# Hans Leemhuis

List of Publications by Year
in descending order

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|---|---|---|---|
| 32 papers | 2,605 citations | 331670 21 h-index | 414414 32 g-index |
| 32 all docs | 32 docs citations | 32 times ranked | 2406 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Structural elements determining the transglycosylating activity of glycoside hydrolase family 57 glycogen branching enzymes. Proteins: Structure, Function and Bioinformatics, 2022, 90, 155-163. | 2.6 | 9 |
| 2 | The thermostable 4,6-Î±-glucanotransferase of <i>Bacillus coagulans</i> DSM 1 synthesizes isomaltooligosaccharides. Amylase, 2021, 5, 13-22. | 1.6 | 8 |
| 3 | GtfC Enzyme of <i>Geobacillus</i> sp. 12AMOR1 Represents a Novel Thermostable Type of GH70 4,6-Î±-Glucanotransferase That Synthesizes a Linear Alternating (Î±1 â†’ 6)/(Î±1 â†’ 4) Î±-Glucan and Delays Bread Staling. Journal of Agricultural and Food Chemistry, 2021, 69, 9859-9868. | 5.2 | 7 |
| 4 | Digestion kinetics of low, intermediate and highly branched maltodextrins produced from gelatinized starches with various microbial glycogen branching enzymes. Carbohydrate Polymers, 2020, 247, 116729. | 10.2 | 12 |
| 5 | Characterization of the GH13 and GH57 glycogen branching enzymes from Petrotoga mobilis SJ95 and potential role in glycogen biosynthesis. PLoS ONE, 2019, 14, e0219844. | 2.5 | 12 |
| 6 | Identification of Thermotoga maritima MSB8 GH57 Î±-amylase AmyC as a glycogen-branching enzyme with high hydrolytic activity. Applied Microbiology and Biotechnology, 2019, 103, 6141-6151. | 3.6 | 12 |
| 7 | Synthesis of highly branched Î±-glucans with different structures using GH13 and GH57 glycogen branching enzymes. Carbohydrate Polymers, 2019, 216, 231-237. | 10.2 | 18 |
| 8 | Biochemical Characterization of the Lactobacillus reuteri Glycoside Hydrolase Family 70 GTFB Type of 4,6-Î±-Glucanotransferase Enzymes That Synthesize Soluble Dietary Starch Fibers. Applied and Environmental Microbiology, 2015, 81, 7223-7232. | 3.1 | 54 |
| 9 | Isomalto/Malto-Polysaccharide, A Novel Soluble Dietary Fiber Made Via Enzymatic Conversion of Starch. Journal of Agricultural and Food Chemistry, 2014, 62, 12034-12044. | 5.2 | 73 |
| 10 | 4,6-Î±-Glucanotransferase activity occurs more widespread in Lactobacillus strains and constitutes a separate GH70 subfamily. Applied Microbiology and Biotechnology, 2013, 97, 181-193. | 3.6 | 52 |
| 11 | Gluco-oligomers initially formed by the reuteransucrase enzyme of Lactobacillus reuteri 121 incubated with sucrose and malto-oligosaccharides. Glycobiology, 2013, 23, 1084-1096. | 2.5 | 33 |
| 12 | Starch modification with microbial alpha-glucanotransferase enzymes. Carbohydrate Polymers, 2013, 93, 116-121. | 10.2 | 115 |
| 13 | Glucansucrases: Three-dimensional structures, reactions, mechanism, Î±-glucan analysis and their implications in biotechnology and food applications. Journal of Biotechnology, 2013, 163, 250-272. | 3.8 | 250 |
| 14 | Structural characterization of linear isomalto-/malto-oligomer products synthesized by the novel GTFB 4,6-Î±-glucanotransferase enzyme from Lactobacillus reuteri 121. Glycobiology, 2012, 22, 517-528. | 2.5 | 60 |
| 15 | Glycosidic bond specificity of glucansucrases: on the role of acceptor substrate binding residues. Biocatalysis and Biotransformation, 2012, 30, 366-376. | 2.0 | 53 |
| 16 | The role of conserved inulosucrase residues in the reaction and product specificity of <i>Lactobacillusâ€ƒreuteri</i> inulosucrase. FEBS Journal, 2012, 279, 3612-3621. | 4.7 | 23 |
| 17 | 4,6-Î±-Glucanotransferase, a Novel Enzyme That Structurally and Functionally Provides an Evolutionary Link between Glycoside Hydrolase Enzyme Families 13 and 70. Applied and Environmental Microbiology, 2011, 77, 8154-8163. | 3.1 | 81 |
| 18 | Engineering of cyclodextrin glucanotransferases and the impact for biotechnological applications. Applied Microbiology and Biotechnology, 2010, 85, 823-835. | 3.6 | 157 |

