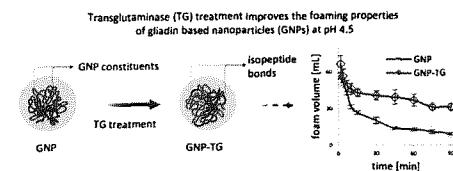


CONTENTS

107471

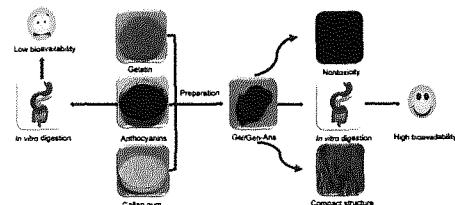
Microbial transglutaminase induced modification of wheat gliadin based nanoparticles and its impact on their air-water interfacial properties

Katarzyna Kaczynska, Arno G.B. Wouters and Jan A. Delcour

**107487**

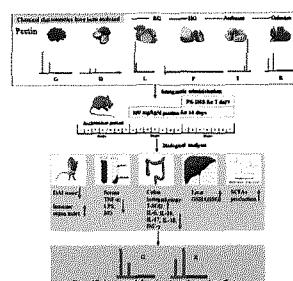
Compound hydrogels derived from gelatin and gellan gum regulates the release of anthocyanins in simulated digestion

Linyuan Liu, Duoduo Zhang, Xiaoxiao Song, Mi Guo, Ziwei Wang, Fang Geng, Xingtao Zhou and Shaoping Nie

**107209**

Protective effects of six different pectic polysaccharides on DSS-induced IBD in mice

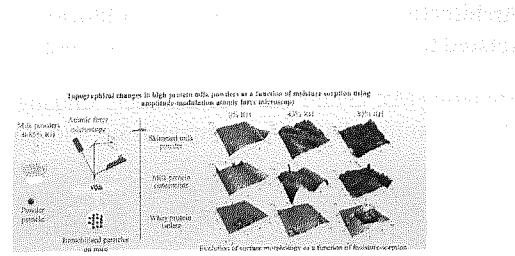
Dongmei Wu, Shiguo Chen, Xingqian Ye, Shokouh Ahmadi, Weiwei Hu, Chengxiao Yu, Kai Zhu, Huan Cheng, Robert J. Linhardt and Qiaojun He



107504

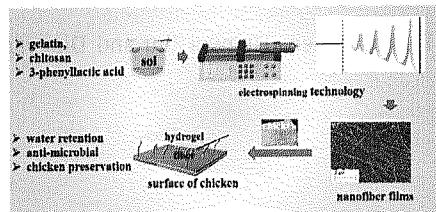
Topographical changes in high-protein milk powders as a function of moisture sorption using amplitude-modulation atomic force microscopy

Vinay S.N. Mishra, Tomasz J. Ochalski, Noel A. McCarthy, André Brodkorb, Brian J. Rodriguez and Sean A. Hogan

**107546**

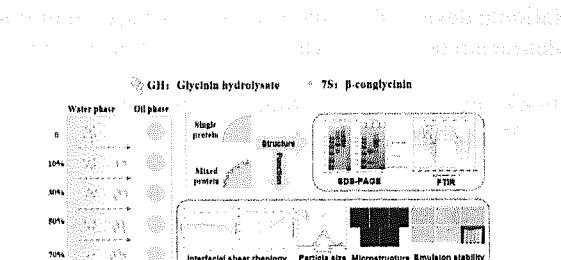
Development of a food packaging antibacterial hydrogel based on gelatin, chitosan, and 3-phenyllactic acid for the shelf-life extension of chilled chicken

Yini Liu, Rui Wang, Debao Wang, Zhilan Sun, Fang Liu, Dequan Zhang and Daoying Wang

**107539**

Effects of globular and flexible structures on the emulsifying and interfacial properties of mixed soy proteins

Wenhui Cao, Rui Gao, Xin Wan, Zhiyong He, Jie Chen, Yaosong Wang, Wenyi Hu, Jianlin Li and Weiwei Li

**107214**

Corrigendum to “Development of the structure of an imitation cheese with low protein content” [Food Hydrocolloids 23 (2009) 1596–1601]

