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Titolo	Spectroscopic Techniques & Artificial Intelligence for Food and Beverage Analysis / / edited by Ashutosh Kumar Shukla
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Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XI, 121 p. 43 illus., 22 illus. in color.)
Disciplina	664.07
Soggetti	Biomedical engineering Food—Biotechnology Nutrition Analytical chemistry Biomedical Engineering/Biotechnology Food Science Nutrition Analytical Chemistry Aliments Química analítica Intel·ligència artificial Espectroscòpia Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Laser Induced Breakdown spectroscopy in food analysis -- Chapter 2: The use of FTIR spectroscopy combined with multivariate analysis in Food composition Analysis -- Chapter 3: Spectrophotometric methods and Electronic Spin Resonance for evaluation antioxidant capacity of food -- Chapter 4: Thermoluminescence the method for the detection of irradiated foodstuffs -- Chapter 5: Advantages of Multi-target modeling for spectral regression.
Sommario/riassunto	This informative book discusses the various spectroscopic techniques applied in the analysis of food and beverages. The respective chapters

cover techniques such as Laser-Induced Breakdown Spectroscopy (LIBS), FTIR spectroscopy, Electron Spin Resonance (ESR) spectroscopy and Thermoluminescence. The book also presents artificial intelligence applications that can be used to enhance the spectral data analysis experience in food safety and quality analysis. Given its scope, the book will appeal to novice researchers and students in the area of food science. It offers an equally exciting read for food scientists and engineers working in the food industry.