	45
15	Macro- and Microstructural Evolution during Drying of Regenerated Cellulose Beads. ACS Nano, 2020, 14, 6774-6784.	14.6	41
16	Effect of Polymer Architecture on the Adsorption Properties of a Nonionic Polymer. Langmuir, 2008, 24, 6676-6682.	3.5	40
17	Microfluidized carboxymethyl cellulose modified pulp: a nanofibrillated cellulose system with some attractive properties. Cellulose, 2015, 22, 1159-1173.	4.9	39
18	Omnidispersible poly(ionic liquid)-functionalized cellulose nanofibrils: surface grafting and polymer membrane reinforcement. Chemical Communications, 2014, 50, 12486-12489.	4.1	35

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19	Influence of Cellulose Charge on Bacteria Adhesion and Viability to PVAm/CNF/PVAm-Modified Cellulose Model Surfaces. Biomacromolecules, 2019, 20, 2075-2083.	5.4	34
20	Determination of transverse and shear moduli of single carbon fibres. Carbon, 2020, 158, 772-782.	10.3	34
21	Lubrication by organized soft matter. Soft Matter, 2010, 6, 1520.	2.7	32
22	Influence of Surface Charge Density and Morphology on the Formation of Polyelectrolyte Multilayers on Smooth Charged Cellulose Surfaces. Langmuir, 2017, 33, 968-979.	3.5	31
23	Green Strategy to Reduced Nanographene Oxide through Microwave Assisted Transformation of Cellulose. ACS Sustainable Chemistry and Engineering, 2018, 6, 1246-1255.	6.7	31
24	Physical Tuning of Cellulose-Polymer Interactions Utilizing Cationic Block Copolymers Based on PCL and Quaternized PDMAEMA. ACS Applied Materials & Interfaces, 2012, 4, 6796-6807.	8.0	29
25	A proof-of-concept for folate-conjugated and quercetin-anchored pluronic mixed micelles as molecularly modulated polymeric carriers for doxorubicin. Polymer, 2015, 74, 193-204.	3.8	25
26	Experimental and computational assessment of F-actin influence in regulating cellular stiffness and relaxation behaviour of fibroblasts. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 168-184.	3.1	25
27	Characterization of interfacial stress transfer ability of particulate cellulose composite materials. Mechanics of Materials, 2011, 43, 693-704.	3.2	24
28	Probing material properties of polymeric surface layers with tapping mode AFM: Which cantilever spring constant, tapping amplitude and amplitude set point gives good image contrast and minimal surface damage?. Ultramicroscopy, 2010, 110, 313-319.	1.9	23
29	Direct Adhesive Measurements between Wood Biopolymer Model Surfaces. Biomacromolecules, 2012, 13, 3046-3053.	5.4	23
30	Redispersion Strategies for Dried Cellulose Nanofibrils. ACS Sustainable Chemistry and Engineering, 2021, 9, 11003-11010.	6.7	21
31	Synthesis, adsorption and adhesive properties of a cationic amphiphilic block copolymer for use as compatibilizer in composites. European Polymer Journal, 2012, 48, 1195-1204.	5.4	20
32	Measuring elasticity of wet cellulose beads with an AFM colloidal probe using a linearized DMT model. Analytical Methods, 2017, 9, 4019-4022.	2.7	19
33	Carbohydrate gel beads as model probes for quantifying non-ionic and ionic contributions behind the swelling of delignified plant fibers. Journal of Colloid and Interface Science, 2018, 519, 119-129.	9.4	19
34	Measurement of the flexibility of wet cellulose fibres using atomic force microscopy. Cellulose, 2017, 24, 4139-4149.	4.9	18
35	Robust and Tailored Wet Adhesion in Biopolymer Thin Films. Biomacromolecules, 2014, 15, 4420-4428.	5.4	17
36	Improved barrier films of cross-linked cellulose nanofibrils: a microscopy study. Green Materials, 2014, 2, 163-168.	2.1	17