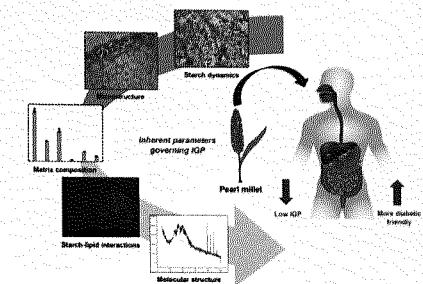
Muzeyyen Burcu Kiziloz, Oznur Cumhur and Meral Kilic

(contents continued from outside back cover)

107481

Microstructure, matrix interactions, and molecular structure are the key determinants of inherent glycemic potential in pearl millet (*Pennisetum glaucum*)

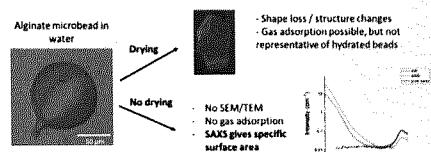
Debarati Mondal, Monika Awana, Shilpi Aggarwal, Debarup Das, Bejoy Thomas, S.P. Singh, Tara Satyavathi C, Raman M. Sundaram, Anjali Anand, Archana Singh, Archana Sachdev, Shelly Praveen and Veda Krishnan



107498

Small angle x-ray scattering to investigate the specific surface of hydrated alginate microbeads

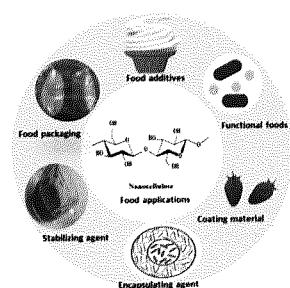
F. Ghernaouti, A. Perrin, J. Causse, F. Chandre, D. Cornu and J. Cambedouzou



107484

Nanocellulose: Recent trends and applications in the food industry

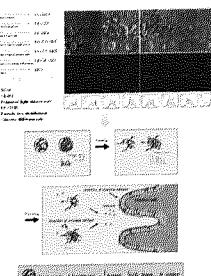
Anand Babu Perumal, Reshma B Nambiar, J.A. Moses and C. Anandharamakrishnan



107457

The effects of removing endogenous proteins, β -glucan and lipids on the surface microstructure, water migration and glucose diffusion *in vitro* of starch in highland barley flour

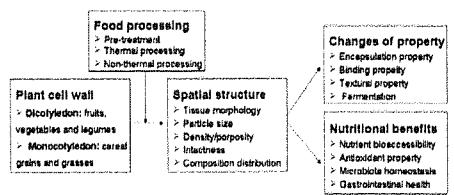
Yueyue Yang, Aiquan Jiao, Qing Liu, Xiaoru Ren, Kunfu Zhu and Zhengyu Jin



107511

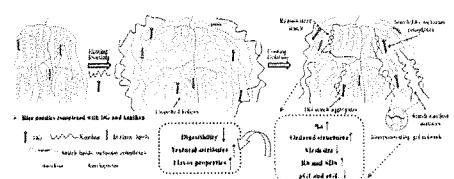
The contribution of intact structure and food processing to functionality of plant cell wall-derived dietary fiber

Xiuting Hu, Genyi Zhang, Bruce R. Hamaker and Ming Miao

**107538**

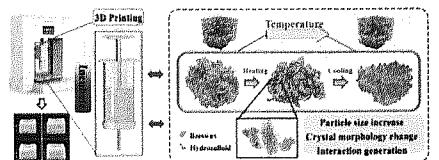
Understanding the structure, digestibility, texture and flavor attributes of rice noodles complexation with xanthan and dodecyl gallate

Shuangxia Huang, Chengdeng Chi, Xiaoxi Li, Yiping Zhang and Ling Chen

**107541**

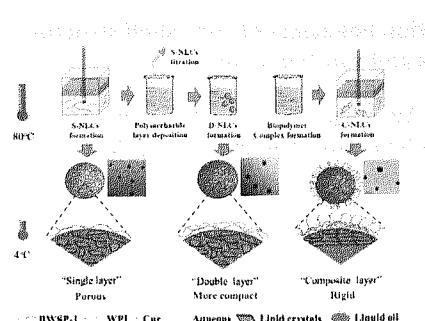
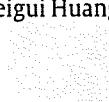
Effects of incubation temperature on the mechanical and structure performance of beeswax-carrageenan-xanthan hybrid gelator system in 3D printing

Han Tian, Kai Wang, Runkang Qiu, Shaoyun Wang, Zhuoyan Hu and Lei Zhao

**107552**

Interfacial engineering strategy to improve the stabilizing effect of curcumin-loaded nanostructured lipid carriers

