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**The synergistic gelation of *Dendrobium officinale* polysaccharide (Dendronans) with xanthan gum and its rheological and texture properties**

Yanjie Hou, Jiaying Zhao, Junyi Yin, Fang Geng and Shaoping Nie

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**Double-layer mucin microencapsulation enhances the stress tolerance and oral delivery of *Lactobacillus plantarum* B2**

Yun-Yang Zhu, Kiran Thakur, Wang-Wei Zhang, Jing-Yu Feng, Jian-Guo Zhang, Fei Hu, Chenzhong Liao and Zhao-Jun Wei

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**Coagulation of model infant formulae: Impact on their in vitro dynamic gastric digestion**

Quanquan Lin, Cenyi Ouyang, Nan Luo and Aiqian Ye

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**Physicochemical properties, structural characteristics and *in vitro* digestion of brown rice–pea protein isolate blend treated by microbial transglutaminase**

Lin Zhao, Ming-Hsu Chen, Xuezhhi Bi and Juan Du

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**Cation-responsive food polysaccharides and their usage in food and pharmaceutical products for improved quality of life**

Takahiro Funami and Makoto Nakauma

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**A comparative study on the gel transition, structural changes, and emulsifying properties of anhydride-esterified agar with varied degrees of substitution and carbon chain lengths**

Luyao Zhang, Qiong Xiao, Yonghui Zhang, Huifen Weng, Siyuan Wang, Fuquan Chen and Anfeng Xiao

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**108695**

**Use of oligomeric globulins to efficiently fabricate nanoemulsions: Importance of enhanced structural stability by introducing trehalose**

Wen Han, Tong-Xun Liu and Chuan-He Tang

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**108684**

**Preparation, characterization, and evaluation of tamarind seed polysaccharide-carboxymethylcellulose buccal films loaded with soybean peptides-chitosan nanoparticles**

Suping Ji, Rui Sun, Wenjuan Wang and Qiang Xia

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**Depletion attraction driven formation of *Spirulina* emulsion gels for 3D printing**

Guangxin Feng, Gaoshang Wang, Qing Li, Chuanwu Han, Dong Wei, Jian Guo, Zhili Wan, Jinmei Wang and Xiaoquan Yang

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**The role of  $\beta$ -subunit in emulsifying performance of  $\beta$ -conglycinin**

Chang Wu, Fengyan Wu, Qian Ju, Yingying Zhang, Yanqiu Yuan, Shufang Kang, Yayun Hu and Guangzhong Luan

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**High-moisture extrusion of soy protein: Effects of insoluble dietary fiber on anisotropic extrudates**

Qian Deng, Zhaojun Wang, Liwei Fu, Zhiyong He, Maomao Zeng, Fang Qin and Jie Chen

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**Remarkable improvement in the storage stability of maltodextrin through 1,4- $\alpha$ -glucan branching enzyme modification**

Yuxian You, Yi Li, Jin Tao, Caiming Li, Zhengbiao Gu, Xiaofeng Ban, Haocun Kong, Hanyuan Xia, Yi Tong and Zhaofeng Li

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**Impact of macronutrient composition in nutrition shakes on postprandial glycemic response, appetite, and food intake**

Keying Yang, Ying Yang, Yun Xie, Yingyi Mao, Xiang Li and Qing Guo

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**Synergistic effect of arabinoxylan and (1,3)(1,4)- $\beta$ -glucan reduces the starch hydrolysis rate in wheat flour**

Ruifeng Ying, Ting Zhou, Hui Xie and Meigui Huang

AX: arabinoxylan; BG: (1,3)(1,4)- $\beta$ -glucan; C: control. KF-AX: AX extracted from Kaifeng wheat; YZ-AX: AX extracted from Yangzhou wheat.

