

Sustainable Food Technology

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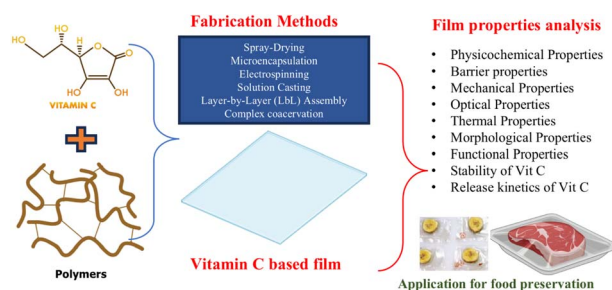
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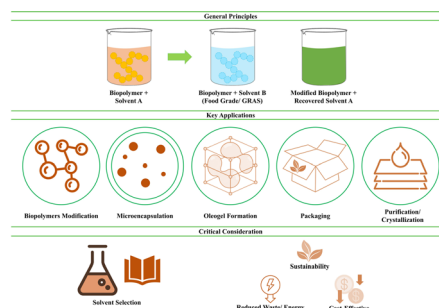
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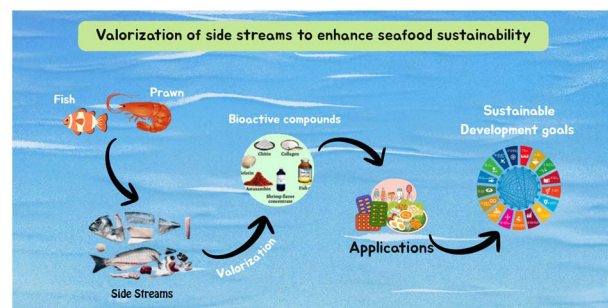
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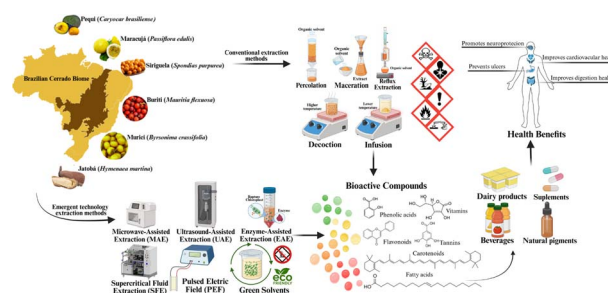
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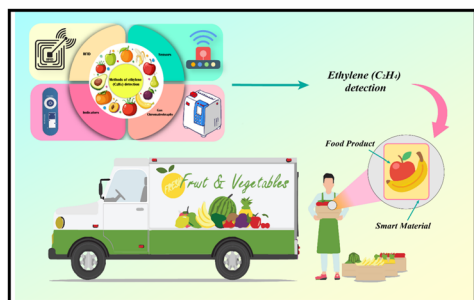
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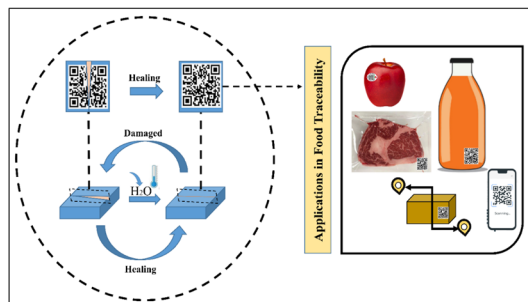
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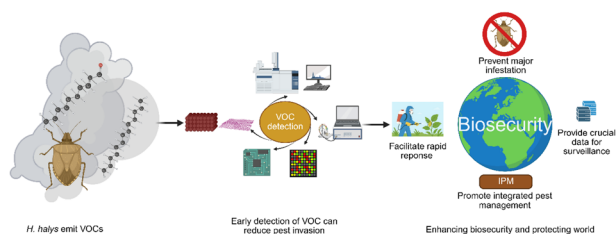
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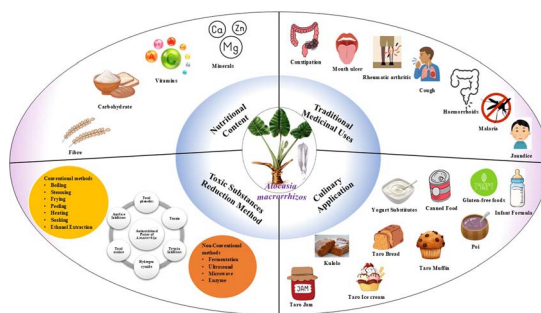


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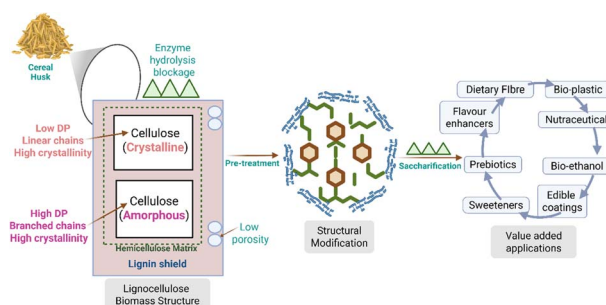


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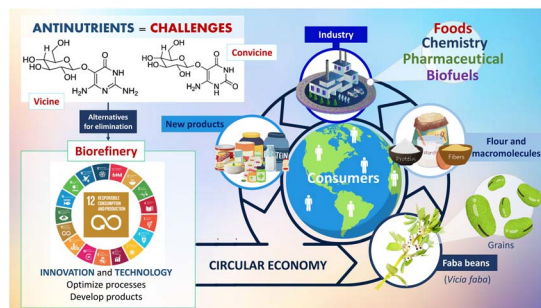
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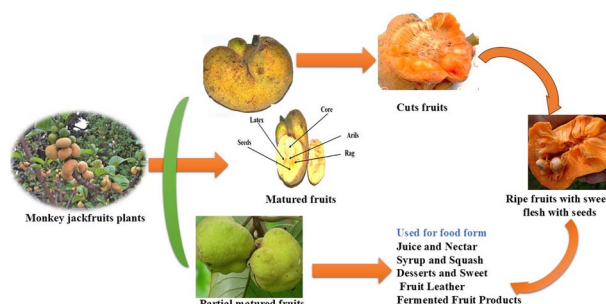
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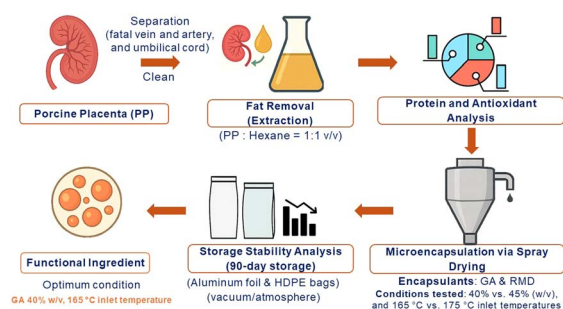