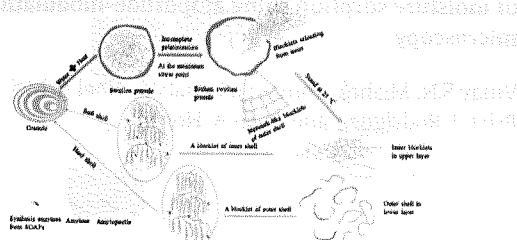
Chunyang Li, Dian Liu, Meigui Huang, Wuyang Huang, Ying Li and Jin Feng



107551

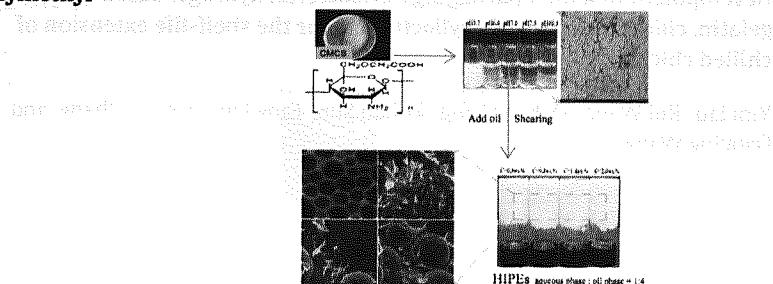
Architecture of outer shell and inner blocklets of rice starch granule is related to starch granule-associated proteins

Mengting Ma, Zekun Xu, Xiaojing Chen, Chuangchuang Zhang, Ziyi Liu, Dennis Cantre, Haitao Li, Zhongquan Sui and Harold Corke

**107554**

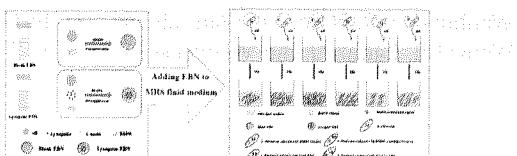
High internal phase emulsions stabilized solely by carboxymethyl chitosan

Yilin Jie, Fusheng Chen, Tingwei Zhu and Dingyang Lv

**107518**

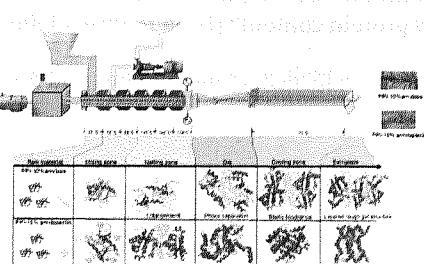
Rational design of lycopene emulsion-based nanofood for *Lactobacillus plantarum* to enhance the growth and flavor production

Tong Zhang, Ruoyun Xu, Ning Zhao, Junnan Xu, Fuguo Liu, Xinyuan Wei and Mingtao Fan

**107559**

Protein-amylose/amylopectin molecular interactions during high-moisture extruded texturization toward plant-based meat substitutes applications

Qiongling Chen, Jinchuang Zhang, Yujie Zhang, David L. Kaplan and Qiang Wang



107510

Inter-laboratory analysis of cereal beta-glucan extracts of nutritional importance: An evaluation of different methods for determining weight-average molecular weight and molecular weight distribution

Simon Ballance, Yudong Lu, Hanne Zobel, Anne Rieder, Svein Halvor Knutsen, Vlad T. Dinu, Bjørn E. Christensen, Ann-Sissel Ulset, Marius Schmid, Ndegwa Maina, Antje Potthast, Sonja Schiehser, Peter R. Ellis and Stephen E. Harding



Weight-average molecular weight (M_w) of cereal beta-glucans (BG)

A4F-MALS may overestimate M_w

- M_w is an important parameter describing the nutritional quality of cereal BG
- Several methods can be used to measure M_w of extracts of cereal BG
- We compare some of these methods in an inter-laboratory study

In laboratory beta-glucan extracts

↓

1/1 A4F-MALS-MALS-AS

1/2 DOWA-MALS-MALS-AS

1/3 Viscosity rheometry

1/4 A4F-MALS-AS

1/5 PEGV-MALS-AS

1/6 Viscosity rheometry

1/7 PEGV-MALS-AS

1/8 Viscosity rheometry

1/9 A4F-MALS-AS

1/10 Viscosity rheometry

↓

AS

↓

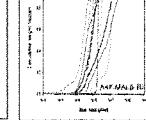
AS

↓

Molecular weight distribution

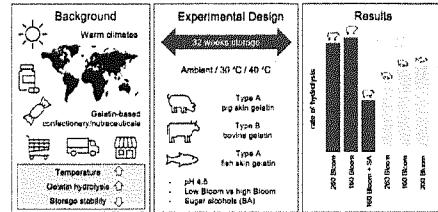
Weight-average molecular weight (M_w) of cereal beta-glucans (BG)

