Gustav Nystrom

List of Publications by Citations

71 papers	4,392 citations	29 h-index	66 g-index
79 ext. papers	5,409 ext. citations	11.4 avg, IF	6.06 L-index

#	Paper	IF	Citations
71	Toward flexible polymer and paper-based energy storage devices. *Advanced Materials*, **2011**, 23, 3751-69	24	790
70	Ultrafast all-polymer paper-based batteries. *Nano Letters*, **2009**, 9, 3635-9	11.5	391
69	Biopolymer Aerogels and Foams: Chemistry, Properties, and Applications. *Angewandte Chemie - International Edition*, **2018**, 57, 7580-7608	16.4	292
68	Understanding nanocellulose chirality and structure-properties relationship at the single fibril level. *Nature Communications*, **2015**, 6, 7564	17.4	290
67	A nanocellulose polypyrrole composite based on microfibrillated cellulose from wood. *Journal of Physical Chemistry B*, **2010**, 114, 4178-82	3.4	235
66	Self-assembled three-dimensional and compressible interdigitated thin-film supercapacitors and batteries. *Nature Communications*, **2015**, 6, 7259	17.4	219
65	Nanocellulose aerogels functionalized by rapid layer-by-layer assembly for high charge storage and beyond. *Angewandte Chemie - International Edition*, **2013**, 52, 12038-42	16.4	170
64	Amyloid fibril systems reduce, stabilize and deliver bioavailable nanosized iron. *Nature Nanotechnology*, **2017**, 12, 642-647	28.7	151
63	Nanocellulose-MXene Biomimetic Aerogels with Orientation-Tunable Electromagnetic Interference Shielding Performance. *Advanced Science*, **2020**, 7, 2000979	13.6	125
62	Amyloid Templated Gold Aerogels. *Advanced Materials*, **2016**, 28, 472-8	24	124
61	Electroactive nanofibrillated cellulose aerogel composites with tunable structural and electrochemical properties. *Journal of Materials Chemistry*, **2012**, 22, 19014		123
60	Additive manufacturing of silica aerogels. *Nature*, **2020**, 584, 387-392	50.4	122
59	Ultralight, Flexible, and Biomimetic Nanocellulose/Silver Nanowire Aerogels for Electromagnetic Interference Shielding. *ACS Nano*, **2020**, 14, 2927-2938	16.7	121
58	Flexible and Ultrathin Waterproof Cellular Membranes Based on High-Conjunction Metal-Wrapped Polymer Nanofibers for Electromagnetic Interference Shielding. *Advanced Materials*, **2020**, 32, e1908496	24	101
57	Functional Materials from Nanocellulose: Utilizing Structure-Property Relationships in Bottom-Up Fabrication. *Advanced Materials*, **2021**, 33, e2000657	24	66
56	Confinement-induced liquid crystalline transitions in amyloid fibril cholesteric tactoids. *Nature Nanotechnology*, **2018**, 13, 330-336	28.7	66
55	Two-Dimensional Aggregation and Semidilute Ordering in Cellulose Nanocrystals. *Langmuir*, **2016**, 32, 442-50	4	64