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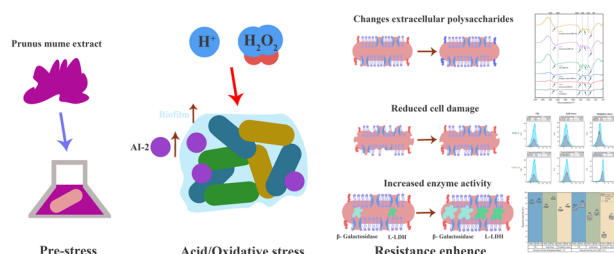
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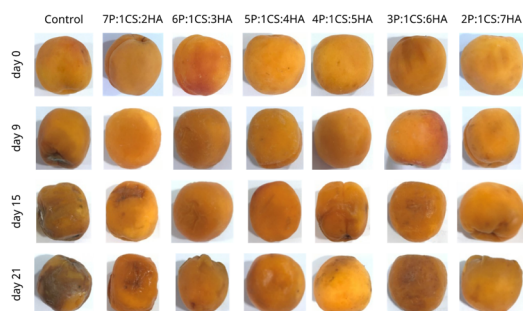
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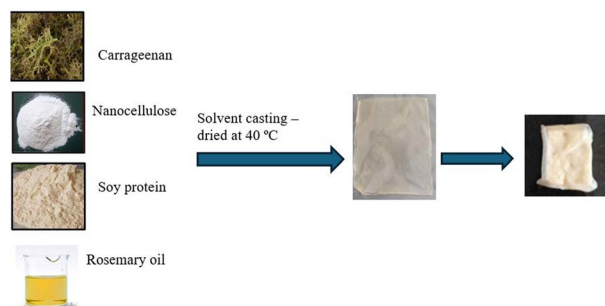
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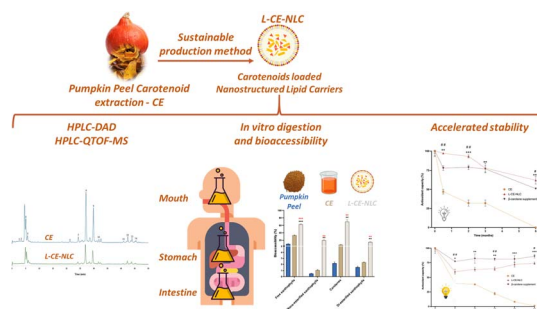
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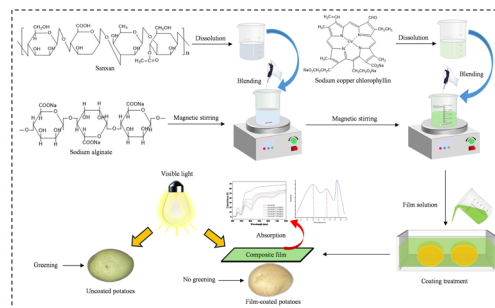
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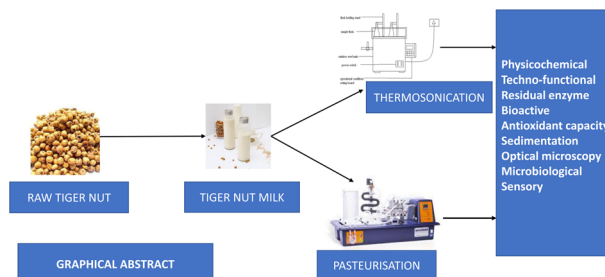
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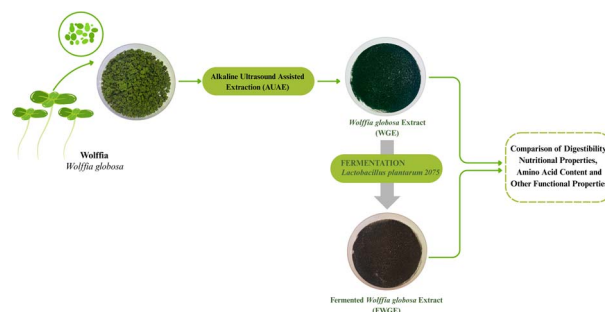
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Optimizing *Wolffia globosa* protein extraction by ultrasonic pretreatment and enhancing protein attributes through LAB fermentation

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The diagram illustrates the enhanced CLA production process. It begins with **Ethanol Permeabilization** of *Lactobacillus* (Lb) cells, which are then subjected to **Coculture Fermentation** in **MRS media**. The final step is **CLA Isomerization**, showing the conversion of *cis*-7 to *trans*-7 and 312 to 311. The final product is **Linoleic acid (LA)**.

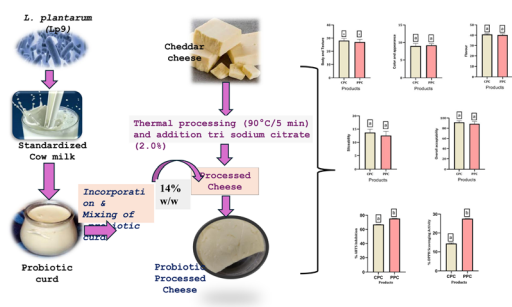
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Yan Ding and Shuhong Ye*

Deepak Kumar, Sangita Ganguly,* Santosh Tambde,
Yogesh Khetra, P. Narender Raju and Rashmi Hogarehalli
Mallappa