A4F-MALS may overestimate M_w

**107535**

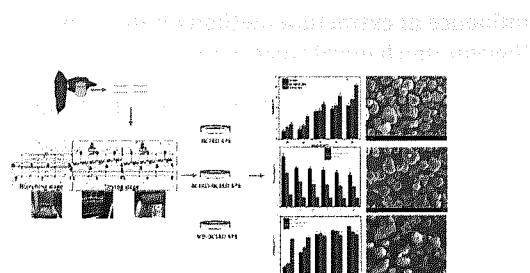
Long-term storage stability of type A and type B gelatin gels: The effect of Bloom strength and co-solutes

Tuna Baydin, Olav A. Aarstad, Morten J. Dille, Magnus N. Hattrem and Kurt I. Draget

**107543**

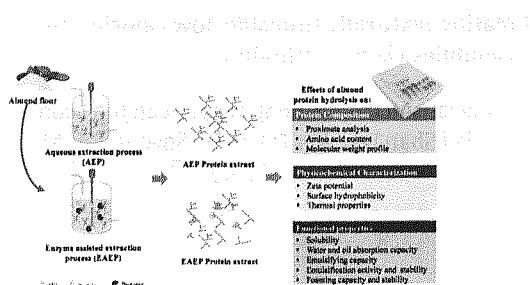
Effects of blanching drying methods on the structure and physicochemical properties of starch in sweet potato slices

Qiaolan Sun, Xiaoqian Song, Mujumdar Arun S, Long Zhang, Xiaojie Yu, Cunshan Zhou, Yuxin Tang and Abu ElGasim Ahmed Yagoub

**107534**

Understanding the impact of enzyme-assisted aqueous extraction on the structural, physicochemical, and functional properties of protein extracts from full-fat almond flour

Fernanda F.G. Dias and Juliana M.L.N. de Moura Bell

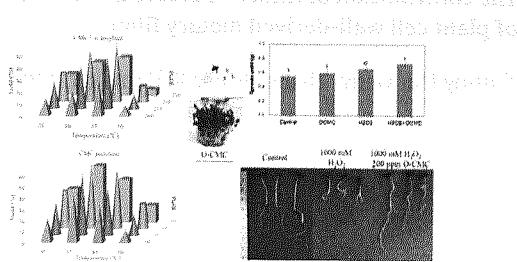


107530

Facile method for preparation of oligo-carboxymethyl cellulose and other oligosaccharides: Physicochemical properties and bioactivity

Yevgenia Shebis, Adriana Vanegas, Nimrod Tish, Elazar Fallik, Victor Rodov and Elena Poverenov

bioactive
oligosaccharides
from
cellulose
and
hemicellulose
polymers

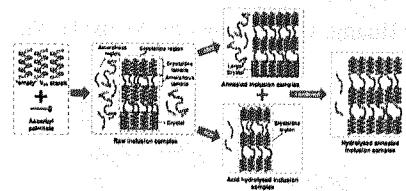


107533

Enhancement of enzymatic resistance in V-type starch inclusion complexes by hydrothermal treatments

Jiayue Guo and Lingyan Kong

Enzymatic
resistance
of V-type
starch
inclusion
complexes
enhanced
by
hydrothermal
treatment

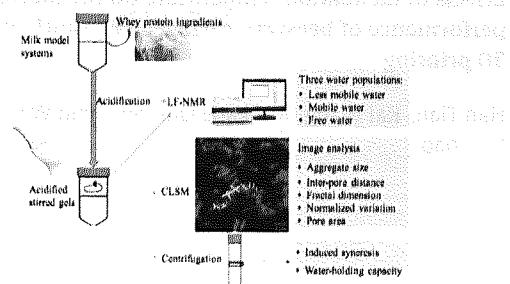


107548

Water mobility and microstructure of acidified milk model gels with added whey protein ingredients

Ruifen Li, Tomasz Paweł Czaja, Zachary J. Glover, Richard Ipsen, Tanja Christine Jæger, Tijs A.M. Rovers, Adam Cohen Simonsen, Birte Svensson, Frans van den Berg and Anni Bygvrå Hougaard

