Anna K StrÃ¶m

List of Publications by Year
in descending order

50 papers	1,451 citations	331259 21 h-index	329751 37 g-index
55 all docs	55 docs citations	55 times ranked	2057 citing authors

#	Article	IF	Citations
1	Resolution of the structural isomers of partially methylesterified oligogalacturonides by polysaccharide analysis using carbohydrate gel electrophoresis. Glycobiology, 2006, 16, 29-35.	1.3	221
2	Influence of Pectin Fine Structure on the Mechanical Properties of Calciumâ^'Pectin and Acidâ^'Pectin Gels. Biomacromolecules, 2007, 8, 2668-2674.	2.6	103
3	Rheological characterization of acid pectin samples in the absence and presence of monovalent ions. Carbohydrate Polymers, 2014, 113, 336-343.	5.1	76
4	Liquid Norbornadiene Photoswitches for Solar Energy Storage. Advanced Energy Materials, 2018, 8, 1703401.	10.2	61
5	Rollâ€toâ€Roll Dyed Conducting Silk Yarns: A Versatile Material for Eâ€Textile Devices. Advanced Materials Technologies, 2018, 3, 1800251.	3.0	56
6	Preparation and physical properties of hyaluronic acidâ€based cryogels. Journal of Applied Polymer Science, 2015, 132, .	1.3	55
7	Microstructural, mechanical and mass transport properties of isotropic and capillary alginate gels. Soft Matter, 2014, 10, 357-366.	1.2	52
8	Impact of solvent quality on the network strength and structure of alginate gels. Carbohydrate Polymers, 2016, 144, 289-296.	5.1	51
9	Doseâ€Dependent Suppression of Hunger by a Specific Alginate in a Lowâ€Viscosity Drink Formulation. Obesity, 2011, 19, 1171-1176.	1.5	49
10	Effect of silencing the two major tomato fruit pectin methylesterase isoforms on cell wall pectin metabolism. Plant Biology, 2013, 15, 1025-1032.	1.8	46
11	Advanced structural characterisation of agar-based hydrogels: Rheological and small angle scattering studies. Carbohydrate Polymers, 2020, 236, 115655.	5.1	38
12	Diffusion of macromolecules in self-assembled cellulose/hemicellulose hydrogels. Soft Matter, 2015, 11, 4002-4010.	1.2	36
13	Periodate oxidation of xylan-based hemicelluloses and its effect on their thermal properties. Carbohydrate Polymers, 2018, 202, 280-287.	5.1	35
14	Microstructure of polymer hydrogels studied by pulsed field gradient NMR diffusion and TEM methods. Soft Matter, 2011, 7, 5711.	1.2	34
15	On the separation, detection and quantification of pectin derived oligosaccharides by capillary electrophoresis. Carbohydrate Research, 2004, 339, 1711-1716.	1.1	31
16	Correlating network structure with functional properties of capillary alginate gels for muscle fiber formation. Food Hydrocolloids, 2017, 72, 210-218.	5.6	31
17	High sugar content impacts microstructure, mechanics and release of calcium-alginate gels. Food Hydrocolloids, 2018, 84, 26-33.	5.6	31
18	Rheological and structural characterization of carrageenan emulsion gels. Algal Research, 2020, 47, 101873.	2.4	31

