

# Bjrn E Christensen

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

87  
papers

3,786  
citations

34  
h-index

59  
g-index

87  
ext. papers

4,051  
ext. citations

6.2  
avg, IF

5.12  
L-index

| #  | Paper  | IF   | Citations |
|----|--|------|-----------|
| 87 | Inter-laboratory evaluation of SEC-post-column calcofluor for determination of the weight-average molar mass of cereal $\beta$ -glucan. <i>Carbohydrate Polymers</i> , <b>2015</b> , 124, 254-64   | 10.3 | 14        |
| 86 | In situ gelation for cell immobilization and culture in alginate foam scaffolds. <i>Tissue Engineering - Part A</i> , <b>2014</b> , 20, 600-10   | 3.9  | 11        |
| 85 | Effects of physical and chemical treatments on the molecular weight and degradation of alginate-hydroxyapatite composites. <i>Macromolecular Bioscience</i> , <b>2014</b> , 14, 872-80   | 5.5  | 14        |
| 84 | Influence of amino acids, buffers, and pH on the $\gamma$ -radiation-induced degradation of alginates. <i>Biomacromolecules</i> , <b>2014</b> , 15, 4590-7   | 6.9  | 5         |
| 83 | Chemical characterization and complement fixation of pectins from <i>Cola cordifolia</i> leaves. <i>Carbohydrate Polymers</i> , <b>2014</b> , 102, 472-80  | 10.3 | 13        |
| 82 | Ionically gelled alginate foams: physical properties controlled by type, amount and source of gelling ions. <i>Carbohydrate Polymers</i> , <b>2014</b> , 99, 249-56  | 10.3 | 27        |
| 81 | Higher order structures of a bioactive, water-soluble (1 $\rightarrow$ 3)- $\beta$ -D-glucan derived from <i>Saccharomyces cerevisiae</i> . <i>Carbohydrate Polymers</i> , <b>2013</b> , 92, 1026-32   | 10.3 | 10        |
| 80 | Degradation of cellulosic insulation in power transformers: a SEC/MALLS study of artificially aged transformer papers. <i>Cellulose</i> , <b>2013</b> , 20, 2003-2011  | 5.5  | 16        |
| 79 | 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> , <b>2013</b> , 1281, 32-7                      | 4.5  | 29        |
| 78 | 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> , <b>2013</b> , 1305, 109-13 | 4.5  | 6         |
| 77 | Periodate oxidation and macromolecular compaction of hyaluronan. <i>Pure and Applied Chemistry</i> , <b>2013</b> , 85, 1893-1900   | 2.1  | 12        |
| 76 | Ionically gelled alginate foams: physical properties controlled by operational and macromolecular parameters. <i>Biomacromolecules</i> , <b>2012</b> , 13, 3703-10   | 6.9  | 43        |
| 75 | Chain length distribution and aggregation of branched (1 $\rightarrow$ 3)- $\beta$ -D-glucans from <i>Saccharomyces cerevisiae</i> . <i>Carbohydrate Polymers</i> , <b>2012</b> , 90, 1092-9   | 10.3 | 5         |
| 74 | The localisation of pectin in Sphagnum moss leaves and its role in preservation. <i>Carbohydrate Polymers</i> , <b>2012</b> , 87, 1326-1332  | 10.3 | 17        |
| 73 | Chemical and biological characterization of pectin-like polysaccharides from the bark of the Malian medicinal tree <i>Cola cordifolia</i> . <i>Carbohydrate Polymers</i> , <b>2012</b> , 89, 259-68  | 10.3 | 47        |
| 72 | Study of oxidation and hydrolysis of oil impregnated paper insulation for transformers using a microcalorimeter. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2011</b> , 18, 2059-2068   | 2.3  | 14        |
| 71 | Antibacterial activity of chemically defined chitosans: influence of molecular weight, degree of acetylation and test organism. <i>International Journal of Food Microbiology</i> , <b>2011</b> , 148, 48-54   | 5.8  | 101       |

