

# Sustainable Food Technology

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## IN THIS ISSUE

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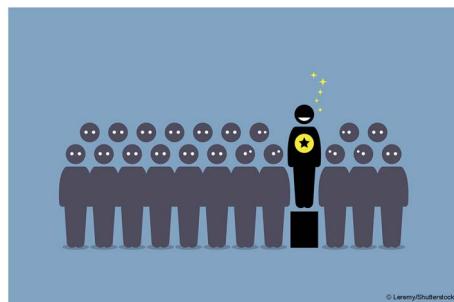
### Cover

See Peter R. Gracey and Elad Tako, pp. 861–874. Image reproduced by permission of Elad Tako from *Sustainable Food Technol.*, 2025, 3, 861.

## EDITORIAL

860

Outstanding Reviewers for *Sustainable Food Technology* in 2024

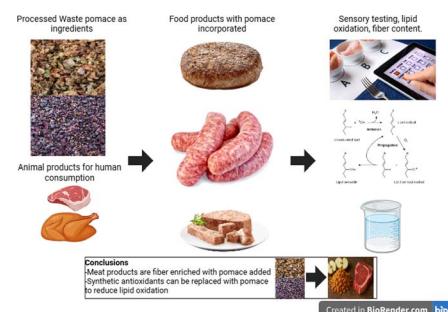


## REVIEWS

861

Apple and grape pomace: emerging upcycled functional ingredients in processed meat products, designed to increase polyphenol and fiber contents

Peter R. Gracey and Elad Tako\*



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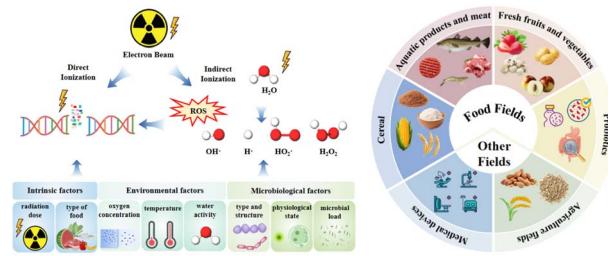


## REVIEWS

875

## Electron beam irradiation in food processing: current applications and strategies for commercial scale implementation

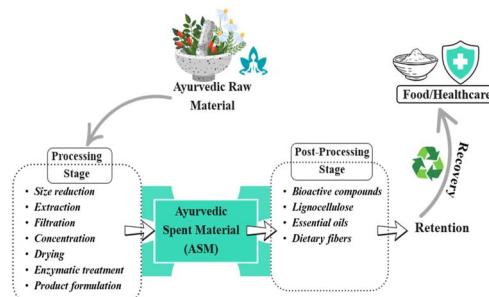
Chen Li, Runrun Zhang, Tahirou Sogore, Jinsong Feng, Xinyu Liao, Xiangyu Wang, Zhaohuan Zhang\* and Tian Ding\*



894

## Status and prospects of valorisation of ayurvedic spent materials: focus on Dashamoola by-products for food applications

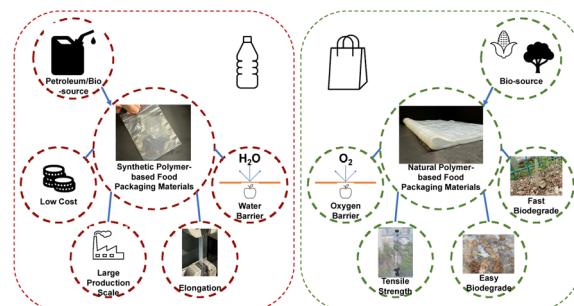
Billu Abraham, Shaheena Aziz A, Charles Brennan, Nitin Mantri, Nisha P\* and Benu Adhikari\*