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**Conformation-emulsification property relationship of partially depolymerized water soluble yellow mustard mucilage**

Aiwu Gao and Ying Wu

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**Effect of starch type and chitosan supplementation on physicochemical properties, morphology, and oil structuring capacity of composite starch bioaerogels**

Farhad Alavi and Ozan N. Ciftci

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**Effect of Pickering emulsion on the physical properties, microstructure and bioactivity of corn starch/cassia gum composite films**

Peixin Zhao, Xiaoran Yan, Meng Cheng, Yirong Wang, Yifan Wang, Kaiyue Wang, Xiangyou Wang and Juan Wang

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**Polysaccharides from small black soybean alleviating type 2 diabetes via modulation of gut microbiota and serum metabolism**

Zhouya Bai, Xiaojun Huang, Guangjie Wu, Yanli Zhang, Hedi Xu, Yang Chen, Huayu Yang and Shaoping Nie

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**Design and characterization of low salt myofibrillar protein-sugar beet pectin double-crosslinked gels pretreated by ultrasound and konjac glucomannan: Conformational and gelling properties**

Yongfang Gao, Shancan Wang, Haoyang Liu, Yingying Gu and Jie Zhu

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**Preparation and characterization of curcumin-loaded debranched starch/*Mesona chinensis* polysaccharide microcapsules: Loading levels and *in vitro* release**

Wenhao Xiao, Mingyue Shen, Jinwang Li, Yulin Li, Xin Qi, Liyuan Rong, Wenmeng Liu and Jianhua Xie

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**Rheological properties and microstructure of thermodynamically stable microemulsions as factors influencing the release rate of liposoluble vitamins**

Noelia Mori Cortés, Sebastián Scioli Montoto, María Esperanza Ruiz, Alicia N. Califano, Noemí Zaritzky and Gabriel Lorenzo

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**Generating slow digestibility in cooked potatoes by modulating starch accessibility to  $\alpha$ -amylase and mucosal  $\alpha$ -glucosidase to different levels**

Andrea Gómez-Maqueo, Alvaro Ferreira-Lazarte, Nur Syahirah Amirruddin and Amy Hui-Mei Lin

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**Bioactive-loaded nanovesicles embedded within electrospun plant protein nanofibers; a double encapsulation technique**

Daniai Dehnad, Bahareh Emadzadeh, Behrouz Ghorani, Ghadir Rajabzadeh, Nick Tucker and Seid Mahdi Jafari

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**Composition and functional profiles of human faecal microbiota fermenting plant-based food particles are related to water-holding capacity more than particle size**

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

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**108687**

**Transforming monomeric globulins into pickering particles to stabilize nanoemulsions: Contribution of trehalose**

Wen Han, Tong-Xun Liu and Chuan-He Tang

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**108715**

**High internal phase emulsions stabilized by pea protein isolate modified by ultrasound and pH-shifting: Effect of chitosan self-assembled particles**

Jingnan Zhang, Siqi Zhao, Qian Liu, Qian Chen, Haotian Liu and Baohua Kong

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**Understanding the digestibility of wheat starch- caffeic acid complexes prepared by hot-extrusion 3D printing technology**

Xin-Ru Cui, Yu-Sheng Wang, Yan Chen, Hong-Yan Mu and Hai-Hua Chen

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**108681**

**Foaming properties of egg white proteins improved by enzymatic hydrolysis: The changes in structure and physicochemical properties**

Siwen Lyu, Meiru Chen, Ying Wang, Deju Zhang, Songning Zhao, Jingbo Liu, Fengguang Pan and Ting Zhang

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**108724**

**Deciphering the competitive binding interaction of  $\beta$ -lactoglobulin with benzaldehyde and vanillic acid via high-spatial-resolution multi-spectroscopic**

Rong Zhang and Wei Jia

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**Fibrillation of  $\beta$ -lactoglobulin at pH 2.0: Impact of cysteine substitution and disulfide bond reduction**

Loes J.G. Hoppenreijs, Sarah E. Brune, Rebekka Biedendieck, Rainer Krull, Remko M. Boom and Julia K. Keppler

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**108712**

**Internal gelation of alginate microparticle prepared by emulsification and microfluidic method: Effect of Ca-EDTA as a calcium source**

