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Titolo	Electrolyzed Water in Food: Fundamentals and Applications / / edited by Tian Ding, Deog-Hwan Oh, Donghong Liu
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ISBN	981-13-3807-8
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (280 pages)
Disciplina	641.3
Soggetti	Food—Biotechnology Microbiology Biotechnology Agriculture Food Science Food Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Generation of EW -- Decontamination Efficacy and Principles of EW -- Pesticide Degradation of food by EW -- Hurdle Enhancement of EW with Other techniques -- Application of EW in fruits and vegetables -- Application of EW in Poultry and Meat -- Application of EW on Aquatic Product -- Application of EW on environment sterilization -- Application of EW on livestock -- Application of EW in agriculture -- Safety evaluation of EW -- Future trends.
Sommario/riassunto	This book provides fundamentals, highlights recent developments and offers new perspectives relating to the use of electrolyzed water (EW) as an emerging user- and environmental-friendly broad-spectrum sanitizer, with particular focus on the food industry. It addresses the generation, inactivation, pesticide degradation and safety of food by EW, illustrates the mechanism of the germicidal action of EW and its antimicrobial efficacy against a variety of microorganisms in suspensions. In addition, the sanitizing effects of combining EW with various chemical and physical sanitizing technologies have been evaluated, and recent developments and applications of EW in various areas including fruits and vegetables, meat, aquatic products,

environment sterilization, livestock and agriculture has been described. The book can be a go-to reference book of EW for: (1) Researchers who need to understand the role of various parameters in its generation, the bactericidal mecha nism of EW and its wide applications for further research and development; (2) Equipment producers who need comprehensive understanding of various factors (e.g. type of electrolyte, flow rates of water and electrolyte) which govern the efficacy of EW and developing its generators; (3) Food processors who need good understanding of EW in order to implement it in the operations and supervisors who need to balance the advantages and limitations of EW and ensuring its safe use.