Tekla Tammelin

List of Publications by Year
in descending order

76 papers	3,488 citations	117625 34 h-index	144013 57 g-index
78 all docs	78 docs citations	78 times ranked	3942 citing authors

#	Article	IF	Citations
1	Pilot-scale modification of polyethersulfone membrane with a size and charge selective nanocellulose layer. Separation and Purification Technology, 2022, 285, 120341.	7.9	8
2	Humidity Response of Cellulose Thin Films. Biomacromolecules, 2022, 23, 1148-1157.	5.4	9
3	Capturing colloidal nano- and microplastics with plant-based nanocellulose networks. Nature Communications, 2022, 13, 1814.	12.8	25
4	Tuning the Porosity, Water Interaction, and Redispersion of Nanocellulose Hydrogels by Osmotic Dehydration. ACS Applied Polymer Materials, 2022, 4, 24-28.	4.4	11
5	Nanocellulose: Recent Fundamental Advances and Emerging Biological and Biomimicking Applications. Advanced Materials, 2021, 33, e2004349.	21.0	212
6	Waterborne nanocellulose coatings for improving the antifouling and antibacterial properties of polyethersulfone membranes. Journal of Membrane Science, 2021, 620, 118842.	8.2	59
7	Functionalized Nanocellulose/Multiwalled Carbon Nanotube Composites for Electrochemical Applications. ACS Applied Nano Materials, 2021, 4, 5842-5853.	5.0	13
8	Production of High-Solid-Content Fire-Retardant Phosphorylated Cellulose Microfibrils. ACS Sustainable Chemistry and Engineering, 2021, 9, 12365-12375.	6.7	18
9	Creaming Layers of Nanocellulose Stabilized Water-Based Polystyrene: High-Solids Emulsions for 3D Printing. Frontiers in Chemical Engineering, 2021, 3, .	2.7	4
10	Nanocellulose-based mechanically stable immobilization matrix for enhanced ethylene production: a framework for photosynthetic solid-state cell factories. Green Chemistry, 2021, 23, 3715-3724.	9.0	15
11	Charged ultrafiltration membranes based on TEMPO-oxidized cellulose nanofibrils/poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	3.6	29
12	Bottom-up Construction of Xylan Nanocrystals in Dimethyl Sulfoxide. Biomacromolecules, 2021, 22, 898-906.	5.4	20
13	Study of xylan and cellulose interactions monitored with solid-state NMR and QCM-D. Holzforschung, 2020, 74, 643-653.	1.9	9
14	Prevention of interfibril hornification by replacing water in nanocellulose gel with low molecular weight liquid poly(ethylene glycol). Carbohydrate Polymers, 2020, 250, 116870.	10.2	21
15	High-Throughput Tailoring of Nanocellulose Films: From Complex Bio-Based Materials to Defined Multifunctional Architectures. ACS Applied Bio Materials, 2020, 3, 7428-7438.	4.6	18
16	Upcycling Poultry Feathers with (Nano)cellulose: Sustainable Composites Derived from Nonwoven Whole Feather Preforms. ACS Sustainable Chemistry and Engineering, 2020, 8, 14263-14267.	6.7	11
17	Production of High Solid Nanocellulose by Enzyme-Aided Fibrillation Coupled with Mild Mechanical Treatment. ACS Sustainable Chemistry and Engineering, 2020, 8, 18853-18863.	6.7	26
18	Bubble Attachment to Cellulose and Silica Surfaces of Varied Surface Energies: Wetting Transition and Implications in Foam Forming. Langmuir, 2020, 36, 7296-7308.	3.5	13

