Advanced Gas Chromatography in Food Analysis
Peter Q Tranchida University of Messina, Italy

Gas chromatography is widely used in applications involving food analysis. Typical applications pertain to the quantitative and/or qualitative analysis of food composition, natural products, food additives, flavor and aroma components, a variety of transformation products, and contaminants, such as pesticides, fumigants, environmental pollutants, natural toxins, veterinary drugs, and packaging materials. This book is an up-to-date look at the significant advances in the technology and is suitable for professionals and postgraduate students learning about the technique in the food industry and research.

Hardback | 451 pages | ISBN 9781788011273 | £179.00 | $250.00 | 30/10/2019

Organic Thermoelectric Materials
Zhiqun Lin Georgia Institute of Technology, USA

Organic thermoelectric materials have gained attention in energy-harvesting and cooling applications due to their intrinsic low cost, energy efficient, and eco-friendly nature. This book summarises the significant progress in the molecular designs, physical characterizations, and performance optimizations of organic thermoelectric materials, focusing especially on the effective routes to minimize the thermal conductivity and maximize the power factor. This informative guide will appeal to graduate students as well as academic and industrial researchers across chemistry, materials science, physics and engineering interested in the materials and their applications.

Hardback | 308 pages | ISBN 9781788014700 | £169.00 | $235.00 | 31/10/2019

Resource Recovery from Wastes
Lynne E Macaskie University of Birmingham, UK

The concept of a circular economy has been gaining increasing attention in recent years. Many of the sources of chemicals we have become reliant on are dwindling and the accumulation of waste products poses a serious environmental problem. Recovering resources from these waste materials can reduce our dependence on less sustainable virgin feedstocks, as well as reducing the quantity of material going to landfill sites. Bringing together a broad range of cross-disciplinary topics on resource recovery this book provides a valuable resource for those working in circular economy research, green chemistry and waste management.

Hardback | 422 pages | ISBN 9781788013819 | £169.00 | $235.00 | 31/10/2019

All information is subject to change without notice
Handbook of Food Structure Development
Fotis Spyropoulos University of Birmingham, UK

The most useful properties of food, ie those detected through sight, touch and taste, are a manifestation of the food’s structure. Studies about how this structure develops or can be manipulated during food production and processing are a vital part of research in food science. This book provides, in detail, the status of research on food structure and how this has developed through the interplay between processing routes and formulation elements. With world class and up-to-date contributions, it brings current knowledge on the subject together and points towards some exciting areas of research for the future. Every chemistry, chemical engineering, food processing and food and nutrition department needs to have a copy.

Hardback | 479 pages | ISBN 9781788012164 | £125.00 | $175.00 | 31/10/2019

DNA Techniques to Verify Food Authenticity
Applications in Food Fraud
Malcolm Burns LGC Limited, UK Lucy Foster Department for the Environment, Food and Rural Affairs, UK Michael Walker Michael Walker Consulting Ltd, UK

Describing the science behind DNA as a target analyte, its extraction, amplification, detection and quantitation as applied to the detection of food fraud and food crime, this book covers this topical and growing area post the horsemeat scandal. Worldwide authorities in the area have been bought together to provide comprehensive coverage of all issues ranging from sampling of DNA through to emerging techniques such as next generation sequencing. It will appeal to a two-fold market – food-testing laboratories worldwide and food policy professionals and regulatory organisations who use these techniques to back up legislation.

Hardback | 320 pages | ISBN 9781788011785 | £149.00 | $205.00 | 16/10/2019

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