

# Bjørn E Christensen

## List of Publications by Year in descending order

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87  
papers

4,343  
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101384

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87  
docs citations

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times ranked

4884  
citing authors

#	ARTICLE	IF	CITATIONS
1	Alginate-based diblock polymers: preparation, characterization and Ca-induced self-assembly. <i>Polymer Chemistry</i> , 2021, 12, 5412-5425.	1.9	9
2	Inter-laboratory evaluation of SEC-post-column calcofluor for determination of the weight-average molar mass of cereal $\beta$ -glucan. <i>Carbohydrate Polymers</i> , 2015, 124, 254-264.	5.1	17
3	<i>In Situ</i> Gelation for Cell Immobilization and Culture in Alginate Foam Scaffolds. <i>Tissue Engineering - Part A</i> , 2014, 20, 131128071850006.	1.6	16
4	Effects of Physical and Chemical Treatments on the Molecular Weight and Degradation of Alginate-Hydroxyapatite Composites. <i>Macromolecular Bioscience</i> , 2014, 14, 872-880.	2.1	15
5	Influence of Amino Acids, Buffers, and pH on the $\gamma$ -Irradiation-Induced Degradation of Alginates. <i>Biomacromolecules</i> , 2014, 15, 4590-4597.	2.6	9
6	Chemical characterization and complement fixation of pectins from <i>Cola cordifolia</i> leaves. <i>Carbohydrate Polymers</i> , 2014, 102, 472-480.	5.1	15
7	Ionically gelled alginate foams: Physical properties controlled by type, amount and source of gelling ions. <i>Carbohydrate Polymers</i> , 2014, 99, 249-256.	5.1	30
8	Higher order structures of a bioactive, water-soluble (1 $\rightarrow$ 3)- $\beta$ -D-glucan derived from <i>Saccharomyces cerevisiae</i> . <i>Carbohydrate Polymers</i> , 2013, 92, 1026-1032.	5.1	14
9	Degradation of cellulosic insulation in power transformers: a SEC-MALLS study of artificially aged transformer papers. <i>Cellulose</i> , 2013, 20, 2003-2011.	2.4	20
10	A re-investigation of the Mark-Houwink-Sakurada parameters for cellulose in Cuen: A study based on size-exclusion chromatography combined with multi-angle light scattering and viscometry. <i>Journal of Chromatography A</i> , 2013, 1281, 32-37.	1.8	36
11	A study of bioactive, branched (1 $\rightarrow$ 3)- $\beta$ -D-glucans in dimethylacetamide/LiCl and dimethyl sulphoxide/LiCl using size-exclusion chromatography with multi-angle light scattering detection. <i>Journal of Chromatography A</i> , 2013, 1305, 109-113.	1.8	8
12	Periodate oxidation and macromolecular compaction of hyaluronan. <i>Pure and Applied Chemistry</i> , 2013, 85, 1893-1900.	0.9	15
13	Ionically Gelled Alginate Foams: Physical Properties Controlled by Operational and Macromolecular Parameters. <i>Biomacromolecules</i> , 2012, 13, 3703-3710.	2.6	52
14	Chain length distribution and aggregation of branched (1 $\rightarrow$ 3)- $\beta$ -D-glucans from <i>Saccharomyces cerevisiae</i> . <i>Carbohydrate Polymers</i> , 2012, 90, 1092-1099.	5.1	7
15	The localisation of pectin in <i>Sphagnum</i> moss leaves and its role in preservation. <i>Carbohydrate Polymers</i> , 2012, 87, 1326-1332.	5.1	21
16	Chemical and biological characterization of pectin-like polysaccharides from the bark of the Malian medicinal tree <i>Cola cordifolia</i> . <i>Carbohydrate Polymers</i> , 2012, 89, 259-268.	5.1	58
17	Study of oxidation and hydrolysis of oil impregnated paper insulation for transformers using a microcalorimeter. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2011, 18, 2059-2068.	1.8	17
18	Antibacterial activity of chemically defined chitosans: Influence of molecular weight, degree of acetylation and test organism. <i>International Journal of Food Microbiology</i> , 2011, 148, 48-54.	2.1	125