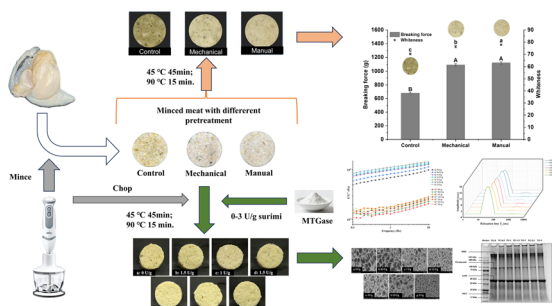
Lin-Da Zhang, Yu-Nan Pan, Lin Li, Zhu-Jun Zhang,
Yue Liu, Jia-Nan Yan, Bin Lai, Ce Wang* and Hai-Tao Wu*

Fizah Farooq, Toiba Majeed, Sharath Kumar Nagaraja*
and Aamir Hussain Dar*

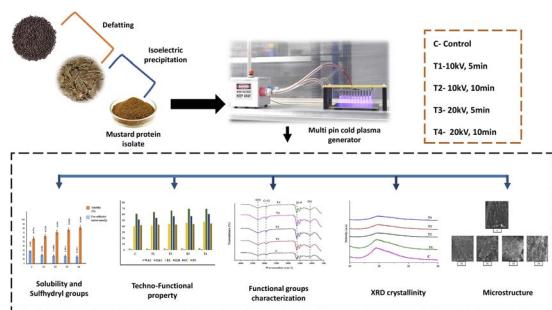
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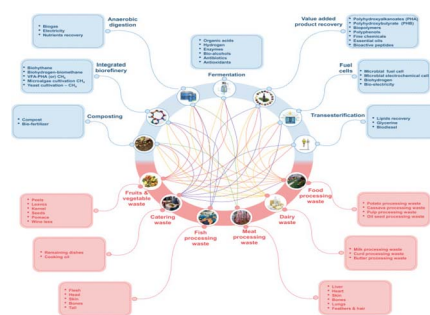
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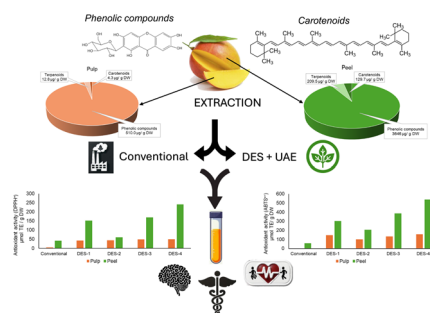
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Green extraction of phenolic compounds and carotenoids from the pulp and peel of mango criollo by sustainable emerging technologies

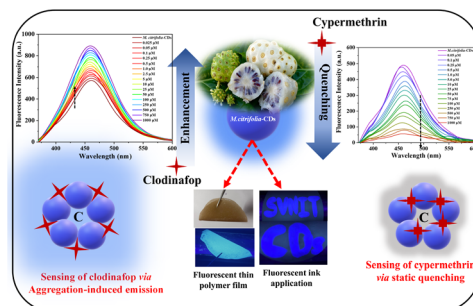
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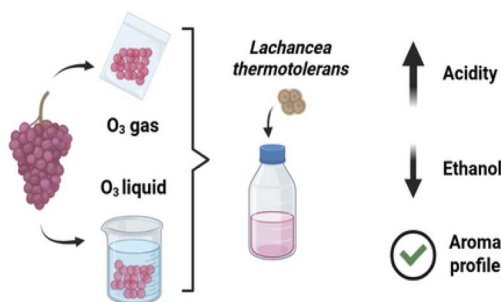
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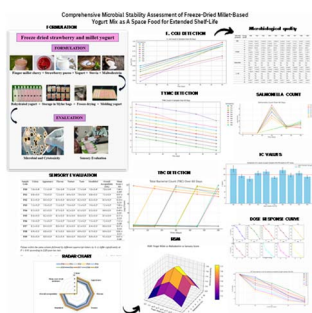
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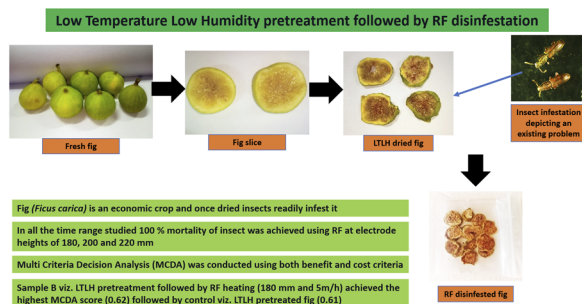
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Comprehensive microbial stability assessment of freeze-dried millet-based yogurt mix as a space food for extended shelf-life

D. Mahalakshmi* and Samuel Ayofemi Olalekan Adeyeye

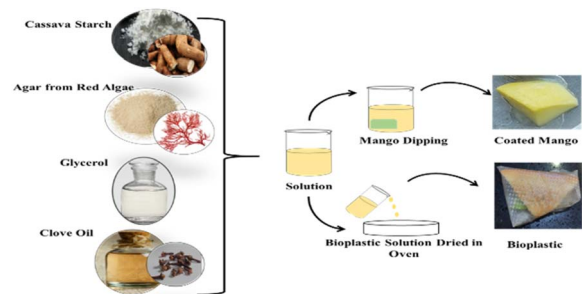
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Low-temperature low-humidity pretreatment followed by RF heating: a novel method of fig preservation

Irengbam Barun Mangang,* A. Vidhya Lakshmi, N. Venkatachalapathy and M. Loganathan*

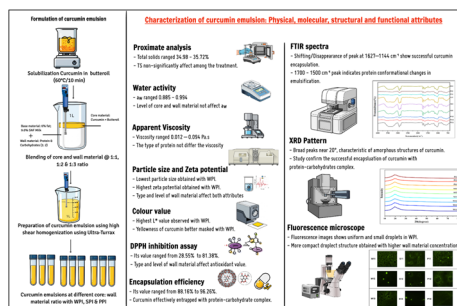
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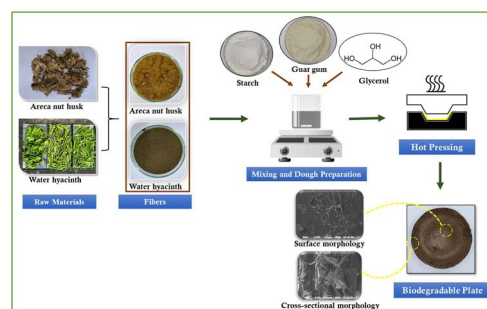