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|---|---|---|---|
| 19 | Inulin and levan synthesis by probiotic Lactobacillus gasseri strains: characterization of three novel fructansucrase enzymes and their fructan products. Microbiology (United Kingdom), 2010, 156, 1264-1274. | 1.8 | 93 |
| 20 | Directed evolution of enzymes: Library screening strategies. IUBMB Life, 2009, 61, 222-228. | 3.4 | 99 |
| 21 | Single Amino Acid Mutations Interchange the Reaction Specificities of Cyclodextrin Glycosyltransferase and the Acarbose-Modifying Enzyme Acarviosyl Transferaseâ€. Biochemistry, 2004, 43, 13204-13213. | 2.5 | 25 |
| 22 | High-throughput screening for gene libraries expressing carbohydrate hydrolase activity. Biotechnology Letters, 2003, 25, 1643-1645. | 2.2 | 5 |
| 23 | Improved thermostability of bacillus circulans cyclodextrin glycosyltransferase by the introduction of a salt bridge. Proteins: Structure, Function and Bioinformatics, 2003, 54, 128-134. | 2.6 | 38 |
| 24 | Engineering cyclodextrin glycosyltransferase into a starch hydrolase with a high exo-specificity. Journal of Biotechnology, 2003, 103, 203-212. | 3.8 | 16 |
| 25 | Conversion of Cyclodextrin Glycosyltransferase into a Starch Hydrolase by Directed Evolution:â€‰ The Role of Alanine 230 in Acceptor Subsite +1,. Biochemistry, 2003, 42, 7518-7526. | 2.5 | 57 |
| 26 | The fully conserved Asp residue in conserved sequence region I of the Î±-amylase family is crucial for the catalytic site architecture and activity. FEBS Letters, 2003, 541, 47-51. | 2.8 | 25 |
| 27 | Engineering of Hydrolysis Reaction Specificity in the Transglycosylase Cyclodextrin Glycosyltransferase. Biocatalysis and Biotransformation, 2003, 21, 261-270. | 2.0 | 9 |
| 28 | Hydrolysis and Transglycosylation Reaction Specificity of Cyclodextrin Glycosyltransferases. Journal of Applied Glycoscience (1999), 2003, 50, 263-271. | 0.7 | 6 |
| 29 | The Remote Substrate Binding Subsite âˆ’6 in Cyclodextrin-glycosyltransferase Controls the Transferase Activity of the Enzyme via an Induced-fit Mechanism. Journal of Biological Chemistry, 2002, 277, 1113-1119. | 3.4 | 43 |
| 30 | Properties and applications of starch-converting enzymes of the Î±-amylase family. Journal of Biotechnology, 2002, 94, 137-155. | 3.8 | 1,075 |
| 31 | Mutations converting cyclodextrin glycosyltransferase from a transglycosylase into a starch hydrolase. FEBS Letters, 2002, 514, 189-192. | 2.8 | 47 |
| 32 | Thermoanaerobacterium thermosulfurigenes cyclodextrin glycosyltransferase. FEBS Journal, 2002, 270, 155-162. | 0.2 | 38 |