908

## Natural polymer-based food packaging: paving the way to a greener future – a review

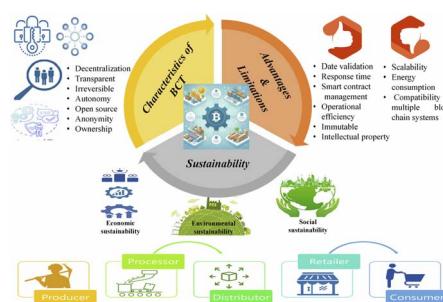
Chun Bong Yuen, Hio Lam Chong, Man-Hin Kwok\* and To Ngai\*



930

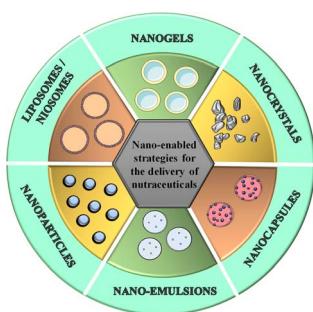
## Blockchain technology in the food supply chain: a way towards circular economy and sustainability

Devraj V. Rajput, Pavankumar R. More, Preeti A. Adhikari and Shalini S. Arya\*



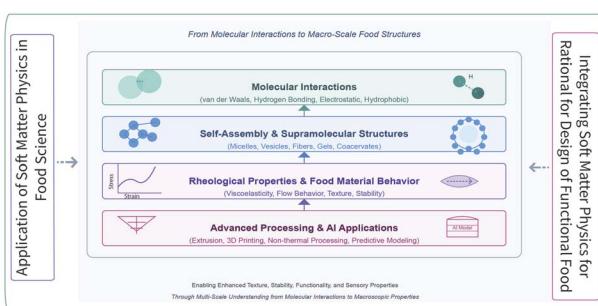
## REVIEWS

947



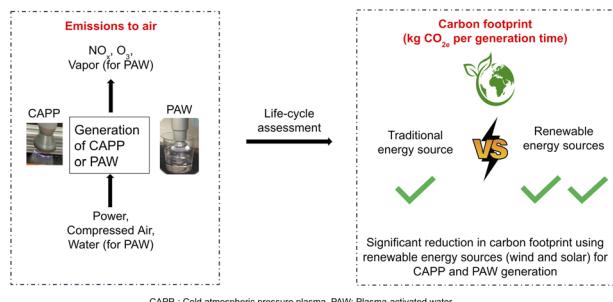
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979



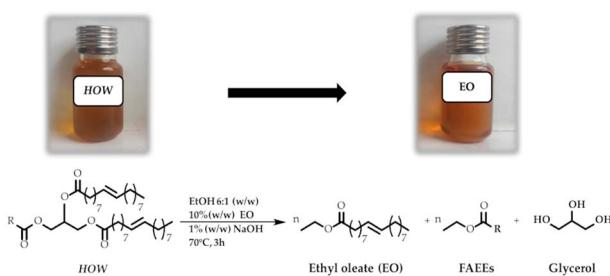
## COMMUNICATIONS

1005



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1011



R = other fatty acids, n = [0-3].

## Recent overview of nanotechnology based approaches for targeted delivery of nutraceuticals

Jhalak Mehta, Khushboo Pathania and Sandip V. Pawar\*

# Applications of soft matter physics in food science: from molecular interactions to macro-scale food structures

Subhash Pawde and Jaydeep Dave\*

# Environmental impact assessment of generating cold atmospheric pressure plasma and plasma-activated water at lab scale

Urvi Shah, Minliang Yang\* and Deepti Salvi\*

# Sustainable synthesis and optimisation of ethyl oleate from high oleic acid waste: a pathway to valorise industrial byproducts

