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| Titolo | Starch Structure, Functionality and Application in Foods [[electronic resource] /] / edited by Shujun Wang |
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| Descrizione fisica | 1 online resource (177 pages) |
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| Soggetti | Biochemistry Food—Biotechnology Biochemistry, general Food Science Midó Bioquímica Biotecnologia alimentària Llibres electrònics |
| Lingua di pubblicazione | Inglese |
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| Nota di contenuto | Chapter 1. History of Starch Research -- Chapter 2. Botanical Sources of Starch -- Chapter 3. Fine Structure of Amylose and Amylopectin -- Chapter 4. Multi-scale Structures of Starch Granules -- Chapter 5. Amylose-Lipid Complex -- Chapter 6. Phase Transitions of Starch and Molecular Mechanisms -- Chapter 7. Rheological, Pasting and Textural Properties of Starch -- Chapter 8. Starch Modification and Application -- Chapter 9. In vitro Starch Digestion: Mechanisms and Kinetic Models. |
| Sommario/riassunto | The book summarizes the latest research on starch structures and how these structures occur during food processing and storage. Discussing the origins, multi-scale granule structures and functional properties of starch as well as starch digestion, it focuses on the relationship between starch structure and functionality, the phase transition mechanism, the molecular disassembly and self-assembly of starch during food processing and storage and their effects on starch digestion. As such, the book provides a comprehensive overview of |

starch structure and functionality for researchers and postgraduate students in the field of food chemistry, carbohydrate polymers, polymer chemistry, food ingredients and food processing as well as human nutrition and health.