Water
mobility
and
microstruc-
ture
of acidified
milk
model
gels
with
added
whey
protein
ingredients

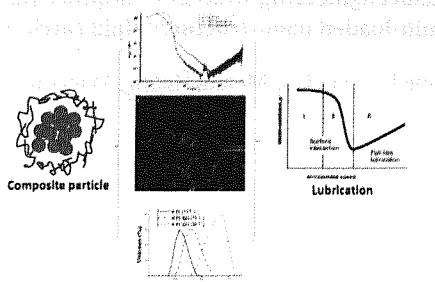


107512

Lubrication behaviors of core-shell structured particles formed by whey proteins and xanthan gum

Borui Li, Wenjuan Gu, Imane Bourouis, Mengya Sun, Yating Huang, Cunshe Chen, Xinqi Liu and Zhihua Pang

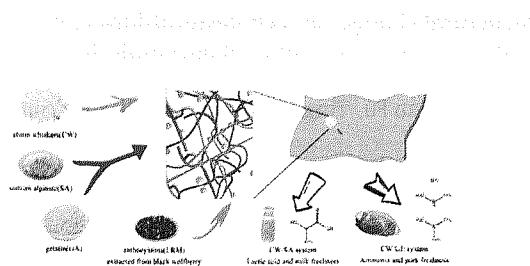
Core-shell
structured
particles
formed
by whey
proteins
and
xanthan
gum



107517

Two colorimetric films based on chitin whiskers and sodium alginate/gelatin incorporated with anthocyanins for monitoring food freshness

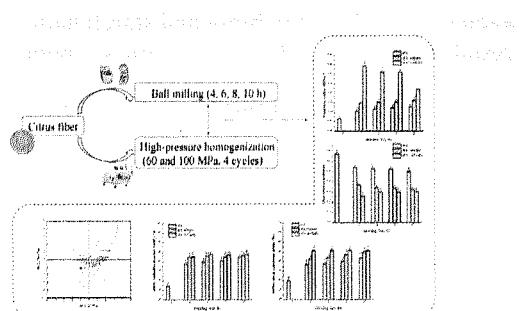
Yuewei Zheng, Xiaomin Li, Yao Huang, Houbin Li, Lingyun Chen and Xinghai Liu



107515

Consequences of ball milling combined with high-pressure homogenization on structure, physicochemical and rheological properties of citrus fiber

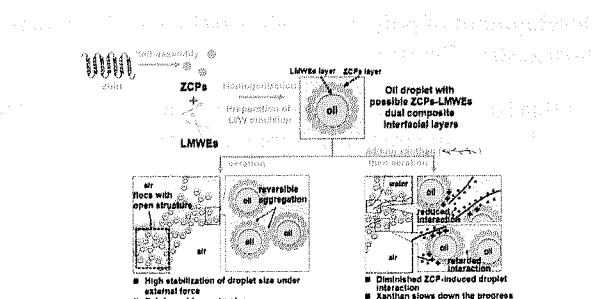
Zhanmei Jiang, Sinan Mu, Chenglong Ma, Yue Liu, Yue Ma, Minghan Zhang, Hongyu Li, Xianqi Liu, Juncai Hou and Bo Tian



107520

Synergistic influence of protein particles and low-molecular-weight emulsifiers on the stability of a milk fat-based whippable oil-in-water emulsion

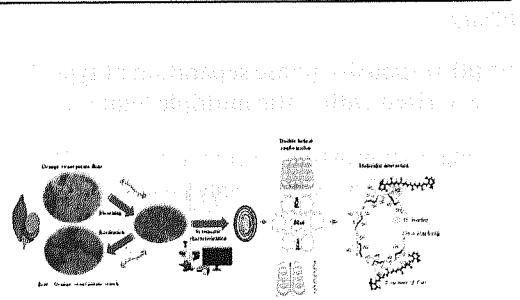
Zelong Liu, Zhenyu Cao, Mengmeng Zhao, Huijuan Zhang, Jing Wang and Baoguo Sun



107522

Molecular interaction of β-carotene with sweet potato starch: A bleaching-restitution assay