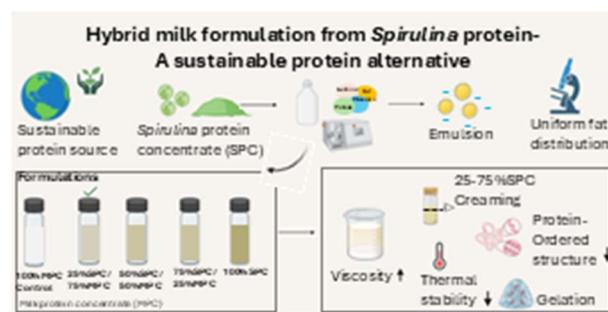
Ana Soares,\* Ana Luiza Fontes, Francisca Teixeira,  
Paula Costa, Lígia Pimentel,\* Manuela Pintado  
and Luis Miguel Rodríguez-Alcalá\*

## PAPERS

1020

**Formulation and characterization of hybrid milk containing bovine and *Spirulina* proteins**

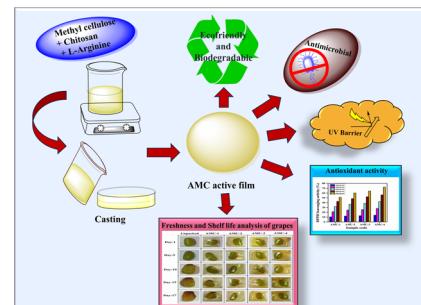
Jayani Samarthunga,\* Thi Phuong Linh Le, Max Gabard, Katrina Strazdins, Jeroen Rens and Benu Adhikari\*



1035

**Fabrication and characterization of methylcellulose/chitosan active films incorporated with L-arginine and their potential in the green packaging of grapes**

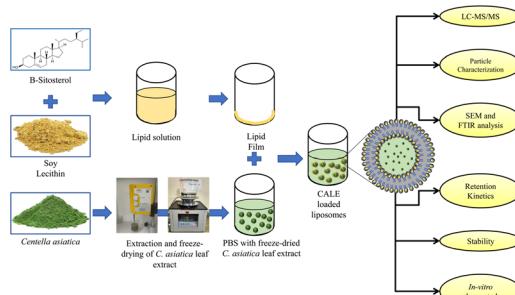
Suhasini Madihalli, Saraswati P. Masti,\* Manjunath P. Eelager, Manjushree Nagaraj Gunaki, Ravindra B. Chougale, Nagarjuna Prakash Dalbanjan and S. K. Praveen Kumar



1053

**Sustainable liposomal delivery of *Centella asiatica* polyphenols:  $\beta$ -sitosterol stabilization, LC-MS/MS profiling, and simulated release study**

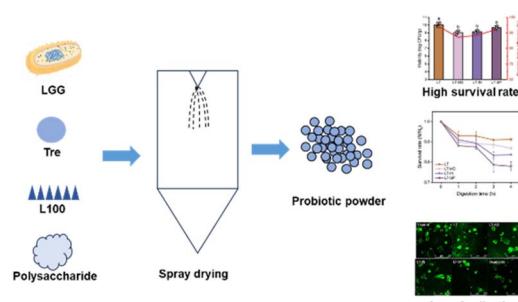
Soubhagya Tripathy\* and Prem Prakash Srivastav



1064

**Fabrication of microcapsules encapsulating *L. rhamnosus* GG with Eudragit® L100–trehalose and polysaccharides: a study on physicochemical properties and cell adhesion**

Yuyan Xu, Shuangying Zhu, Xinyi Sun, Kai Shan, Chong Zhang, Hongmei Xiao, Xia Fan and Chuang Zhang\*



## PAPERS

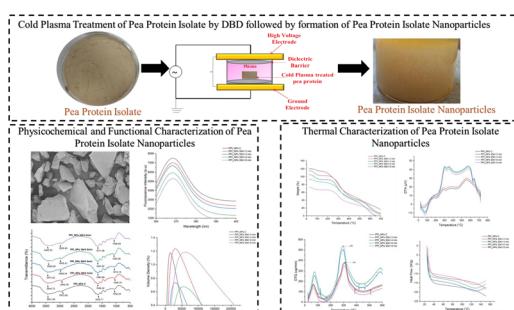
1074



### Optimization of a novel probiotic-fermented pearl millet-based strained yoghurt-like functional dessert: physicochemical, microbial and sensory characterization