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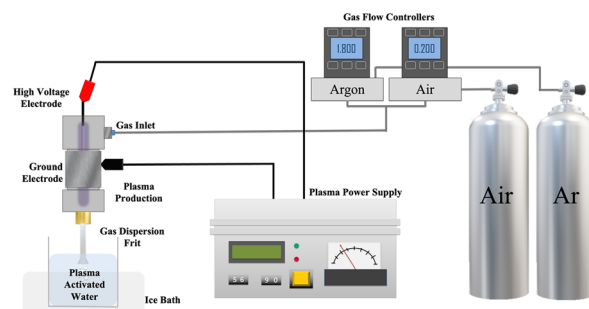
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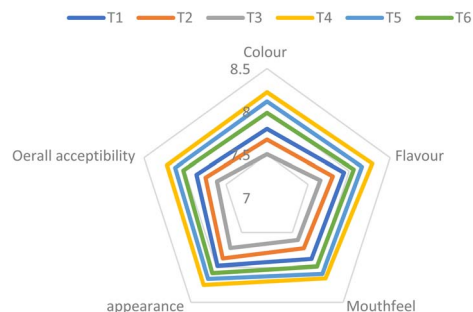
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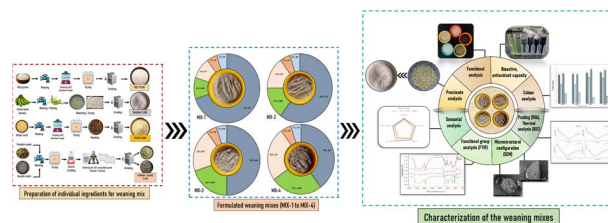
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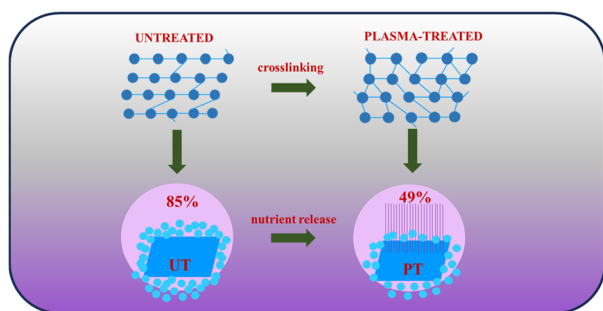
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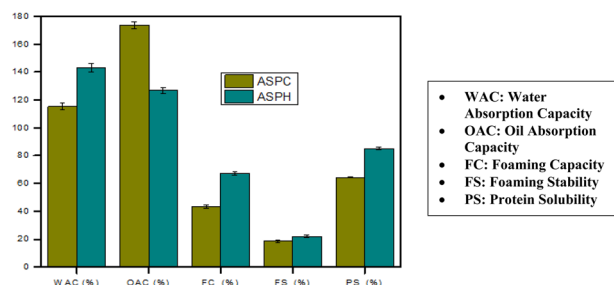
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Plasma-assisted modification of micronutrient-embedded PVA/PVP blend films for sustained nutrient delivery in agricultural applications

Nandhu Varshini Gnanasekar
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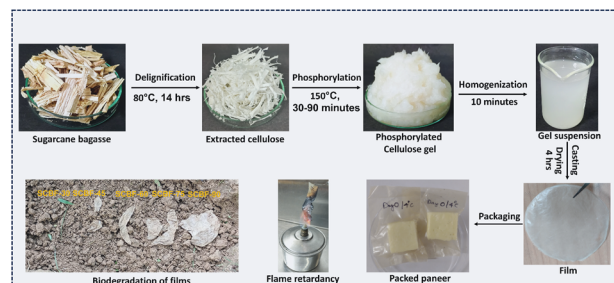
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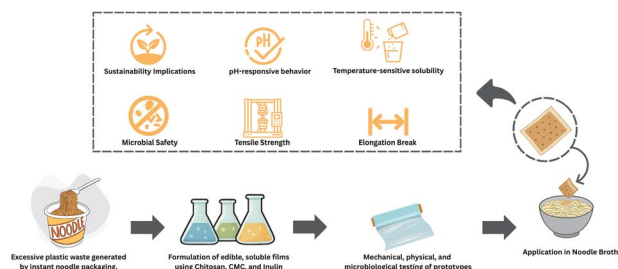
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Rahul Ranjan, Chandra Kant and Prodyut Dhar*

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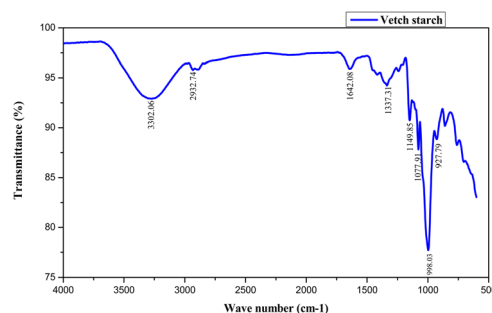
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Toiba Majeed, Aamir Hussain Dar* and Tariq Ahmad Ganaie

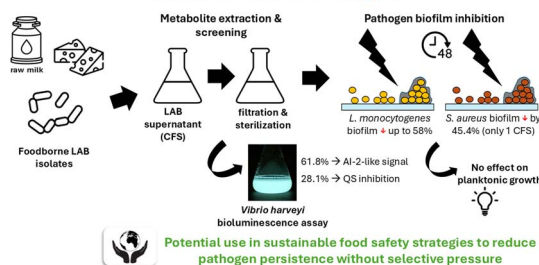


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Sustainable biofilm control using lactic acid bacteria to disrupt quorum sensing in foodborne pathogens

Dimitra Kostoglou, Alexandra Vlachopoulou, Georgios Vafeiadis and Efstathios Giaouris*

