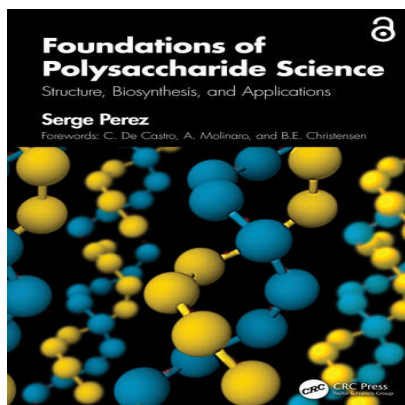
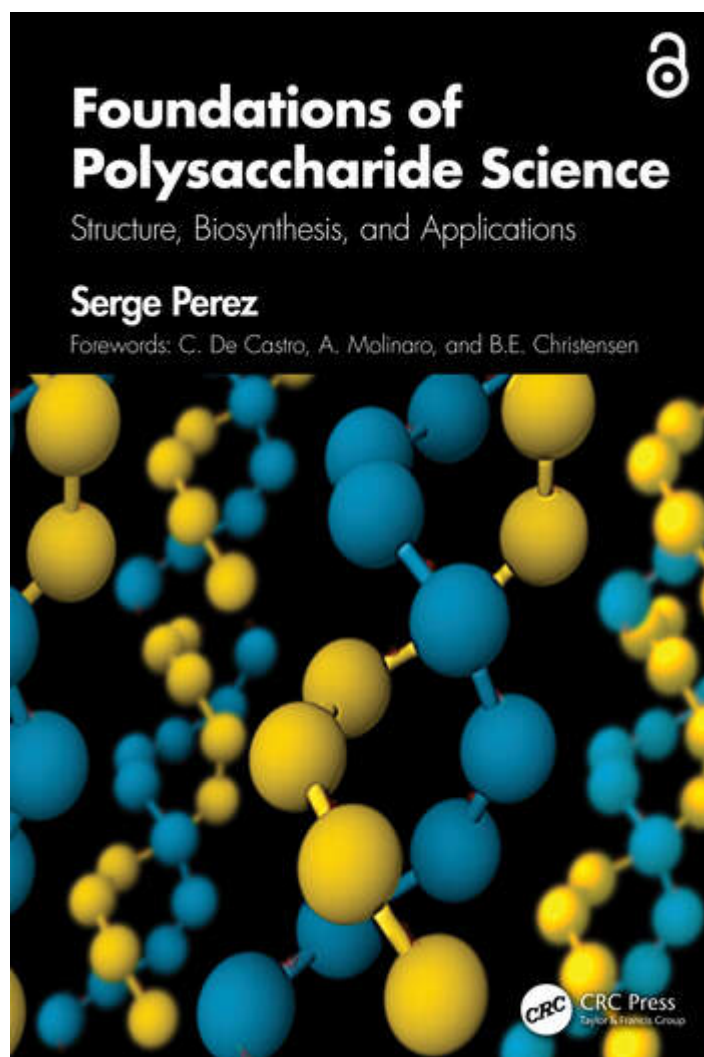




Foundations of Polysaccharide Science

Description

This book examines the role of polysaccharides as essential biopolymers, tracing their origins, structural organization, and applications in materials science, healthcare, and environmental sustainability. It provides a detailed exploration of their biosynthesis, functional modifications, and industrial uses. By connecting molecular science with practical applications, the book highlights the importance of polysaccharides in advancing biomedical technologies and sustainable materials



- **Key Features:**

- Explains the genesis and natural sources of polysaccharides across plants, animals, fungi, bacteria, and algae.
- Describes the biosynthesis pathways and functional modifications of polysaccharides for diverse applications.
- Highlights industrial uses, including their roles in material making, coatings, gels, and 3D structures.
- Explores biomedical applications such as wound healing, biofilm disruption, and anticancer activity.
- Provides insights into the structural and functional versatility of polysaccharides in sustaining life.

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10. Conclusion

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