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| 1. Record Nr.           | UNINA9910824842603321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Titolo                  | DNA methods in food safety : molecular typing of foodborne and waterborne bacterial pathogens // editors, Omar A. Oyarzabal, Sophia Kathariou ; contributors, Joao Andre Carrico [et al.]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Pubbl/distr/stampa      | Chichester, [England] : , : Wiley Blackwell, , 2014<br>©2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Descrizione fisica      | 1 online resource (xiv, 392 pages)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Disciplina              | 363.1926                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Soggetti                | Food - Safety measures<br>Food contamination - Prevention<br>Food industry and trade - Safety measures<br>Water - Microbiology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Note generali           | Description based upon print version of record.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Nota di bibliografia    | Includes bibliographical references at the end of each chapters and index.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Nota di contenuto       | Polymerase chain reaction based subtyping methods / Yi Chen and Insook Son -- Pulsed-field gel electrophoresis and the molecular epidemiology of foodborne pathogens / Mohana Ray and David C. Schwartz -- Multilocus sequence typing : an adaptable tool for understanding the global epidemiology of bacterial pathogens / Stephen J. Knabel -- High-throughput sequencing / Xiangyu Deng, Lee S. Katz, Patricia I. Fields, and Wei Zhang -- Analysis of typing results / Joo Andr Carrio and Mario Ramirez -- Databases and internet applications / G. Gopinath, K. Hari, R. Jain, M.H. Kothary, K.G. Jarvis, A. A. Franco, C.J. Grim, V. Sathyamoorthy, M.K. Mammel, A.R. Datta, B.A. McCardell, M.D. Solomotis, and B.D. Tall -- The transformation of disease surveillance, outbreak detection, and regulatory response by molecular epidemiology / David A. Sweat -- The genus bacillus / Monika Ehling-Schulz and Ute Messelhusser -- Molecular typing of campylobacter jejuni / Catherine D. Carrillo and Omar A. Oyarzabal -- |

DNA typing methods for members of the Cronobacter genus / Susan Joseph and Stephen Forsythe -- Molecular subtyping approaches for pathogenic Clostridium spp. isolated from foods / Brian H. Raphael, Deborah F. Talkington, Carolina Luquez and Susan E. Maslanka -- Molecular characterization of Shiga toxin-producing Escherichia coli / Pallavi Singh and Shannon D. Manning -- Molecular subtyping methods for Listeria monocytogenes : tools for tracking and control / Sara Lomonaco and Daniele Nucera -- Salmonella / Aaron M. Lynne, Jing Han, and Steven L. Foley -- Vibrio cholerae / Dong Wook Kim.

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#### Sommario/riassunto

Molecular typing of foodborne pathogens has become an indispensable tool in epidemiological studies. Thanks to these techniques, we now have a better understanding of the distribution and appearance of bacterial foodborne diseases and have a deeper knowledge of the type of food products associated with the major foodborne pathogens. Within the molecular techniques, DNA-based techniques have prospered for more than 40 years and have been incorporated in the first surveillance systems to monitor bacterial foodborne pathogens in the United States and other countries.

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