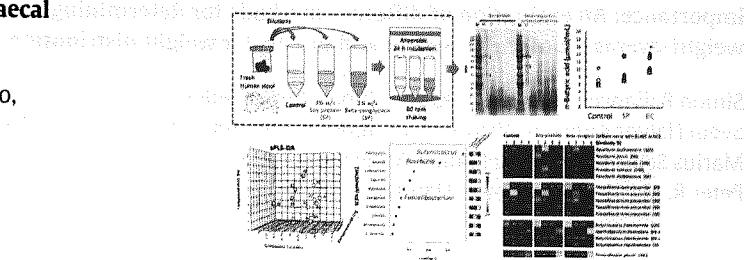
Alberto A. Escobar-Puentes, Simón Yobanny Reyes-López, Álvaro de Jesús Ruiz Baltazar, Verónica López-Terés and Abraham Wall-Medrano



107516

Effects of soy protein and β -conglycinin on microbiota and *in vitro* antioxidant and immunomodulatory capacities of human faecal cultures

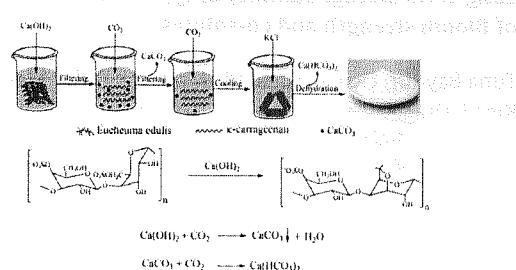
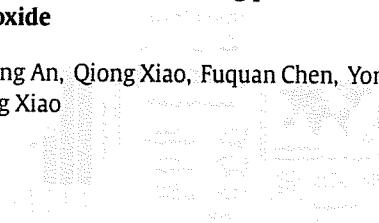
Yumeng Xia, Takashi Kuda, Saori Nakamura, Mahiro Yamamoto, Hajime Takahashi and Bon Kimura



107507

A novel κ -carrageenan extracting process with calcium hydroxide and carbon dioxide

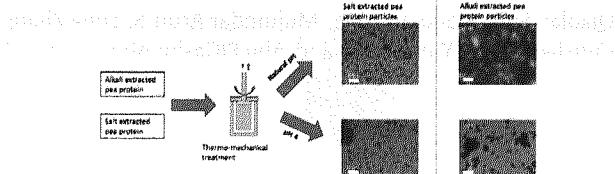
Yao Liu, Ding An, Qiong Xiao, Fuquan Chen, Yonghui Zhang, Huifen Weng and Anfeng Xiao



107514

Influence of extraction method on the aggregation of pea protein during thermo-mechanical treatment

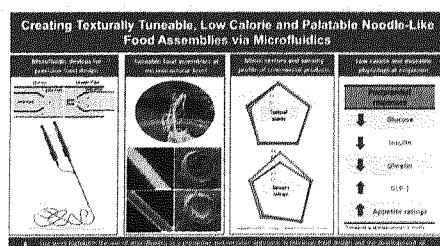
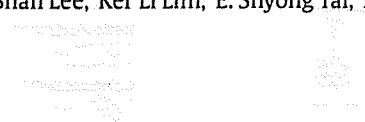
Caren Tanger, Johannes Mertens and Ulrich Kulozik



107544

Creating texturally tuneable, low calorie and palatable noodle-like food assemblies via microfluidics

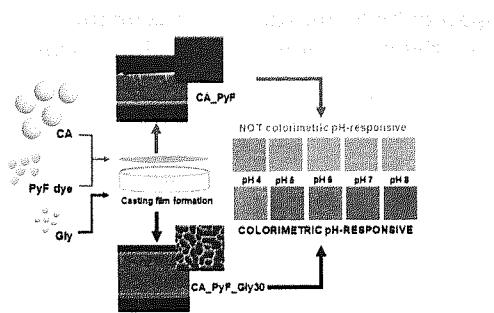
Jiaxing Jansen Lin, Dimeng Yang, Sean Jun Leong Ou, Ying Yuan Mak, Delia Pei Shan Lee, Ker Li Lim, E. Shyong Tai, Mei Hui Liu and Saif A. Khan



107501

Pyranoflavylum-cellulose acetate films and the glycerol effect towards the development of pH-freshness smart label for food packaging

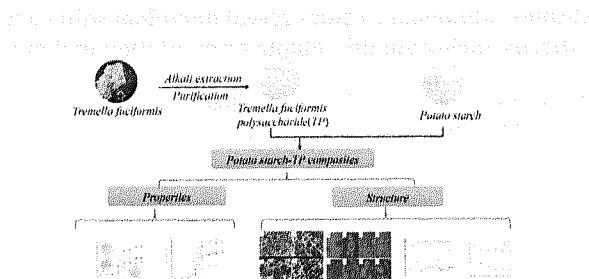
Vânia Gomes, Ana Sofia Pires, Nuno Mateus, Victor de Freitas and Luís Cruz