#	ARTICLE	IF	CITATIONS
19	Vapour-assisted roll-to-roll nanoimprinting of micropillars on nanocellulose films. Microelectronic Engineering, 2020, 225, 111258.	2.4	6
20	Highâ€Resolution Patterned Biobased Thin Films via Selfâ€Assembled Carbohydrate Block Copolymers and Nanocellulose. Advanced Materials Interfaces, 2020, 7, 1901737.	3.7	9
21	Recovery of Gold from Chloride Solution by TEMPO-Oxidized Cellulose Nanofiber Adsorbent. Sustainability, 2019, 11, 1406.	3.2	17
22	Multidimensional micro- and nano-printing technologies: general discussion. Faraday Discussions, 2019, 219, 73-76.	3.2	0
23	Structural distinction due to deposition method in ultrathin films of cellulose nanofibres. Cellulose, 2018, 25, 1715-1724.	4.9	12
24	Low-temperature atomic layer deposition of SiO ₂ /Al ₂ O ₃ multilayer structures constructed on self-standing films of cellulose nanofibrils. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170037.	3.4	15
25	Versatile templates from cellulose nanofibrils for photosynthetic microbial biofuel production. Journal of Materials Chemistry A, 2018, 6, 5825-5835.	10.3	34
26	Surface tailoring and design-driven prototyping of fabrics with 3D-printing: An all-cellulose approach. Materials and Design, 2018, 140, 409-419.	7.0	50
27	Understanding the interactions of cellulose fibres and deep eutectic solvent of choline chloride and urea. Cellulose, 2018, 25, 137-150.	4.9	55
28	Enhancing the Stability of Aqueous Dispersions and Foams Comprising Cellulose Nanofibrils (CNF) with CaCO3 Particles. Nanomaterials, 2018, 8, 651.	4.1	17
29	Crucial Interfacial Features of Nanocellulose Materials. , 2018, , 87-128.		4
30	Phase behaviour and droplet size of oil-in-water Pickering emulsions stabilised with plant-derived nanocellulosic materials. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 519, 60-70.	4.7	143
31	In situ TEMPO surface functionalization of nanocellulose membranes for enhanced adsorption of metal ions from aqueous medium. RSC Advances, 2017, 7, 5232-5241.	3.6	120
32	Understanding the mechanisms of oxygen diffusion through surface functionalized nanocellulose films. Carbohydrate Polymers, 2017, 174, 309-317.	10.2	38
33	Strongly reduced thermal conductivity in hybrid ZnO/nanocellulose thin films. Journal of Materials Science, 2017, 52, 6093-6099.	3.7	19
34	Sample geometry dependency on the measured tensile properties of cellulose nanopapers. Materials and Design, 2017, 121, 421-429.	7.0	50
35	Submicron hierarchy of cellulose nanofibril films with etherified hemicelluloses. Carbohydrate Polymers, 2017, 177, 126-134.	10.2	13
36	Interfacial Mechanisms of Water Vapor Sorption into Cellulose Nanofibril Films as Revealed by Quantitative Models. Biomacromolecules, 2017, 18, 2951-2958.	5.4	55

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37	All-Printed Transistors on Nano Cellulose Substrate. MRS Advances, 2016, 1, 645-650.	0.9	13
38	Etherification of Wood-Based Hemicelluloses for Interfacial Activity. Biomacromolecules, 2016, 17, 1894-1901.	5.4	41
39	Viscoelastic Properties of Coreâ€"Shell-Structured, Hemicellulose-Rich Nanofibrillated Cellulose in Dispersion and Wet-Film States. Biomacromolecules, 2016, 17, 2104-2111.	5.4	43
40	UV-ozone patterning of micro-nano fibrillated cellulose (MNFC) with alkylsilane self-assembled monolayers. Cellulose, 2016, 23, 1847-1857.	4.9	8
41	Fabrication of micropillars on nanocellulose films using a roll-to-roll nanoimprinting method. Microelectronic Engineering, 2016, 163, 1-6.	2.4	34
42	Mimicking the Humidity Response of the Plant Cell Wall by Using Two-Dimensional Systems: The Critical Role of Amorphous and Crystalline Polysaccharides. Langmuir, 2016, 32, 2032-2040.	3.5	42
43	Direct Interfacial Modification of Nanocellulose Films for Thermoresponsive Membrane Templates. ACS Applied Materials & Interfaces, 2016, 8, 2923-2927.	8.0	47
44	Effect of interfibrillar PVA bridging on water stability and mechanical properties of TEMPO/NaClO2 oxidized cellulosic nanofibril films. Carbohydrate Polymers, 2015, 126, 78-82.	10.2	48
45	Correlation between cellulose thin film supramolecular structures and interactions with water. Soft Matter, 2015, 11, 4273-4282.	2.7	43
46	Water Vapor Uptake of Ultrathin Films of Biologically Derived Nanocrystals: Quantitative Assessment with Quartz Crystal Microbalance and Spectroscopic Ellipsometry. Langmuir, 2015, 31, 12170-12176.	3.5	79
47	Effects of charge ratios of xylan-poly(allylamine hydrochloride) complexes on their adsorption onto different surfaces. Cellulose, 2015, 22, 2955-2970.	4.9	10
48	Cellulose nanopapers as tight aqueous ultra-filtration membranes. Reactive and Functional Polymers, 2015, 86, 209-214.	4.1	147
49	Microscopic Characterization of Nanofibers and Nanocrystals. Materials and Energy, 2014, , 159-180.	0.1	2
50	Nanocellulose Films and Barriers. Materials and Energy, 2014, , 213-229.	0.1	8
51	Significance of xylan on the stability and water interactions of cellulosic nanofibrils. Reactive and Functional Polymers, 2014, 85, 157-166.	4.1	55
52	Modified nanofibrillated celluloseâ€"polyvinyl alcohol films with improved mechanical performance. RSC Advances, 2014, 4, 11343.	3.6	81
53	Nanofibrillated cellulose, poly(vinyl alcohol), montmorillonite clay hybrid nanocomposites with superior barrier and thermomechanical properties. Polymer Composites, 2014, 35, 1117-1131.	4.6	38
54	Nanopapers for organic solvent nanofiltration. Chemical Communications, 2014, 50, 5778-5781.	4.1	114

