

1. Record Nr.	UNINA9911002552803321
Titolo	Biofilm Applications to Revolutionize Food Technology // edited by Tanmay Sarkar, Dibyajit Lahiri, Moupriya Nag, Debasmita Bhattacharya
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-031-85205-2
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (VI, 419 p. 43 illus., 38 illus. in color.)
Disciplina	641.3 664
Soggetti	Food science Food - Microbiology Food - Safety measures Food security Food - Sensory evaluation Food Science Food Microbiology Food Safety Food Engineering Food Security Sensory Evaluation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Enigmatic World of Biofilms -- Microbial Life: Foundations and Diversity -- Architectural Marvel: Biofilm Formation -- Biofilm Dynamics in Food Environments -- Resilience and Adaptability of Biofilms -- Taste Alchemy: Biofilm's Influence -- Textural Symphony: Biofilm's Impact on Food -- Aroma Amplification by Biofilms -- Prolonging Perfection: Biofilm and Shelf Life -- Ensuring Safety: Mitigating Biofilm Risks -- Fermentation Frontiers with Biofilms -- Elevating Flavors: Biofilm Innovations,- Nutritional Fortification: Biofilm Contributions -- Reducing Waste: Biofilm Sustainability -- Case Studies: Biofilm-Assisted Transformations -- Cultivating Cultures: Biofilm in Cheese Making -- Brewing Wonders: Biofilm in Beverages --

Fresh Produce Challenges: Biofilm Solutions -- Ethical Quandaries of Biofilm Utilization -- Consumer Perspectives on Biofilm-Enhanced Foods -- Regulatory Frameworks for Biofilm Integration -- Future Visions: Biofilm's Global Impact -- Insights from Food Technologists -- Industry Voices on Biofilm Innovations -- Navigating the Future: Biofilm Trajectories.

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## Sommario/riassunto

Biofilm Applications to Transform the Food Industry is a sweeping introduction to the world of biofilms, illuminating their potential to revolutionize the landscape of both food safety and culinary innovation. This groundbreaking work delves into the various methods through which biofilms improve quality and sensory aspects, while also enhancing overall safety and sustainability. At its core, this book addresses the preeminent challenge facing the food industry: how to optimize taste, enhance safety and extend shelf life without compromising nutritional value. It offers a dynamic blueprint for chefs, food scientists, and industry professionals to leverage biofilm usage, exploring cutting-edge techniques that revolutionize fermentation, flavor enhancement, and waste reduction. By decoding the intricate mechanisms of biofilm interactions, this work unveils solutions to persistent industry challenges, providing practical insights and strategies to elevate culinary experiences while meeting consumer demands for healthier, safer, and more flavorful foods. Biofilm Applications to Transform the Food Industry is an indispensable guide for culinary professionals, food technologists, and enthusiasts seeking to stay ahead in a rapidly evolving industry. It equips readers with the tools to navigate the complexities of biofilm applications, empowering them to innovate, create ethically sound products, and contribute to a more sustainable future. This title's relevance lies in its ability to bridge the gap between cutting-edge science and practical culinary applications, making it an essential resource for those passionate about shaping the future of food technology. .

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