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| 70 | Inhibition of <i>Bacillus cereus</i> spore outgrowth and multiplication by chitosan. <i>International Journal of Food Microbiology</i> , <b>2011</b> , 149, 218-25  | 5.8  | 22  |
| 69 | Periodate oxidized alginates: Depolymerization kinetics. <i>Carbohydrate Polymers</i> , <b>2011</b> , 86, 1595-1601   | 10.3 | 53  |
| 68 | 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> , <b>2011</b> , 83, 629-634  | 10.3 | 20  |
| 67 | Preparation and characterization of branched chitosans. <i>Carbohydrate Polymers</i> , <b>2011</b> , 83, 1558-1564  | 10.3 | 22  |
| 66 | Transcriptional responses of <i>Bacillus cereus</i> towards challenges with the polysaccharide chitosan. <i>PLoS ONE</i> , <b>2011</b> , 6, e24304  | 3.7  | 9   |
| 65 | Chapter 9: Alginates as biomaterials in tissue engineering. <i>Carbohydrate Chemistry</i> , <b>2011</b> , 227-258   | 3    | 114 |
| 64 | Cross-linking and depolymerisation of gamma-irradiated fish gelatin and porcine gelatin studied by SEC-MALLS and SDS-PAGE: a comparative study. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2010</b> , 21, 877-92  | 3.5  | 11  |
| 63 | Calorimetric and light scattering study of interactions and macromolecular properties of native and hydrophobically modified hyaluronan. <i>Carbohydrate Polymers</i> , <b>2010</b> , 81, 855-863   | 10.3 | 12  |
| 62 | Periodate oxidation of polysaccharides for modification of chemical and physical properties. <i>Carbohydrate Research</i> , <b>2010</b> , 345, 1264-71  | 2.9  | 196 |
| 61 | Novel alginates prepared by independent control of chain stiffness and distribution of G-residues: Structure and gelling properties. <i>Carbohydrate Polymers</i> , <b>2009</b> , 77, 725-735   | 10.3 | 32  |
| 60 | Sphagnum--a pectin-like polymer isolated from Sphagnum moss can inhibit the growth of some typical food spoilage and food poisoning bacteria by lowering the pH. <i>Journal of Applied Microbiology</i> , <b>2009</b> , 106, 967-76   | 4.7  | 43  |
| 59 | An evaluation of tritium and fluorescence labelling combined with multi-detector SEC for the detection of carbonyl groups in polysaccharides. <i>Carbohydrate Polymers</i> , <b>2009</b> , 76, 196-205  | 10.3 | 15  |
| 58 | 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> , <b>2009</b> , 344, 255-9 | 2.9  | 8   |
| 57 | 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> , <b>2008</b> , 10, 1760-70  | 5.2  | 29  |
| 56 | Tailoring of chitosans for gene delivery: novel self-branched glycosylated chitosan oligomers with improved functional properties. <i>Biomacromolecules</i> , <b>2008</b> , 9, 3268-76  | 6.9  | 71  |
| 55 | 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> , <b>2008</b> , 71, 550-558                          | 10.3 | 12  |
| 54 | 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> , <b>2008</b> , 74, 559-565   | 10.3 | 59  |
| 53 | Comment on "conformational changes and aggregation of alginic acid as determined by fluorescence correlation spectroscopy". <i>Biomacromolecules</i> , <b>2007</b> , 8, 3279; discussion 3280   | 6.9  | 3   |

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| 52 | 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> , <b>2007</b> , 67, 104-115  | 10.3 | 30  |
| 51 | Relationship between energetic stress and pro-apoptotic/cytoprotective kinase mechanisms in intestinal preservation. <i>Surgery</i> , <b>2007</b> , 141, 795-803   | 3.6  | 15  |
| 50 | Targeted gene delivery with trisaccharide-substituted chitosan oligomers in vitro and after lung administration in vivo. <i>Journal of Controlled Release</i> , <b>2006</b> , 115, 103-12  | 11.7 | 83  |
| 49 | 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> , <b>2006</b> , 188, 5551-60   | 3.5  | 29  |
| 48 | 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> , <b>2006</b> , 7, 2136-46   | 6.9  | 156 |
| 47 | Influence of chitosan structure on the formation and stability of DNA-chitosan polyelectrolyte complexes. <i>Biomacromolecules</i> , <b>2005</b> , 6, 3357-66  | 6.9  | 149 |
| 46 | 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> , <b>2005</b> , 1093, 59-68 | 4.5  | 28  |
| 45 | Periodate oxidation of chitosans with different chemical compositions. <i>Carbohydrate Research</i> , <b>2005</b> , 340, 679-84  | 2.9  | 104 |
| 44 | Probing macromolecular architectures of nanosized cyclic structures of (1-->3)-beta-D-glucans by AFM and SEC-MALLS. <i>Carbohydrate Research</i> , <b>2005</b> , 340, 971-9  | 2.9  | 28  |
| 43 | Comparison of chitosans with different molecular weights as possible wood preservatives. <i>Journal of Wood Science</i> , <b>2005</b> , 51, 387-394  | 2.4  | 33  |
| 42 | 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> , <b>2005</b> , 187, 8375-84   | 3.5  | 72  |
| 41 | Improved chitosan-mediated gene delivery based on easily dissociated chitosan polyplexes of highly defined chitosan oligomers. <i>Gene Therapy</i> , <b>2004</b> , 11, 1441-52   | 4    | 327 |
| 40 | 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> , <b>2004</b> , 1026, 271-81   | 4.5  | 43  |
| 39 | Comparison of Molecular Weight and Molecular Weight Distributions of Softwood and Hardwood Lignosulfonates. <i>Journal of Wood Chemistry and Technology</i> , <b>2003</b> , 23, 197-215  | 2    | 70  |
| 38 | Polyelectrolyte Complexes: Interactions between Lignosulfonate and Chitosan. <i>Biomacromolecules</i> , <b>2003</b> , 4, 232-9   | 6.9  | 105 |
| 37 | Molecular weight determination of lignosulfonates by size-exclusion chromatography and multi-angle laser light scattering. <i>Journal of Chromatography A</i> , <b>2002</b> , 942, 191-9   | 4.5  | 120 |
| 36 | Preparation and characterisation of chitosans with oligosaccharide branches. <i>Carbohydrate Research</i> , <b>2002</b> , 337, 2455-62   | 2.9  | 71  |
| 35 | 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> , <b>2001</b> , 45, 11-22  | 10.3 | 44  |