54	Cycling stability and self-protective properties of a paper-based polypyrrole energy storage device. *Electrochemistry Communications*, **2011**, 13, 869-871	5.1	64
53	Formation of Colloidal Nanocellulose Glasses and Gels. *Langmuir*, **2017**, 33, 9772-9780	4	63
52	Rapid potential step charging of paper-based polypyrrole energy storage devices. *Electrochimica Acta*, **2012**, 70, 91-97	6.7	57
51	High-capacity conductive nanocellulose paper sheets for electrochemically controlled extraction of DNA oligomers. *PLoS ONE*, **2011**, 6, e29243	3.7	54
50	Influence of the cellulose substrate on the electrochemical properties of paper-based polypyrrole electrode materials. *Journal of Materials Science*, **2012**, 47, 5317-5325	4.3	45
49	Nanocellulose Fragmentation Mechanisms and Inversion of Chirality from the Single Particle to the Cholesteric Phase. *ACS Nano*, **2018**, 12, 5141-5148	16.7	43
48	Nanostructural Properties and Twist Periodicity of Cellulose Nanofibrils with Variable Charge Density. *Biomacromolecules*, **2019**, 20, 1288-1296	6.9	36
47	Ice-Templated and Cross-Linked Amyloid Fibril Aerogel Scaffolds for Cell Growth. *Biomacromolecules*, **2017**, 18, 2858-2865	6.9	36
46	Titania-Cellulose Hybrid Monolith for In-Flow Purification of Water under Solar Illumination. *ACS Applied Materials & Interfaces*, **2018**, 10, 29599-29607	9.5	35
45	Amyloid Fibrils Length Controls Shape and Structure of Nematic and Cholesteric Tactoids. *ACS Nano*, **2019**, 13, 591-600	16.7	35
44	Nanocellulose assisted preparation of ambient dried, large-scale and mechanically robust carbon nanotube foams for electromagnetic interference shielding. *Journal of Materials Chemistry A*, **2020**, 8, 17969-17979	13	30
43	Amyloid Templated Organic□norganic Hybrid Aerogels. *Advanced Functional Materials*, **2018**, 28, 1703609	15.6	29
42	Ultra-Porous Nanocellulose Foams: A Facile and Scalable Fabrication Approach. *Nanomaterials*, **2019**, 9,	5.4	28
41	Amyloid Fibrils form Hybrid Colloidal Gels and Aerogels with Dispersed CaCO3 Nanoparticles. *Advanced Functional Materials*, **2017**, 27, 1700897	15.6	28
40	Fully 3D Printed and Disposable Paper Supercapacitors. *Advanced Materials*, **2021**, 33, e2101328	24	26
39	3D-Printing Nanocellulose-Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) Biodegradable Composites by Fused Deposition Modeling. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 10292-10302	8.3	23
38	Nanocellulose Aerogels Functionalized by Rapid Layer-by-Layer Assembly for High Charge Storage and Beyond. *Angewandte Chemie*, **2013**, 125, 12260-12264	3.6	22
37	Terahertz Birefringent Biomimetic Aerogels Based on Cellulose Nanofibers and Conductive Nanomaterials. *ACS Nano*, **2021**, 15, 7451-7462	16.7	19

36	Biopolymer-Aerogele und -Schäume: Chemie, Eigenschaften und Anwendungen. *Angewandte Chemie*, **2018**, 130, 7704-7733	3.6	18
35	Designing Cellulose Nanofibrils for Stabilization of Fluid Interfaces. *Biomacromolecules*, **2019**, 20, 4574-4580	6.9	18
34	Aligned cellulose nanocrystals and directed nanoscale deposition of colloidal spheres. *Cellulose*, **2014**, 21, 1591-1599	5.5	17
33	Ultrafine Cellulose Nanofiber-Assisted Physical and Chemical Cross-Linking of MXene Sheets for Electromagnetic Interference Shielding.. *Small Methods*, **2021**, 5, e2100889	12.8	17
32	Mechanical Properties Tailoring of 3D Printed Photoresponsive Nanocellulose Composites. *Advanced Functional Materials*, **2020**, 30, 2002914	15.6	16
31	3D printing of shape-morphing and antibacterial anisotropic nanocellulose hydrogels. *Carbohydrate Polymers*, **2021**, 259, 117716	10.3	16
30	Confinement-Induced Ordering and Self-Folding of Cellulose Nanofibrils. *Advanced Science*, **2019**, 6, 1801540	15.4	16
29	Dual-porous cellulose nanofibril aerogels via modular drying and cross-linking. *Nanoscale*, **2020**, 12, 7383-7394	7.7	15
28	Liquid crystalline filamentous biological colloids: Analogies and differences. *Current Opinion in Colloid and Interface Science*, **2018**, 38, 30-44	7.6	15
27	Globular protein assembly and network formation at fluid interfaces: effect of oil. *Soft Matter*, **2021**, 17, 1692-1700	3.6	15
26	Particle size distributions for cellulose nanocrystals measured by atomic force microscopy: an interlaboratory comparison. *Cellulose*, **2021**, 28, 1387-1403	5.5	14
25	Dual physically and chemically crosslinked regenerated cellulose - Gelatin composite hydrogels towards art restoration. *Carbohydrate Polymers*, **2020**, 234, 115885	10.3	11
24	Assembly of Cellulose Nanocrystal-Lysozyme Composite Films with Varied Lysozyme Morphology. *Biomacromolecules*, **2020**, 21, 5139-5147	6.9	11
23	Nanocellulose-lysozyme colloidal gels via electrostatic complexation. *Carbohydrate Polymers*, **2021**, 251, 117021	10.3	9
22	Advantages of Additive Manufacturing for Biomedical Applications of Polyhydroxyalkanoates. *Bioengineering*, **2021**, 8,	5.3	9
21	Probing the Structure of Filamentous Nonergodic Gels by Dynamic Light Scattering. *Macromolecules*, **2020**, 53, 5950-5956	5.5	7
20	[P1.028] Development of Nanocellulose/Polypyrrole Composites Towards Blood Purification. *Procedia Engineering*, **2012**, 44, 733-736		5
19	Self-Assembly Pathways and Antimicrobial Properties of Lysozyme in Different Aggregation States. *Biomacromolecules*, **2021**, 22, 4327-4336	6.9	5