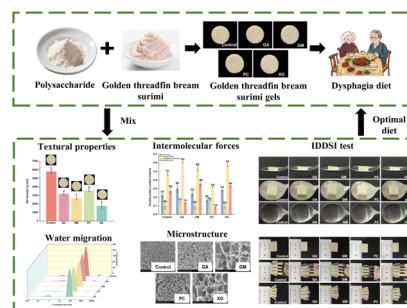
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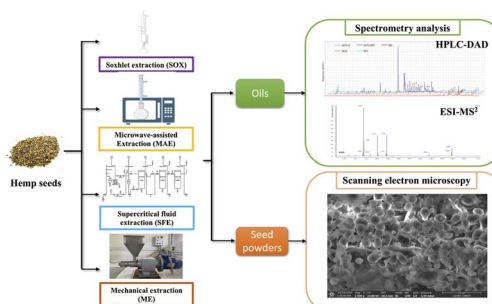
Jiani Zhou, Zhujun Zhang, Yinyin Lv, Bin Lai, Ce Wang, Haitao Wu and Jianan Yan*



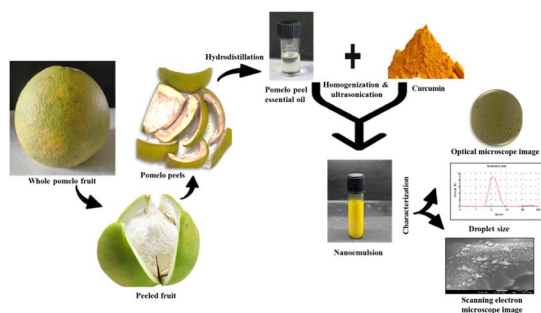
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Development and characterization of a functional nanoemulsion using pomelo peel essential oil and curcumin

Parismita Koch, Munmi Borah, Sankar Chandra Deka and Poonam Mishra*

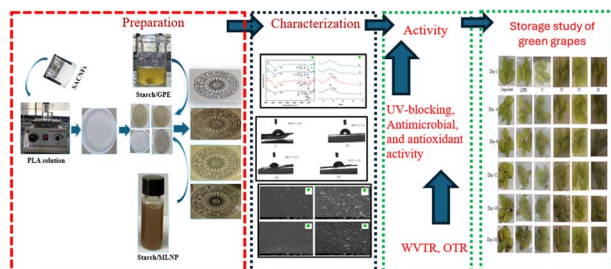
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From cow to coconut: a literature review of the environmental cost of ice cream

Faustina Sakyiwaah Sekyere and Andrea Hicks*

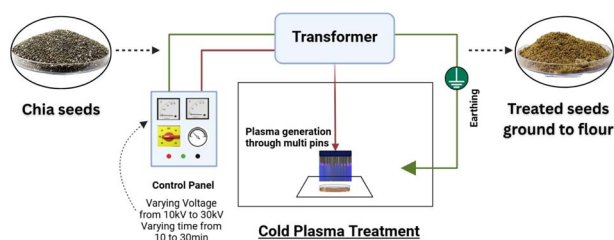
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PLA/starch bi-layer films reinforced with rice straw cellulose nanofibers and functionalized with organosolv–lignin nanoparticles and grapefruit bioactives for shelf life extension of green grapes

Makdud Islam,* Akhouri Sanjay Kumar Sinha and Kamlesh Prasad*

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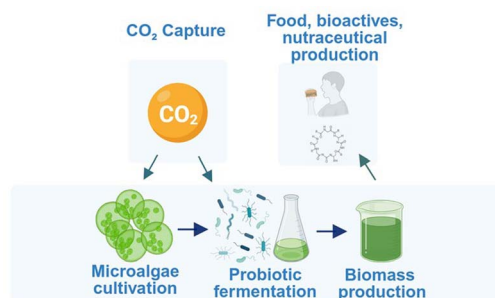
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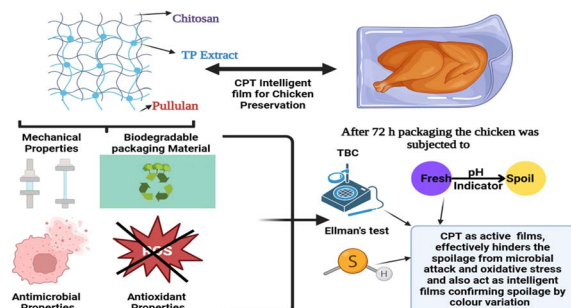
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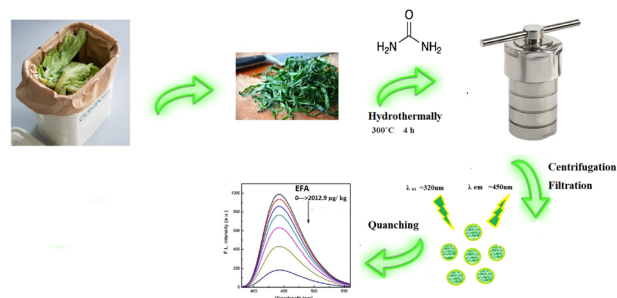
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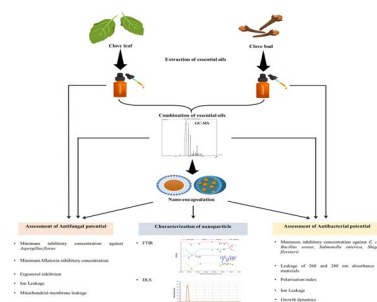
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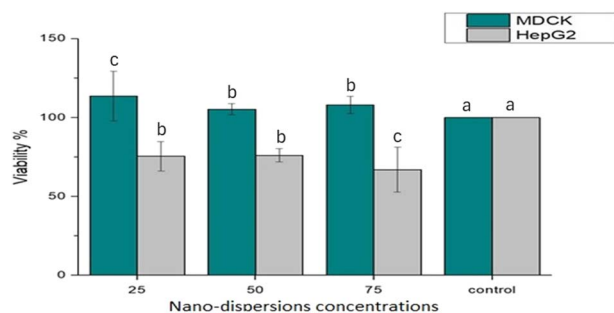
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Assessing the antibacterial, antifungal, and antiaflatoxigenic activity of a developed nanoformulation based on a combination of *Syzygium aromaticum* leaf and bud essential oils