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| 34 | Gelation of periodate oxidised scleroglucan (scleraldehyde). <i>Carbohydrate Polymers</i> , <b>2001</b> , 46, 241-248  | 10.3 | 19  |
| 33 | Preparation and characterisation of oligosaccharides produced by nitrous acid depolymerisation of chitosans. <i>Carbohydrate Research</i> , <b>2001</b> , 333, 137-44  | 2.9  | 135 |
| 32 | Molecular weight, structure and shape of oat (1→3),(1→4)-β-glucan fractions obtained by enzymatic degradation with (1→4)-β-glucan 4-glucanohydrolase from <i>Trichoderma reesei</i> . <i>Carbohydrate Polymers</i> , <b>2001</b> , 46, 275-285               | 10.3 | 42  |
| 31 | Resistance of biofilms containing alginate-producing bacteria to disintegration by an alginate degrading enzyme (AlgI). <i>Biofouling</i> , <b>2001</b> , 17, 203-210  | 3.3  | 15  |
| 30 | SIZE EXCLUSION CHROMATOGRAPHY OF CELLULOSE DISSOLVED IN LiCl/DMAC USING MACROPOROUS MONODISPERSE POLY(STYRENE-CO-DIVINYLBENZENE) PARTICLES. <i>Journal of Liquid Chromatography and Related Technologies</i> , <b>2000</b> , 23, 2277-2288                   | 1.3  | 9   |
| 29 | Molecular weight, structure, and shape of oat (1→3),(1→4)-β-D-glucan fractions obtained by enzymatic degradation with lichenase. <i>Biomacromolecules</i> , <b>2000</b> , 1, 584-91  | 6.9  | 45  |
| 28 | Molecular weight dependency on the production of the TNF stimulated by fractions of rye (1→3),(1→4)-β-D-glucan. <i>Scandinavian Journal of Immunology</i> , <b>2000</b> , 52, 584-7  | 3.4  | 9   |
| 27 | Analysis of the conformational properties of β and γ-carrageenan by size-exclusion chromatography combined with low-angle laser light scattering. <i>Biopolymers</i> , <b>1999</b> , 49, 71-80   | 2.2  | 39  |
| 26 | Physicochemical studies on xylinan (acetan). II. Characterization by static light scattering. <i>Biopolymers</i> , <b>1998</b> , 39, 721-728   | 2.2  | 6   |
| 25 | Free-radical degradation of triple-stranded scleroglucan by hydrogen peroxide and ferrous ions. <i>Carbohydrate Polymers</i> , <b>1998</b> , 37, 41-48   | 10.3 | 28  |
| 24 | 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. <i>Polymer Gels and Networks</i> , <b>1998</b> , 6, 471-492                                    |      | 24  |
| 23 | Acid Hydrolysis of β and γ-Carrageenan in the Disordered and Ordered Conformations: Characterization of Partially Hydrolyzed Samples and Single-Stranded Oligomers Released from the Ordered Structures. <i>Macromolecules</i> , <b>1998</b> , 31, 1842-1851 | 5.5  | 41  |
| 22 | Metastable, Partially Depolymerized Xanthans and Rearrangements toward Perfectly Matched Duplex Structures. <i>Macromolecules</i> , <b>1996</b> , 29, 2939-2944  | 5.5  | 8   |
| 21 | Static Light Scattering Studies on Xanthan in Aqueous Solutions. <i>Macromolecules</i> , <b>1996</b> , 29, 3491-3498   | 5.5  | 50  |
| 20 | Dependence of the content of unsubstituted (cellulosic) regions in prehydrolysed xanthans on the rate of hydrolysis by <i>Trichoderma reesei</i> endoglucanase. <i>International Journal of Biological Macromolecules</i> , <b>1996</b> , 18, 93-9           | 7.9  | 7   |
| 19 | Development of an artificial biofilm to study the effects of a single microcolony on mass transport. <i>Journal of Microbiological Methods</i> , <b>1996</b> , 26, 161-169   | 2.8  | 22  |
| 18 | Release of disordered xanthan oligomers upon partial acid hydrolysis of double-stranded xanthan. <i>Food Hydrocolloids</i> , <b>1996</b> , 10, 83-89   | 10.6 | 13  |
| 17 | Degradation of double-stranded xanthan by hydrogen peroxide in the presence of ferrous ions: comparison to acid hydrolysis. <i>Carbohydrate Research</i> , <b>1996</b> , 280, 85-99  | 2.9  | 24  |