18	Chitin-amyloid synergism and their use as sustainable structural adhesives. *Journal of Materials Chemistry A*, **2021**, 9, 19741-19753	13	5
17	Versatile carbon-loaded shellac ink for disposable printed electronics. *Scientific Reports*, **2021**, 11, 23784	4.9	5
16	Structure-property relationships of cellulose nanofibril hydro- and aerogels and their building blocks. *Nanoscale*, **2020**, 12, 11638-11646	7.7	4
15	Polysaccharide-reinforced amyloid fibril hydrogels and aerogels. *Nanoscale*, **2021**, 13, 12534-12545	7.7	4
14	Rheology of cocoa butter. *Journal of Food Engineering*, **2021**, 305, 110598	6	4
13	Enzyme Activities of Five White-Rot Fungi in the Presence of Nanocellulose. *Journal of Fungi (Basel, Switzerland)*, **2021**, 7,	5.6	2
12	Hierarchical Structure of Cellulose Nanofibril-Based Foams Explored by Multimodal X-ray Scattering.. *Biomacromolecules*, **2022**, 23, 676-686	6.9	2
11	Sustainable Cellulose Nanofiber Films from Carrot Pomace as Sprayable Coatings for Food Packaging Applications. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 342-352	8.3	2
10	Nanocellulose-assisted preparation of electromagnetic interference shielding materials with diversified microstructure. *SmartMat*,	22.8	2
9	Benchmarking supramolecular adhesive behaviour of nanocelluloses, cellulose derivatives and proteins. *Carbohydrate Polymers*, **2022**, 119681	10.3	2
8	The Salt and Paper Battery; Ultrafast and All-polymer Based. *Materials Research Society Symposia Proceedings*, **2009**, 1197, 60		1
7	Melanized-Cationic Cellulose Nanofiber Foams for Bioinspired Removal of Cationic Dyes. *Biomacromolecules*, **2021**, 22, 4681-4690	6.9	0
6	Self-Sensing Cellulose Structures With Design-Controlled Stiffness. *IEEE Robotics and Automation Letters*, **2021**, 6, 4017-4024	4.2	0
5	Nanocellulose: Functional Materials from Nanocellulose: Utilizing Structure–Property Relationships in Bottom-Up Fabrication (Adv. Mater. 28/2021). *Advanced Materials*, **2021**, 33, 2170216	24	0
4	Biohybrid Nanocellulose-Lysozyme Amyloid Aerogels via Electrostatic Complexation.. *ACS Omega*, **2022**, 7, 578-586	3.9	0
3	Superinsulating nanocellulose aerogels: Effect of density and nanofiber alignment. *Carbohydrate Polymers*, **2022**, 119675	10.3	0
2	Long Cycle Life Nanocellulose Polypyrrole Electrodes. *Materials Research Society Symposia Proceedings*, **2011**, 1312, 1		
1	Ultrafine Cellulose Nanofiber-Assisted Physical and Chemical Cross-Linking of MXene Sheets for Electromagnetic Interference Shielding (Small Methods 12/2021). *Small Methods*, **2021**, 5, 2170062	12.8	