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55	Clean and reactive nanostructured cellulose surface. Cellulose, 2013, 20, 983-990.	4.9	24
56	Xylan as limiting factor in enzymatic hydrolysis of nanocellulose. Bioresource Technology, 2013, 129, 135-141.	9.6	82
57	Solvent impact on esterification and film formation ability of nanofibrillated cellulose. Cellulose, 2013, 20, 2359-2370.	4.9	37
58	Structural Features and Water Interactions of Etherified Xylan Thin Films. Journal of Polymers and the Environment, 2012, 20, 895-904.	5.0	35
59	Immobilizationâ€“Stabilization of Proteins on Nanofibrillated Cellulose Derivatives and Their Bioactive Film Formation. Biomacromolecules, 2012, 13, 594-603.	5.4	108
60	High Performance Cellulose Nanocomposites: Comparing the Reinforcing Ability of Bacterial Cellulose and Nanofibrillated Cellulose. ACS Applied Materials & Interfaces, 2012, 4, 4078-4086.	8.0	202
61	Quantitative Assessment of the Enzymatic Degradation of Amorphous Cellulose by Using a Quartz Crystal Microbalance with Dissipation Monitoring. Langmuir, 2011, 27, 8819-8828.	3.5	47
62	Experimental evidence on medium driven cellulose surface adaptation demonstrated using nanofibrillated cellulose. Soft Matter, 2011, 7, 10917.	2.7	111
63	Free radical graft copolymerization of nanofibrillated cellulose with acrylic monomers. Carbohydrate Polymers, 2011, 84, 1039-1047.	10.2	161
64	Biohybrid barrier films from fluidized pectin and nanoclay. Carbohydrate Polymers, 2010, 82, 989-996.	10.2	48
65	Effects of commercial cellobiohydrolase treatment on fiber strength and morphology of bleached hardwood pulp 10th EWLP, Stockholm, Sweden, August 25â€“28, 2008. Holzforschung, 2009, 63, 731-736.	1.9	18
66	Adsorption of Cationic Starch on Cellulose Studied by QCM-D. Langmuir, 2008, 24, 4743-4749.	3.5	68
67	Adsorption of colloidal extractives and dissolved hemicelluloses on thermomechanical pulp fiber components studied by QCM-D. Nordic Pulp and Paper Research Journal, 2007, 22, 93-101.	0.7	21
68	Preparation of lignin and extractive model surfaces by using spincoating technique â€“ Application for QCM-D studies. Nordic Pulp and Paper Research Journal, 2006, 21, 444-450.	0.7	32
69	Celluloseâ€”model films and the fundamental approach. Chemical Society Reviews, 2006, 35, 1287-1304.	38.1	213
70	Preparation of Langmuir/Blodgett-cellulose Surfaces by Using Horizontal Dipping Procedure. Application for Polyelectrolyte Adsorption Studies Performed with QCM-D. Cellulose, 2006, 13, 519-535.	4.9	81
71	Adsorption of Polycation and Anionic Surfactant onto Iron Surfaces and the Inhibition of Carbon Dioxide Corrosion. Journal of Dispersion Science and Technology, 2006, 27, 277-292.	2.4	5
72	The influence of dissolved substances on resin adsorption to TMP fine material. Nordic Pulp and Paper Research Journal, 2006, 21, 629-637.	0.7	6

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73	Adsorption of complexes formed by cationic starch and anionic surfactants on quartz studied by QCM-D. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 250, 103-114.	4.7	29
74	Viscoelastic Properties of Cationic Starch Adsorbed on Quartz Studied by QCM-D. Langmuir, 2004, 20, 10900-10909.	3.5	84
75	The ability of PEO to remove model colloidal extractives from solutions with different types of fines. Nordic Pulp and Paper Research Journal, 2004, 19, 59-66.	0.7	3
76	Interaction between Cellulose and Xylan: An Atomic Force Microscope and Quartz Crystal Microbalance Study. ACS Symposium Series, 2003, , 269-290.	0.5	32