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19	Inhibition of <i>Bacillus cereus</i> spore outgrowth and multiplication by chitosan. <i>International Journal of Food Microbiology</i> , 2011, 149, 218-225.	2.1	30
20	Periodate oxidized alginates: Depolymerization kinetics. <i>Carbohydrate Polymers</i> , 2011, 86, 1595-1601.	5.1	67
21	Effect of mannuronate content and molecular weight of alginates on intestinal immunological activity through Peyer's patch cells of C3H/HeJ mice. <i>Carbohydrate Polymers</i> , 2011, 83, 629-634.	5.1	22
22	Preparation and characterization of branched chitosans. <i>Carbohydrate Polymers</i> , 2011, 83, 1558-1564.	5.1	23
23	Alginates as biomaterials in tissue engineering. <i>Carbohydrate Chemistry</i> , 2011, , 227-258.	0.3	132
24	Transcriptional Responses of <i>Bacillus cereus</i> towards Challenges with the Polysaccharide Chitosan. <i>PLoS ONE</i> , 2011, 6, e24304.	1.1	10
25	Calorimetric and light scattering study of interactions and macromolecular properties of native and hydrophobically modified hyaluronan. <i>Carbohydrate Polymers</i> , 2010, 81, 855-863.	5.1	13
26	Periodate oxidation of polysaccharides for modification of chemical and physical properties. <i>Carbohydrate Research</i> , 2010, 345, 1264-1271.	1.1	247
27	Cross-Linking and Depolymerisation of $^{13}\text{C}$ -Irradiated Fish Gelatin and Porcine Gelatin Studied by SEC-MALLS and SDS-PAGE: A Comparative Study. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2010, 21, 877-892.	1.9	17
28	Novel alginates prepared by independent control of chain stiffness and distribution of G-residues: Structure and gelling properties. <i>Carbohydrate Polymers</i> , 2009, 77, 725-735.	5.1	36
29	Sphagnum - a pectin-like polymer isolated from <i>Sphagnum</i> moss can inhibit the growth of some typical food spoilage and food poisoning bacteria by lowering the pH. <i>Journal of Applied Microbiology</i> , 2009, 106, 967-976.	1.4	61
30	An evaluation of tritium and fluorescence labelling combined with multi-detector SEC for the detection of carbonyl groups in polysaccharides. <i>Carbohydrate Polymers</i> , 2009, 76, 196-205.	5.1	16
31	Preparation of high purity monodisperse oligosaccharides derived from mannuronan by size-exclusion chromatography followed by semi-preparative high-performance anion-exchange chromatography with pulsed amperometric detection. <i>Carbohydrate Research</i> , 2009, 344, 255-259.	1.1	9
32	Interactions of polysaccharides extracted by mild acid hydrolysis from the leaves of <i>Sphagnum papillosum</i> with either phenylhydrazine, o-phenylenediamine and its oxidation products or collagen. <i>Carbohydrate Polymers</i> , 2008, 71, 550-558.	5.1	15
33	Chain stiffness and extension of chitosans and periodate oxidised chitosans studied by size-exclusion chromatography combined with light scattering and viscosity detectors. <i>Carbohydrate Polymers</i> , 2008, 74, 559-565.	5.1	62
34	The <i>Azotobacter vinelandii</i> AlgE mannuronan C-5-epimerase family is essential for the in vivo control of alginate monomer composition and for functional cyst formation. <i>Environmental Microbiology</i> , 2008, 10, 1760-1770.	1.8	33
35	Tailoring of Chitosans for Gene Delivery: Novel Self-Branched Glycosylated Chitosan Oligomers with Improved Functional Properties. <i>Biomacromolecules</i> , 2008, 9, 3268-3276.	2.6	75
36	Comment on "Conformational Changes and Aggregation of Alginic Acid as Determined By Fluorescence Correlation Spectroscopy". <i>Biomacromolecules</i> , 2007, 8, 3279-3279.	2.6	6