Tanya Singh Raghuvanshi, Vishal Gupta and Bhanu Prakash*



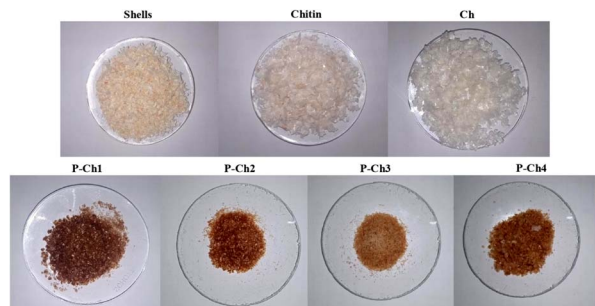
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Formulation of casein–curcumin nanodispersions using microfluidization and nano-precipitation methods: cytotoxicity and *in vitro* release in a mango drink

Maanya Mehrotra, Shashank Singh, Nikita Kansal, Kiran Verma, Anit Kumar* and Narashans Alok Sagar*

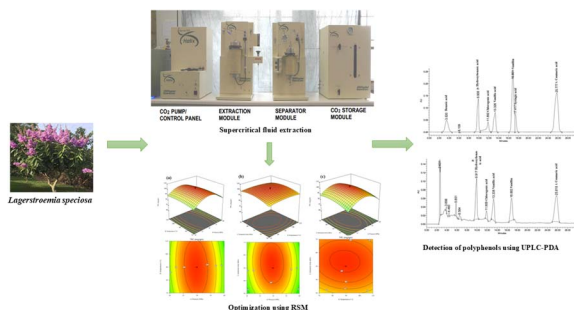
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Sustainable conversion of *Penaeopsis serrata* waste into phosphorylated chitosan for agricultural drought mitigation

Fatima El Amerany,* Oumaima Ait Ali and Mohammed Rhazi

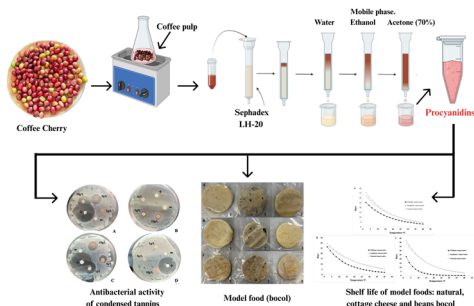
868



Optimization of supercritical fluid extraction of valuable compounds from *Lagerstroemia speciosa* leaves for *in vitro* antidiabetic and antioxidant activity

Kiran Khandare and Saswata Goswami*

885



Evaluation of condensed tannins from coffee pulp (*Coffea arabica*) as a natural preservative: study in a model food

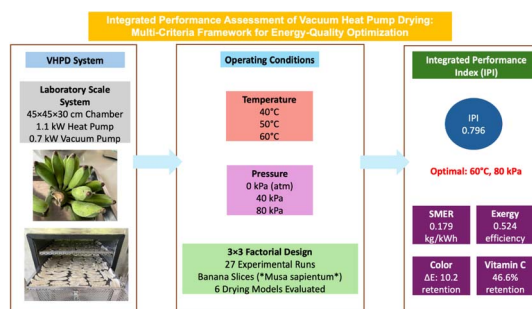
Sandy R. García-Rodríguez, Hector Reynoso-Ponce, Diana B. Muñoz-Márquez, Abigail Reyes-Munguía, Martina de la Rosa-Hernández and Jorge E. Wong-Paz*



894

Integrated performance assessment of vacuum heat pump drying: a multi-criteria framework for energy-quality optimization in banana slice drying

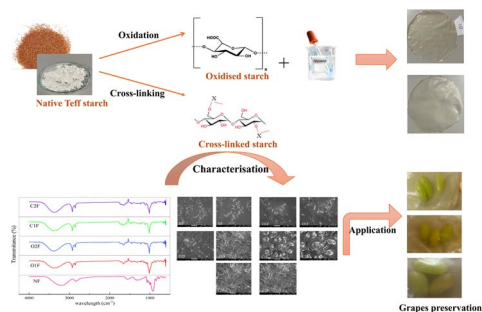
Thanapon Saengsuwan and Narathip Sujinda*



916

Eco-friendly biofilms from chemically modified Indian teff (*Eragrostis tef*) starch for quality maintenance and shelf-life improvement of green grapes

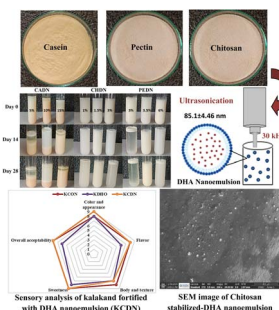
Ramandeep Kaur Sidhu,* C. S. Riar and Sukhcharn Singh



930

Ultrasound-assisted microalgal docosahexaenoic acid (DHA) nanoemulsion preparation using casein, chitosan, and pectin as emulsifiers for enhanced oxidative stability and shelf life for food fortification

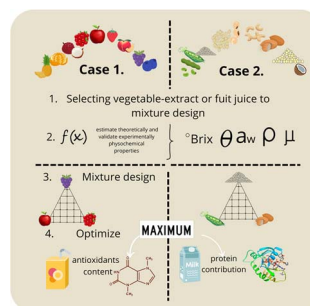
Sirajdeen Asmath Mubeena and Radhakrishnan Preetha*



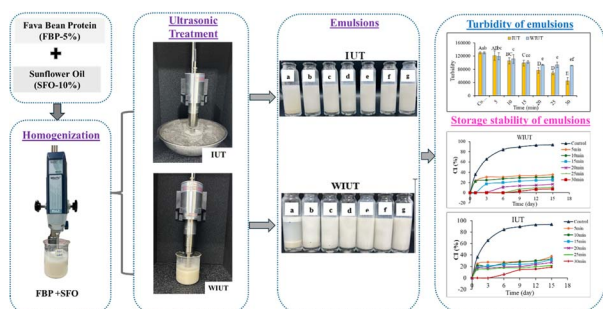
947

A comparative study of theoretical model-based optimization and experimental design approaches for functional beverage formulation

Regina Navarrete-González, Aurelio López-Malo, Enrique Palou and Nelly Ramírez-Corona*



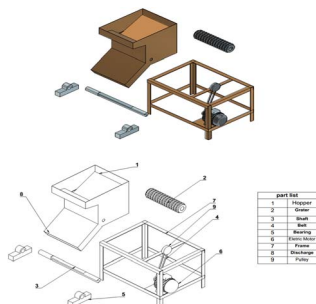
961



Comparative analysis of the effect of ultrasonic treatment with ice and without ice cooling on the stability of oil-in-water emulsions stabilized by fava bean (*Vicia fava* L.) protein