107509

Interaction between potato starch and *Tremella fuciformis* polysaccharide

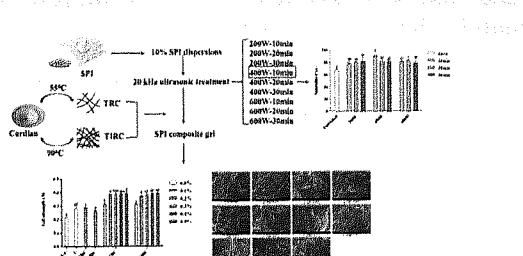
Fang Yang, Qinling Du, Ting Miao, Xueer Zhang, Wen Xu and Dongying Jia



107506

Effects of low-frequency and high-intensity ultrasonic treatment combined with curdlan gels on the thermal gelling properties and structural properties of soy protein isolate

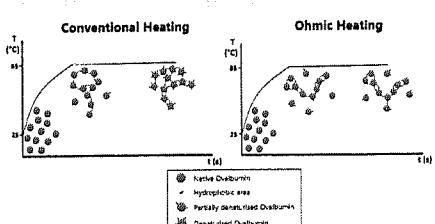
Ming Li, Rong Yang, Xianchao Feng, Xiaojing Fan, Yaping Liu, Xinglian Xu, Guanghong Zhou, Beiwei Zhu, Niamat Ullah and Lin Chen



107519

Ohmic vs. conventional heating: Influence of moderate electric fields on properties of egg white protein gels

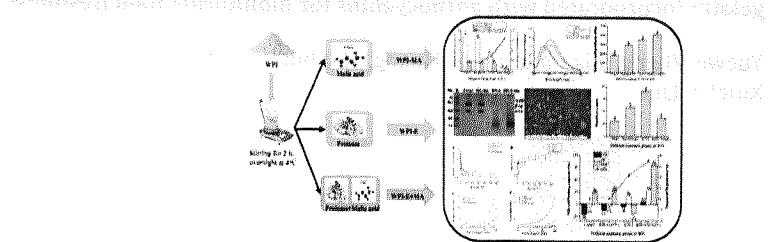
Eike Joeres, Henry Schölzel, Stephan Drusch, Stefan Töpfel, Volker Heinz and Nino Terjung



107502

Structural changes and cholesterol-lowering in denatured whey protein isolate: Malic acid combined enzymolysis

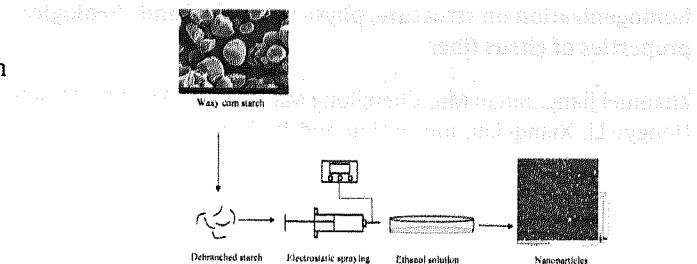
Lin Mei, Qian Fu, Tingting Guo, Qiuya Ji and Yibin Zhou



107513

Green preparation of debranched starch nanoparticles with different crystalline structures by electrostatic spraying

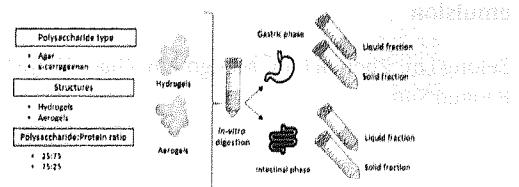
Qianzhu Lin, Yadi Liu, Liyang Zhou, Na Ji, Liu Xiong and Qingjie Sun



107505

Development of polysaccharide-casein gel-like structures resistant to *in vitro* gastric digestion

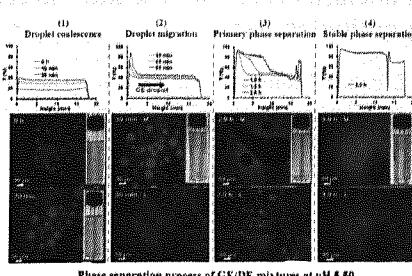
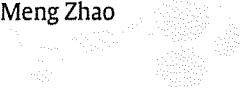
Cynthia Fontes-Candia, Pablo Jiménez-Barrios, Beatriz Miralles, Isidra Recio, Amparo López-Rubio and Marta Martínez-Sanz