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37	A re-examination and partial characterisation of polysaccharides released by mild acid hydrolysis from the chlorite-treated leaves of <i>Sphagnum papillosum</i> . <i>Carbohydrate Polymers</i> , 2007, 67, 104-115.	5.1	37
38	Relationship between energetic stress and pro-apoptotic/cytoprotective kinase mechanisms in intestinal preservation. <i>Surgery</i> , 2007, 141, 795-803.	1.0	15
39	A Study of the Chain Stiffness and Extension of Alginates, in Vitro Epimerized Alginates, and Periodate-Oxidized Alginates Using Size-Exclusion Chromatography Combined with Light Scattering and Viscosity Detectors. <i>Biomacromolecules</i> , 2006, 7, 2136-2146.	2.6	176
40	Targeted gene delivery with trisaccharide-substituted chitosan oligomers in vitro and after lung administration in vivo. <i>Journal of Controlled Release</i> , 2006, 115, 103-112.	4.8	87
41	Identification and Characterization of an <i>Azotobacter vinelandii</i> Type I Secretion System Responsible for Export of the AlgE-Type Mannuronan C-5-Epimerases. <i>Journal of Bacteriology</i> , 2006, 188, 5551-5560.	1.0	31
42	Application of high-performance anion-exchange chromatography with pulsed amperometric detection and statistical analysis to study oligosaccharide distributions – a complementary method to investigate the structure and some properties of alginates. <i>Journal of Chromatography A</i> , 2005, 1093, 59-68.	1.8	33
43	Periodate oxidation of chitosans with different chemical compositions. <i>Carbohydrate Research</i> , 2005, 340, 679-684.	1.1	121
44	Probing macromolecular architectures of nanosized cyclic structures of (1 $\rightarrow$ 3)- $\beta$ -D-glucans by AFM and SEC-MALLS. <i>Carbohydrate Research</i> , 2005, 340, 971-979.	1.1	31
45	Comparison of chitosans with different molecular weights as possible wood preservatives. <i>Journal of Wood Science</i> , 2005, 51, 387-394.	0.9	42
46	Role of the <i>Pseudomonas fluorescens</i> Alginate Lyase (AlgL) in Clearing the Periplasm of Alginates Not Exported to the Extracellular Environment. <i>Journal of Bacteriology</i> , 2005, 187, 8375-8384.	1.0	80
47	Influence of Chitosan Structure on the Formation and Stability of DNA-Chitosan Polyelectrolyte Complexes. <i>Biomacromolecules</i> , 2005, 6, 3357-3366.	2.6	161
48	Improved chitosan-mediated gene delivery based on easily dissociated chitosan polyplexes of highly defined chitosan oligomers. <i>Gene Therapy</i> , 2004, 11, 1441-1452.	2.3	363
49	Determination of average degree of polymerisation and distribution of oligosaccharides in a partially acid-hydrolysed homopolysaccharide: A comparison of four experimental methods applied to mannuronan. <i>Journal of Chromatography A</i> , 2004, 1026, 271-281.	1.8	45
50	Polyelectrolyte Complexes: Interactions between Lignosulfonate and Chitosan. <i>Biomacromolecules</i> , 2003, 4, 232-239.	2.6	112
51	Comparison of Molecular Weight and Molecular Weight Distributions of Softwood and Hardwood Lignosulfonates. <i>Journal of Wood Chemistry and Technology</i> , 2003, 23, 197-215.	0.9	77
52	Molecular weight determination of lignosulfonates by size-exclusion chromatography and multi-angle laser light scattering. <i>Journal of Chromatography A</i> , 2002, 942, 191-199.	1.8	135
53	Preparation and characterisation of chitosans with oligosaccharide branches. <i>Carbohydrate Research</i> , 2002, 337, 2455-2462.	1.1	80
54	Macromolecular characterisation of three barley $\beta$ -glucan standards by size-exclusion chromatography combined with light scattering and viscometry: an inter-laboratory study. <i>Carbohydrate Polymers</i> , 2001, 45, 11-22.	5.1	47