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| 16 | Macroporous, monodisperse particles and their application in aqueous size exclusion chromatography of high molecular weight polysaccharides. <i>Carbohydrate Polymers</i> , <b>1996</b> , 29, 217-223   | 10.3 | 16  |
| 15 | Swelling and partial solubilization of alginic acid gel beads in acidic buffer. <i>Carbohydrate Polymers</i> , <b>1996</b> , 29, 209-215  | 10.3 | 62  |
| 14 | Preparative and analytical size-exclusion chromatography of chitosans. <i>Carbohydrate Polymers</i> , <b>1996</b> , 31, 253-261   | 10.3 | 89  |
| 13 | The influence of the conformational state of $\beta$ - and $\beta$ -arrageenan on the rate of acid hydrolysis. <i>Carbohydrate Research</i> , <b>1996</b> , 288, 175-187  | 2.9  | 41  |
| 12 | Carboxylation of scleroglucan for controlled crosslinking by heavy metal ions. <i>Carbohydrate Polymers</i> , <b>1995</b> , 27, 5-11  | 10.3 | 18  |
| 11 | Conformation dependent depolymerisation kinetics of polysaccharides studied by viscosity measurements. <i>Carbohydrate Polymers</i> , <b>1994</b> , 24, 265-275   | 10.3 | 51  |
| 10 | The role of side-chains in the $\text{Cr}^{3+}$ -induced gelation of xanthan and xylinan (acetan) variants. <i>Carbohydrate Polymers</i> , <b>1994</b> , 25, 25-29  | 10.3 | 5   |
| 9  | Depolymerization of double-stranded xanthan by acid hydrolysis: characterization of partially degraded double strands and single-stranded oligomers released from the ordered structures. <i>Macromolecules</i> , <b>1993</b> , 26, 6111-6120 | 5.5  | 54  |
| 8  | Temperature-induced conformational transition in xanthans with partially hydrolyzed side chains. <i>Biopolymers</i> , <b>1993</b> , 33, 151-61  | 2.2  | 22  |
| 7  | Degradation of multistranded polymers: effects of interstrand stabilization in xanthan and scleroglucan studied by a Monte Carlo method. <i>Macromolecules</i> , <b>1992</b> , 25, 2209-2214  | 5.5  | 20  |
| 6  | Hydrolysis of xanthan in dilute acid: Effects on chemical composition, conformation, and intrinsic viscosity. <i>Carbohydrate Research</i> , <b>1991</b> , 214, 55-69   | 2.9  | 37  |
| 5  | Polysaccharide research in Trondheim. <i>Carbohydrate Polymers</i> , <b>1990</b> , 13, 239-255  | 10.3 | 15  |
| 4  | The role of extracellular polysaccharides in biofilms. <i>Journal of Biotechnology</i> , <b>1989</b> , 10, 181-202  | 3.7  | 153 |
| 3  | Long-term storage of xanthan in seawater at elevated temperature: physical dimensions and chemical composition of degradation products. <i>International Journal of Biological Macromolecules</i> , <b>1989</b> , 11, 137-44                  | 7.9  | 9   |
| 2  | Flexibility and length of human bronchial mucin studied using low-shear viscometry, birefringence relaxation analysis, and electron microscopy. <i>Biopolymers</i> , <b>1985</b> , 24, 1683-704   | 2.2  | 32  |
| 1  | Alginate-based diblock polymers: preparation, characterization and Ca-induced self-assembly. <i>Polymer Chemistry</i> ,   | 4.9  | 4   |