Manvik Joshi, Kamalesh Kumar Meena,\* Arun Kumar and Sunil Meena

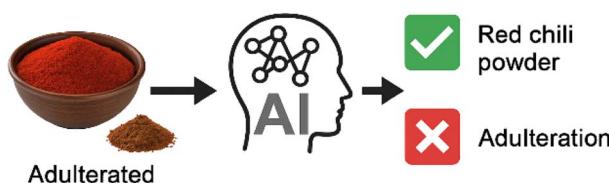
1086



### Dielectric barrier discharge cold plasma-modified pea protein nanoparticles: enhancing functional and thermal properties for food and biopolymer applications

Srujee Rout\* and Prem Prakash Srivastav

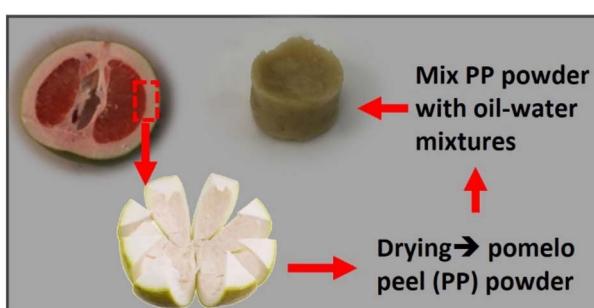
1099



### An XAI-enabled 2D-CNN model for non-destructive detection of natural adulterants in the wonder hot variety of red chilli powder

Dilpreet Singh Brar,\* Birmohan Singh and Vikas Nanda

1114



### Fabrication of gel-like sorbents derived from pomelo (*Citrus grandis* L.) peel powder via an immediate setting emulsion approach

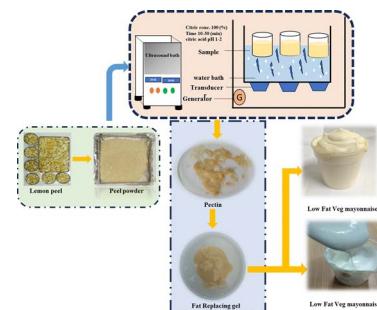
Haoxin Wang, Peng Wang, Stefan Kasapis and Tuyen Truong\*

## PAPERS

1128

**Extraction of pectin from Assam lemon (*Citrus limon*) peel and its use in preparation of low-fat mayonnaise**

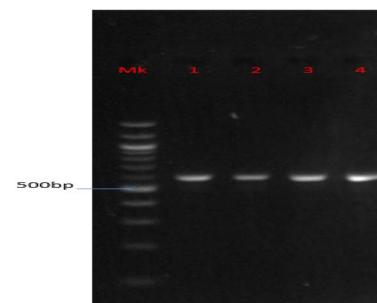
Nithish S, Ram Prasanna Kumar, Laxmi Kant Rawat, Nurin Afzia and Tabli Ghosh\*



1136

**Production and optimization of date fruit and honey wines using *Saccharomyces cerevisiae* isolated from various palm wine sources**

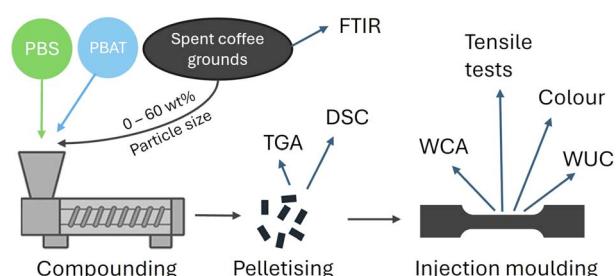
Ositadinma Chinyere Ugbogu,\* Alloysius Chibuike Ogodo, Amadike Eziuche Ugbogu, Kingsley Chukwuemeka Nwachukwu and Frank Anayo Orji