Susma Bhattarai,^{*} Sanjaya Karki, Yottha Srithep, Kunwadee Kaewka and Arissara Phosanam^{*}

972



Development and performance evaluation of a hygienic and portable small-scale cassava grater for safe food processing

Kehinde A. Adeyeye,^{*} Cornelius Folahan Oladipupo, Sanni Sodiq, Tomilola F. Oguntunde and Tosin O. Olanrewaju

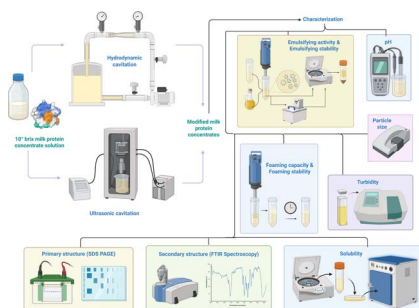
985



L-Net: a lightweight CNN framework for sustainable multicrop leaf disease detection and classification on edge devices

R. Deepa, Midhun P. Mathew,^{*} S. Baskar and Abubeker K. M^{*}

1004



Hydrodynamic and ultrasonic cavitation physically modifies the milk protein concentrates with improved functionality

Shreyas H. K., Preeti Adhikari, Anas Ejaz Yasmeen Shaikh and Shalini S. Arya^{*}

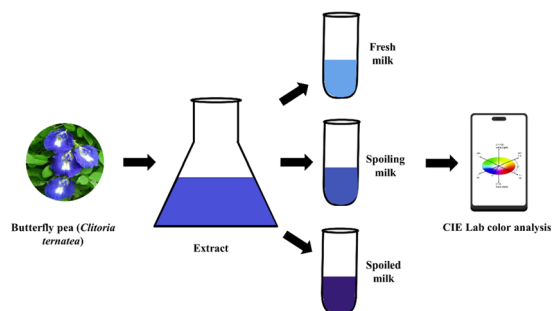


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Dual-indicator approach for real-time milk freshness detection using butterfly pea anthocyanins and riboflavin fluorescence

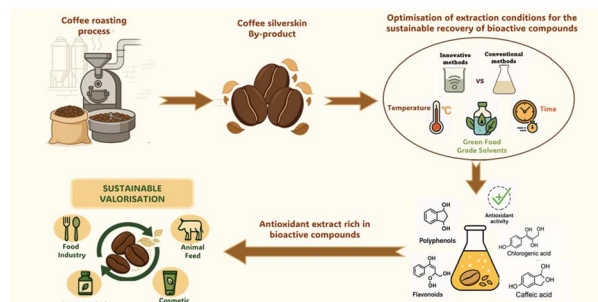
Parita A. Mangroliya, Tanmay Hazra,* Kunal Ahuja, Rohit Sindhav, Anamika Das, Subhadip Manik and Vimal Ramani



1032

Sustainable recovery of bioactive compounds from coffee silverskin

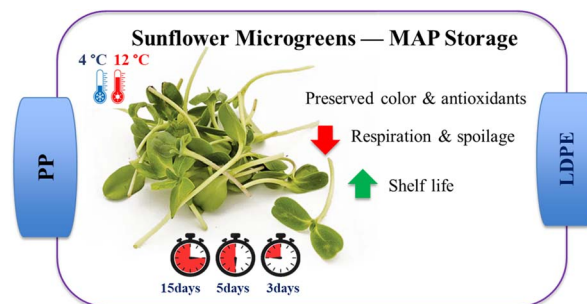
Miriam Arianna Boninsegna, Amalia Piscopo,* Alessandra De Bruno, Tiziana Taglieri, Valerio Chinè and Marco Poiana



1045

Modified atmosphere packaging of sunflower microgreens (*Helianthus annuus*) for quality and postharvest shelf-life extension

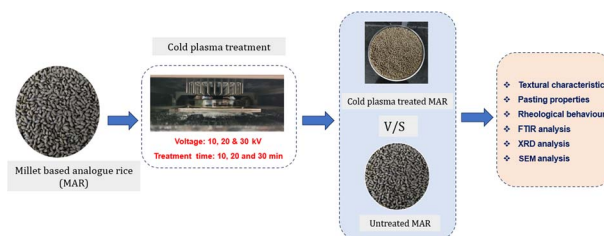
Elham Azarpazhooh,* Parvin Sharayei, Yeganeh Sabeghi, Fatemeh Zare, Xin Rui and Hosahalli S. Ramaswamy*



1057

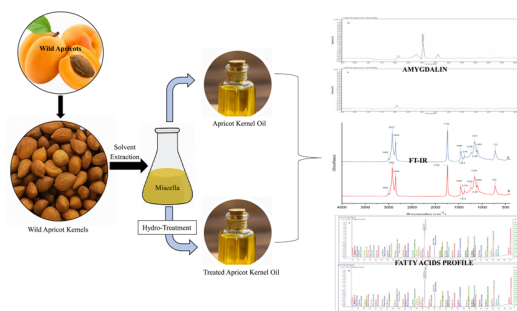
Enhancing millet-based analogue rice through sustainable cold plasma treatment: effects on mineral composition, structural, textural, cooking, and rheological properties

S. Ganga Kishore, Madhuresh Dwivedi,* R. Rahul, J. Deepa, G. Jeevarathinam,* K. Kamaleeswari, Gitanjali Jothiprakash and Abinaya Veluswamy



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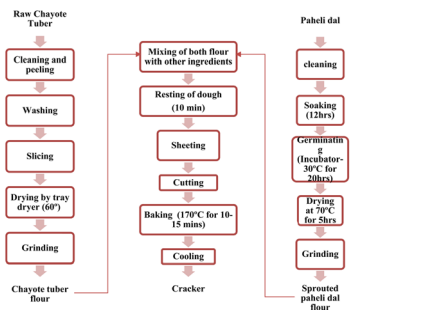
1073



Hydro-treatment of wild bitter apricot kernel oil: a cheap and cost-effective alternative for reducing toxicity and enhancing quality