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55	Gelation of periodate oxidised scleroglucan (scleraldehyde). Carbohydrate Polymers, 2001, 46, 241-248.	5.1	21
56	Preparation and characterisation of oligosaccharides produced by nitrous acid depolymerisation of chitosans. Carbohydrate Research, 2001, 333, 137-144.	1.1	158
57	Molecular weight, structure and shape of oat (1 $\alpha$ '3),(1 $\alpha$ '4)- $\beta$ -d-glucan fractions obtained by enzymatic degradation with (1 $\alpha$ '4)- $\beta$ -d-glucan 4-glucanohydrolase from <i>Trichoderma reesei</i> . Carbohydrate Polymers, 2001, 46, 275-285.	5.1	46
58	Resistance of biofilms containing alginate-producing bacteria to disintegration by an alginate degrading enzyme (AlgI). Biofouling, 2001, 17, 203-210.	0.8	18
59	SIZE EXCLUSION CHROMATOGRAPHY OF CELLULOSE DISSOLVED IN LiCl/DMAC USING MACROPOROUS MONODISPERSE POLY(STYRENE-CO-DIVINYLBENZENE) PARTICLES. Journal of Liquid Chromatography and Related Technologies, 2000, 23, 2277-2288.	0.5	12
60	Molecular Weight, Structure, and Shape of Oat (1 $\alpha$ '3),(1 $\alpha$ '4)- $\beta$ -d-Glucan Fractions Obtained by Enzymatic Degradation with Lichenase. Biomacromolecules, 2000, 1, 584-591.	2.6	47
61	Molecular Weight Dependency on the Production of the TNF Stimulated by Fractions of rye (13),(14)-beta- d-Glucan. Scandinavian Journal of Immunology, 2000, 52, 584-587.	1.3	10
62	Analysis of the conformational properties of $\beta$ - and $\gamma$ -carrageenan by size-exclusion chromatography combined with low-angle laser light scattering. Biopolymers, 1999, 49, 71-80.	1.2	44
63	Physicochemical studies on xylinan (acetan). II. Characterization by static light scattering. Biopolymers, 1998, 39, 721-728.	1.2	6
64	Free-radical degradation of triple-stranded scleroglucan by hydrogen peroxide and ferrous ions. Carbohydrate Polymers, 1998, 37, 41-48.	5.1	28
65	Sclerox-chitosan co-gels: Effects of charge density on swelling of gels in ionic aqueous solution and in poor solvents, and on the rehydration of dried gels. Polymer Gels and Networks, 1998, 6, 471-492.	0.6	24
66	Acid Hydrolysis of $\beta$ - and $\gamma$ -Carrageenan in the Disordered and Ordered Conformations: Characterization of Partially Hydrolyzed Samples and Single-Stranded Oligomers Released from the Ordered Structures. Macromolecules, 1998, 31, 1842-1851.	2.2	46
67	Metastable, Partially Depolymerized Xanthans and Rearrangements toward Perfectly Matched Duplex Structures. Macromolecules, 1996, 29, 2939-2944.	2.2	10
68	Static Light Scattering Studies on Xanthan in Aqueous Solutions. Macromolecules, 1996, 29, 3491-3498.	2.2	52
69	Dependence of the content of unsubstituted (cellulosic) regions in prehydrolysed xanthans on the rate of hydrolysis by <i>Trichoderma reesei</i> endoglucanase. International Journal of Biological Macromolecules, 1996, 18, 93-99.	3.6	8
70	Development of an artificial biofilm to study the effects of a single microcolony on mass transport. Journal of Microbiological Methods, 1996, 26, 161-169.	0.7	25
71	Release of disordered xanthan oligomers upon partial acid hydrolysis of double-stranded xanthan. Food Hydrocolloids, 1996, 10, 83-89.	5.6	21
72	Degradation of double-stranded xanthan by hydrogen peroxide in the presence of ferrous ions: comparison to acid hydrolysis. Carbohydrate Research, 1996, 280, 85-99.	1.1	27

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73	Macroporous, monodisperse particles and their application in aqueous size exclusion chromatography of high molecular weight polysaccharides. Carbohydrate Polymers, 1996, 29, 217-223.	5.1	17
74	Swelling and partial solubilization of alginic acid gel beads in acidic buffer. Carbohydrate Polymers, 1996, 29, 209-215.	5.1	67
75	Preparative and analytical size-exclusion chromatography of chitosans. Carbohydrate Polymers, 1996, 31, 253-261.	5.1	100
76	The influence of the conformational state of $\hat{\text{I}}^2$ - and $\hat{\text{I}}^1$ -carrageenan on the rate of acid hydrolysis. Carbohydrate Research, 1996, 288, 175-187.	1.1	42
77	Carboxylation of scleroglucan for controlled crosslinking by heavy metal ions. Carbohydrate Polymers, 1995, 27, 5-11.	5.1	20
78	Conformation dependent depolymerisation kinetics of polysaccharides studied by viscosity measurements. Carbohydrate Polymers, 1994, 24, 265-275.	5.1	54
79	The role of side-chains in the Cr <sup>3+</sup> -induced gelation of xanthan and xylinan (acetan) variants. Carbohydrate Polymers, 1994, 25, 25-29.	5.1	6
80	Temperature-Induced conformational transition in xanthans with partially hydrolyzed side chains. Biopolymers, 1993, 33, 151-161.	1.2	27
81	Depolymerization of double-stranded xanthan by acid hydrolysis: characterization of partially degraded double strands and single-stranded oligomers released from the ordered structures. Macromolecules, 1993, 26, 6111-6120.	2.2	60
82	Degradation of multistranded polymers: effects of interstrand stabilization in xanthan and scleroglucan studied by a Monte Carlo method. Macromolecules, 1992, 25, 2209-2214.	2.2	21
83	Hydrolysis of xanthan in dilute acid: Effects on chemical composition, conformation, and intrinsic viscosity. Carbohydrate Research, 1991, 214, 55-69.	1.1	40
84	Polysaccharide research in Trondheim. Carbohydrate Polymers, 1990, 13, 239-255.	5.1	28
85	The role of extracellular polysaccharides in biofilms. Journal of Biotechnology, 1989, 10, 181-202.	1.9	184
86	Long-term storage of xanthan in seawater at elevated temperature: physical dimensions and chemical composition of degradation products. International Journal of Biological Macromolecules, 1989, 11, 137-144.	3.6	10
87	Flexibility and length of human bronchial mucin studied using low-shear viscometry, birefringence relaxation analysis, and electron microscopy. Biopolymers, 1985, 24, 1683-1704.	1.2	33