1151

**Utilizing spent coffee grounds as sustainable fillers in biopolymer composites: influence of particle size and content**

Gabriel Mäder, Nadine Rüegg, Tobias Tschichold and Selçuk Yıldırım\*



1164

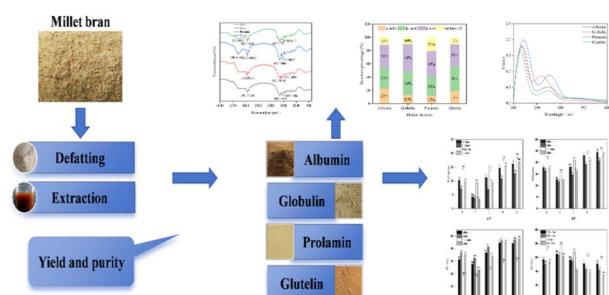
**Coconut oleosomes as a sustainable ingredient for food emulsion systems**

A. A. Anoop, P. M. Ramees and K. V. Ragavan\*



## PAPERS

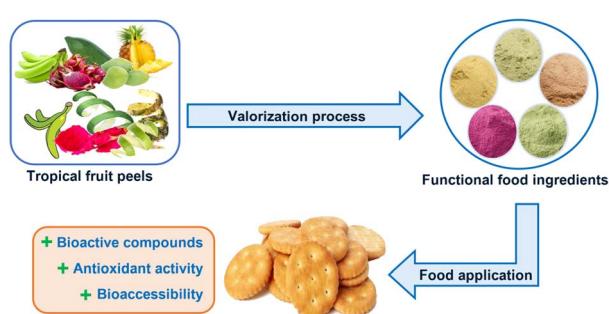
1175



### Extraction, structural characterization and functional properties of protein fractions from millet bran

Wenjie Zhao, Xia Fan, Juan Shen, Fanqiang Meng, Fengxia Lv, Zhaoxin Lu and Haizhen Zhao\*

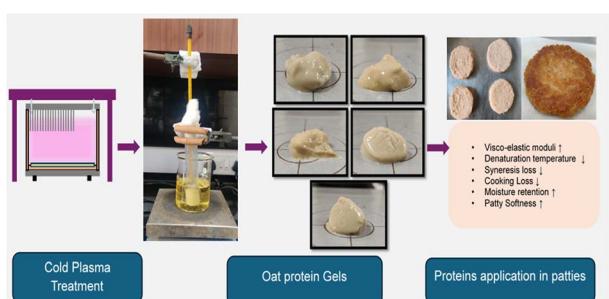
1189



### Sustainable valorization of tropical fruit peels for sustainable production of natural antioxidants and functional food ingredients

Panorjit Nitisuk, Pitchaporn Wanyo,\* Tossaporn Chamsai and Kiatipong Charoenjit

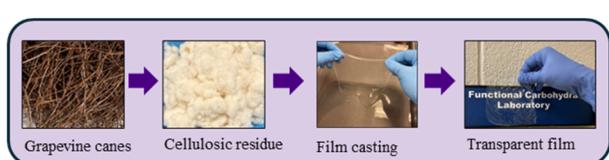
1203



### Cold plasma enhanced gelation and thermal properties of oat protein and its application in a selected model food system

Gunaseelan Eazhumalai, Ranjitha Gracy T. K. and Uday S. Annapure\*

1218



### Valorization of grapevine agricultural waste into transparent and high-strength biodegradable films for sustainable packaging

Sandeep Paudel, Sumi Regmi, Sajal Bhattacharai, Anne Fennell and Srinivas Janaswamy\*



## CORRECTION

1232

**Correction: Duckweed: exploring its farm-to-fork potential for food production and biorefineries**

Anim Ujong, Joncer Naibaho, Soudabeh Ghalamara, Brijesh K. Tiwari, Shay Hannon and Uma Tiwari\*