Swati Joia, Himanshi Rao, Raashid Ahmad Siddiqi and Tajendra Pal Singh*

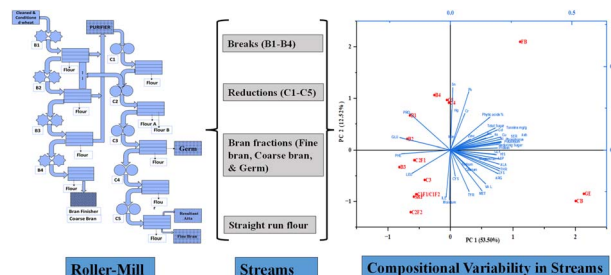
1083



Quality characterization, optimization and consumer acceptance of enriched gluten-free crackers through valorization of chayote tuber and sprouted pabli dal flour

Robishini Akoijam, Dhamchoe Dolma Bhutia, Sujata Jena* and Prashant Pandharinath Said

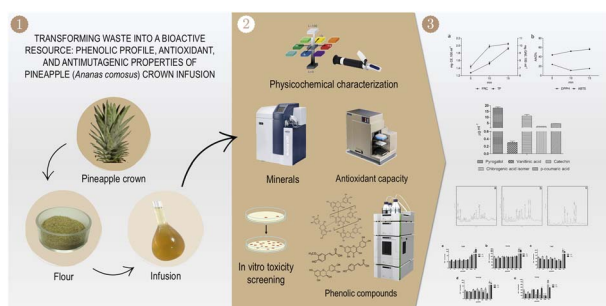
1099



Compositional variability in roller-mill processed streams: distribution of macro- and micronutrients, phytochemicals, and contaminants (heavy metals and anti-nutrients)

Veeranna Hitlamani, Swamy Gowda M. R., Salony Azam Sheikh, Nandini P. Shetty, Sridevi Annapurna Singh and Aashitosh Ashok Inamdar*

1115



Transforming waste into a bioactive resource: phenolic profile, antioxidant, and antimutagenic properties of pineapple (*Ananas comosus*) crown infusion

Talita Braga de Brito Nogueira, Lays Souza da Silva, Carlos Fernando Araujo Lima, Mateus Grilo de Oliveira Carvalho, Mônica Regina da Costa Marques, Israel Felzenszwalb, Juliano Lemos Bicas, Mariana Simões Larráz Ferreira* and Ana Elizabeth Cavalcante Fai*

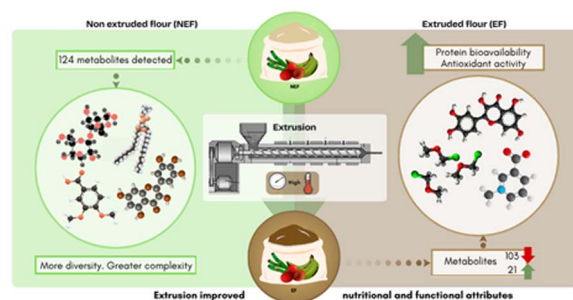


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Extrusion-driven metabolic shifts in composite flour from coffee and plantain byproducts

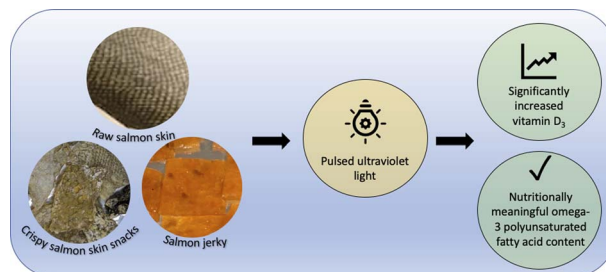
Laura Sofía Torres-Valenzuela,* Carolina Franco-Urbano, Diana Paola Navia-Porras, Jose Luis Plaza-Dorado and Mónica P. Cala



1136

Vitamin D biofortification of salmon (*Salmo salar*) processing offcuts to create novel shelf-stable foods

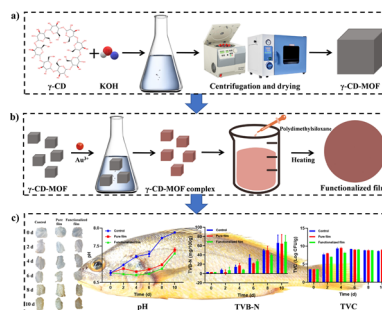
Eleanor Dunlop,* Wing Huen Chung, Janet Howieson, Belinda Neo, Welma Stonehouse, Paul Adorno, Georgios Dabos, Linda Portsmouth and Lucinda J. Black



1144

An antibacterial γ -CD-MOF complex functionalized film for fish meat safety and freshness

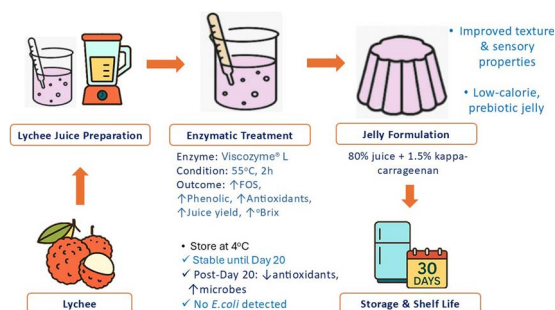
Meimei Guo, Tahirou Sogore, Jin Huang, Xinyu liao, Mofei Shen* and Tian Ding*

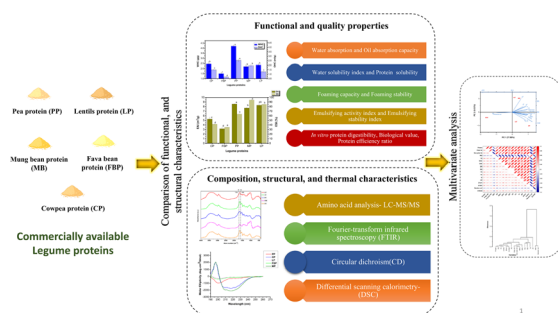


1157

Enzymatic bioprocessing of lychee juice for fructooligosaccharide enhancement and sustainable functional jelly formulation

Nattida Pongjuntuk, Saeid Jafari, Sochanet Chheng and Kitipong Assatarakul*





Functional and structural characterization of legume protein derivatives for advanced plant-based food applications

Harsha Varayil and Jayeeta Mitra*