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37	NanoWear of Salivary Films vs. Substratum Wettability. Journal of Dental Research, 2012, 91, 973-978.	5.2	16
38	Slipdisc: a versatile sample preparation platform for point of care diagnostics. RSC Advances, 2017, 7, 35048-35054.	3.6	14
39	Bactericidal surfaces prepared by femtosecond laser patterning and layer-by-layer polyelectrolyte coating. Journal of Colloid and Interface Science, 2020, 575, 286-297.	9.4	13
40	Leveling During Toner Fusing: Effects on Surface Roughness and Gloss of Printed Paper. Journal of Imaging Science and Technology, 2006, 50, 202.	0.5	12
41	Friction Measurement Between Polyester Fibres Using the Fibre Probe SPM. Australian Journal of Chemistry, 2006, 59, 390.	0.9	12
42	Force Interactions of Nonagglomerating Polylactide Particles Obtained through Covalent Surface Grafting with Hydrophilic Polymers. Langmuir, 2013, 29, 8873-8881.	3.5	12
43	Tailoring Soft Polymer Networks Based on Sugars and Fatty Acids toward Pressure Sensitive Adhesive Applications. ACS Sustainable Chemistry and Engineering, 2017, 5, 2632-2638.	6.7	12
44	Measuring elasticity of wet cellulose fibres with AFM using indentation and a linearized Hertz model. Analytical Methods, 2018, 10, 3820-3823.	2.7	11
45	Understanding the Drying Behavior of Regenerated Cellulose Gel Beads: The Effects of Concentration and Nonsolvents. ACS Nano, 2022, 16, 2608-2620.	14.6	11
46	Thermal calibration of photodiode sensitivity for atomic force microscopy. Review of Scientific Instruments, 2006, 77, 116110.	1.3	10
47	Multi-layer assembly of cellulose nanofibrils in a microfluidic device for the selective capture and release of viable tumor cells from whole blood. Nanoscale, 2020, 12, 21788-21797.	5.6	10
48	Swelling of Cellulose-Based Fibrillar and Polymeric Networks Driven by Ion-Induced Osmotic Pressure. Langmuir, 2020, 36, 12261-12271.	3.5	10
49	Development of mechanical properties of regenerated cellulose beads during drying as investigated by atomic force microscopy. Soft Matter, 2020, 16, 6457-6462.	2.7	10
50	Adhesion properties of regenerated lignocellulosic fibres towards poly(lactic acid) microspheres assessed by colloidal probe technique. Journal of Colloid and Interface Science, 2018, 532, 819-829.	9.4	9
51	Investigation of the cohesive strength of membrane fouling layers formed during cross-flow microfiltration: The effects of pH adjustment on the properties and fouling characteristics of microcrystalline cellulose. Chemical Engineering Research and Design, 2019, 149, 52-64.	5.6	9
52	Effects of the injection grout Silica sol on bentonite. Physics and Chemistry of the Earth, 2011, 36, 1580-1589.	2.9	8
53	AFM adhesion imaging for the comparison of polyelectrolyte complexes and polyelectrolyte multilayers. Soft Matter, 2012, 8, 8298.	2.7	8
54	Structure Development of the Interphase between Drying Cellulose Materials Revealed by In Situ Grazing-Incidence Small-Angle X-ray Scattering. Biomacromolecules, 2021, 22, 4274-4283.	5.4	8

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55	Adsorption of paper strength additives to hardwood fibres with different surface charges and their effect on paper strength. Cellulose, 2022, 29, 2617-2632.	4.9	8
56	Macroscopic cellulose probes for the measurement of polymer grafted surfaces. Cellulose, 2019, 26, 1467-1477.	4.9	7
57	Wet-expandable capsules made from partially modified cellulose. Green Chemistry, 2020, 22, 4581-4592.	9.0	7
58	The adhesive behavior of extracted latex polymers towards silicon oxide and cellulose. International Journal of Adhesion and Adhesives, 2013, 44, 250-258.	2.9	6
59	Solid-state polymer adsorption for surface modification: The role of molecular weight. Journal of Colloid and Interface Science, 2022, 605, 441-450.	9.4	5
60	Spreading of individual toner particles studied using in situ optical microscopy. Journal of Colloid and Interface Science, 2005, 287, 249-260.	9.4	4
61	The Effect of Salt Concentration and Cation Valency on Interactions Between Mucin-Coated Hydrophobic Surfaces. , 2008, , 1-10.		3
62	Note: Particle adhesion and imaging of particle/surface breakage zone. Review of Scientific Instruments, 2012, 83, 106107.	1.3	3
63	Phenomenological analysis of constrained in-plane compression of paperboard using micro-computed tomography Imaging. Nordic Pulp and Paper Research Journal, 2021, 36, 491-502.	0.7	3
64	Use of polyelectrolyte complexes and multilayers from polymers and nanoparticles to create sacrificial bonds between surfaces. Journal of Colloid and Interface Science, 2013, 391, 28-35.	9.4	2
65	Strong and tuneable wet adhesion with rationally designed layer-by-layer assembled triblock copolymer films. Nanoscale, 2016, 8, 18204-18211.	5.6	2
66	The effect of different wear on superhydrophobic wax coatings. Nordic Pulp and Paper Research Journal, 2017, 32, 195-203.	0.7	2