107503

The pH-responsive phase separation of type-A gelatin and dextran characterized with static multiple light scattering (S-MLS)

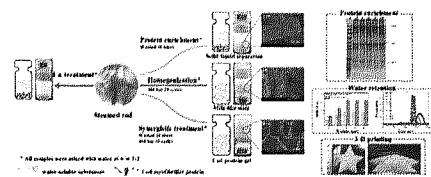
Qi Wang, Qianwan Guo, Wenlong Niu, Ling Wu, Wen Gong, Sicong Yan, Katsuyoshi Nishinari and Meng Zhao



107468

The synergistic effects of myofibrillar protein enrichment and homogenization on the quality of cod protein gel

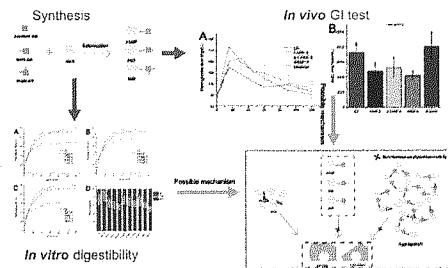
Yisha Xie, Xiliang Yu, Zheming Wang, Chenxu Yu, Sangeeta Prakash and Xiuping Dong



107432

Modulating the digestibility of cassava starch by esterification with phenolic acids

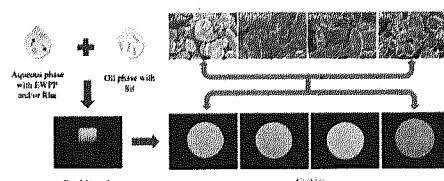
Tao Xu, Yongheng Zhong, Qi Chen, Lipeng Wu, Shengyang Ji, Bowen Yang, Yongzhu Zhang, Jianfu Shen and Baiyi Lu



107479

Construction of egg white protein particle and rhamnolipid based emulsion gels with β -sitosterol as gelation factor: The application in cookie

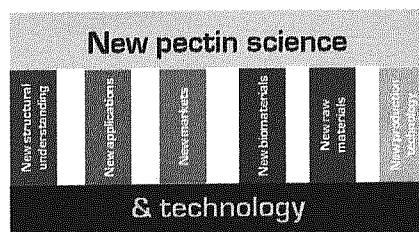
Yinyue Yang, Ming Zhang, Junhua Li, Yujie Su, Luping Gu, Yanjun Yang and Cuihua Chang



107483

Pectin: New science and forthcoming applications of the most valued hydrocolloid

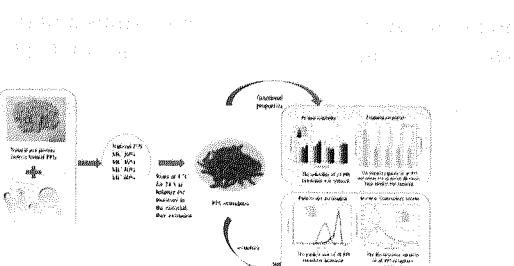
Rosaria Ciriminna, Alexandra Fidalgo, Antonino Scurria, Laura M. Ilharco and Mario Pagliaro



107508

Impact of high moisture contents on the structure and functional properties of pea protein isolate during extrusion

Bairu Zhang, Xueming Kang, Yunhui Cheng, Bo Cui and A.M. Abd El-Aty

**107422**

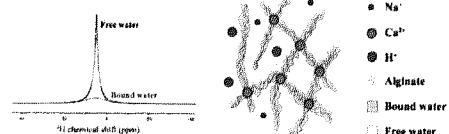
Absolute abundance values reveal microbial shifts and co-occurrence patterns during gut microbiota fermentation of dietary fibres *in vitro*

Hong Yao, Shiyi Lu, Barbara A. Williams, Bernadine M. Flanagan, Michael J. Gidley and Deirdre Mikkelsen

**107500**

Solid-state NMR spectroscopy insights for resolving different water pools in alginate hydrogels

Mustapha El Hariri El Nokab, Alessia Lasorsa, Khaled O. Sebakhy, Francesco Picchioni and Patrick C.A. van der Wel

**107499**

Preparation of konjac glucomannan/xanthan gum/sodium alginate composite gel by freezing combining moisture regulation

Sha Jiang, Longchen Shang, Hongshan Liang, Bin Li and Jing Li