#	Article	IF	Citations
19	Controlled Calcium Release in the Absence and Presence of an Ion-Binding Polymer. Journal of Physical Chemistry B, 2003, 107, 10995-10999.	1.2	28
20	An investigation of pectin methylesterification patterns by two independent methods: capillary electrophoresis and polysaccharide analysis using carbohydrate gel electrophoresis. Carbohydrate Research, 2005, 340, 1193-1199.	1.1	23
21	Thermoplastic and Flexible Films from Arabinoxylan. ACS Applied Polymer Materials, 2019, 1, 1443-1450.	2.0	23
22	Recovery of a protein-rich biomass from shrimp (Pandalus borealis) boiling water: A colloidal study. Food Chemistry, 2020, 302, 125299.	4.2	23
23	Electrophoretic Behavior of Copolymeric Galacturonans Including Comments on the Information Content of the Intermolecular Charge Distribution. Biomacromolecules, 2009, 10, 1523-1531.	2.6	21
24	Modeling capillary formation in calcium and copper alginate gels. Materials Science and Engineering C, 2016, 58, 442-449.	3.8	18
25	Understanding nanostructural differences in hydrogels from commercial carrageenans: Combined small angle X-ray scattering and rheological studies. Algal Research, 2020, 47, 101882.	2.4	18
26	Altered Thermal and Mechanical Properties of Spruce Galactoglucomannan Films Modified with an Etherification Reaction. Biomacromolecules, 2020, 21, 1832-1840.	2.6	18
27	Interplay between flow and diffusion in capillary alginate hydrogels. Soft Matter, 2016, 12, 3897-3907.	1.2	17
28	Dynamics of capillary transport in semi-solid channels. Soft Matter, 2017, 13, 2562-2570.	1.2	17
29	Hydrogels as a water bolus during hyperthermia treatment. Physics in Medicine and Biology, 2019, 64, 115025.	1.6	17
30	Alginate and HM-pectin in sports-drink give rise to intra-gastric gelation in vivo. Food and Function, 2019, 10, 7892-7899.	2.1	17
31	Modification of xylan via an oxidationâ€“reduction reaction. Carbohydrate Polymers, 2022, 292, 119660.	5.1	16
32	The effect of sulfate half-ester groups on cellulose nanocrystal periodate oxidation. Cellulose, 2021, 28, 9633-9644.	2.4	15
33	A Multiâ€Component Reaction towards the Development of Highly Modular Hydrogelators. Chemistry - A European Journal, 2018, 24, 8071-8075.	1.7	13
34	Dynamic Nanocellulose Networks for Thermoset-like yet Recyclable Plastics with a High Melt Stiffness and Creep Resistance. Biomacromolecules, 2019, 20, 3924-3932.	2.6	13
35	Maximizing the oil content in polysaccharide-based emulsion gels for the development of tissue mimicking phantoms. Carbohydrate Polymers, 2021, 256, 117496.	5.1	12
36	Effect of physicochemical properties, pre-processing, and extraction on the functionality of wheat bran arabinoxylans in breadmaking â€“ A review. Food Chemistry, 2022, 383, 132584.	4.2	12

#	Article	IF	Citations
37	Capillary electrophoresis of homogeneous pectin fractions. Carbohydrate Polymers, 2005, 60, 467-473.	5.1	11
38	Phase behavior, rheology, and release from liquid crystalline phases containing combinations of glycerol monooleate, glyceryl monooleyl ether, propylene glycol, and water. RSC Advances, 2017, 7, 32966-32973.	1.7	9
39	Oxidized xylan additive for nanocellulose films â€“ A swelling modifier. International Journal of Biological Macromolecules, 2021, 180, 753-759.	3.6	9
40	Controlling water permeability of composite films of polylactide acid, cellulose, and xyloglucan. Journal of Applied Polymer Science, 2015, 132, .	1.3	8
41	Oxidation Level and Glycidyl Ether Structure Determine Thermal Processability and Thermomechanical Properties of Arabinoxylan-Derived Thermoplastics. ACS Applied Bio Materials, 2021, 4, 3133-3144.	2.3	7
42	Impact of Glucose on the Nanostructure and Mechanical Properties of Calcium-Alginate Hydrogels. Gels, 2022, 8, 71.	2.1	7
43	Microcellular foaming of arabinoxylan and PEGylated arabinoxylan with supercritical CO2. Carbohydrate Polymers, 2018, 181, 442-449.	5.1	6
44	Hydrophobization of arabinoxylan with n-butyl glycidyl ether yields stretchable thermoplastic materials. International Journal of Biological Macromolecules, 2021, 188, 491-500.	3.6	6
45	Stickâ€“slip motion and controlled filling speed by the geometric design of soft micro-channels. Journal of Colloid and Interface Science, 2018, 524, 139-147.	5.0	5
46	Side chains affect the melt processing and stretchability of arabinoxylan biomass-based thermoplastic films. Chemosphere, 2022, 294, 133618.	4.2	5
47	Soft Gelatin Films Modified with Cellulose Acetate Phthalate Pseudolatex Dispersionâ€”Structure and Permeability. Polymers, 2018, 10, 981.	2.0	4
48	Determination of mechanical and rheological properties of a cell-loaded peptide gel during ECM production. International Journal of Pharmaceutics, 2019, 563, 437-444.	2.6	4
49	Odunsi et al. Results for CM3 Cannot Be Extrapolated to Alginates in General. Obesity, 2010, 18, 2069-2069.	1.5	3
50	Fat tissue equivalent phantoms for microwave applications by reinforcing gelatin with nanocellulose. Biomedical Physics and Engineering Express, 2021, 7, 065025.	0.6	3