Narin Paiboon, Suvimol Surassmo, Uracha Rungsardthong Ruktanonchai, Michael Kappl and Apinan Soottitantawat



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**Effect of sulfate-ester content and nanocellulose allomorph on stability of amylopectin-xyloglucan water-in-water emulsions**

Cassiano Pires, Bernardo Mauad Régnier, Maria Jackeline Rodrigues dos Santos and Rilton Alves de Freitas

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**Pea and lupin protein ingredients: New insights into endogenous lipids and the key effect of high-pressure homogenization on their aqueous suspensions**

Eléna Keuleyan, Perrine Gélébart, Valérie Beaumal, Alice Kermarrec, Lucie Ribourg-Birault, Sophie Le Gall, Anne Meynier, Alain Riaublanc and Claire Berton-Carabin

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**Bacterial cellulose nanocrystals with a great difference in aspect ratios: A comparison study of their reinforcing effects on properties of the sodium alginate film**

Jinshu Yang, Md Nazmus Saqib, Fei Liu and Fang Zhong

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**Tartary buckwheat-derived exosome-like nanovesicles against starch digestion and their interaction mechanism**

Dan Li, Guifang Cao, Xiaolin Yao, Yongli Yang, Dan Yang, Ning Liu, Ying Yuan, Katsuyoshi Nishinari and Xi Yang

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**Gastric digestion of whey protein gels: A randomized cross-over trial with the use of MRI**

Ruoxuan Deng, Monica Mars, Anja E.M. Janssen and Paul A.M. Smeets

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**An efficient approach for improving granular cold water soluble starch properties using energetic neutral atoms treatment and NaOH/urea solution**

Cherakkathodi Sudheesh, Kappat Valiyapeediyekkal Sunooj, Muhammed Navaf, Plachikkattu Parambil Akhila, Basheer Aaliya, Sabah Mounir, Suraj Kumar Sinha, Sunny Kumar, Vallayil Appukuttan Sajeevkumar and Johnsy George

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**Different starch varieties influence the complexing state and digestibility of the resulting starch-lipid complexes**

Shenglin Sun, Yan Hong, Zhengbiao Gu, Li Cheng, Xiaofeng Ban, Zhaofeng Li and Caiming Li

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**Effect of chitin nanowhiskers on structural and physical properties of konjac glucomannan hydrogels nanocomposites**

Danje Li, Weiwan Zhong, Liang Li, Cailing Tong, Shan Yu, Mengxia Duan, Jingting Xu, Xiaoyan Liu, Jie Pang and Chunhua Wu

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**Schiff base type casein-konjac glucomannan conjugates with improved stability and emulsifying properties via mild covalent cross-linking**

Ying Kuang, Si Zhao, Puming Liu, Menglong Liu, Kao Wu, Yi Liu, Pengpeng Deng, Cao Li and Fatang Jiang

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**Unravelling the impact of emulsifier blends on interfacial properties and *in vitro* small intestinal lipolysis of oil-in-water emulsions**

Daphne Michels, Sarah H.E. Verkempinck, Esther Staes, Riet Spaepen, Karen Vermeulen, Alexandra Wealleans and Tara Grauwet

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**Effect of starch retrogradation on molecular dynamics of cooked rice by quasi-elastic neutron scattering**

Yoshinobu Hirata, Hiroshi Nakagawa, Hiroki Yamauchi, Koji Kaneko, Masato Hagihara, Hideyuki Yamaguchi, Chie Ohmoto, Nakako Katsuno, Teppei Imaizumi and Takahisa Nishizu

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**The potential of supercritical drying as a “green” method for the production of food-grade bioaerogels: A comprehensive critical review**

Somnath Basak and Rekha S. Singhal

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**Co-delivery system based on multilayer structural nanoparticles for programmed sequential release of fucoxanthin and curcumin**

Luhui Wang, Zihao Wei, Changhu Xue and Lu Yang

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**Atomic-level understanding on conformational flexibility of neochlorogenic and chlorogenic acids and their inclusion complexation with  $\beta$ -cyclodextrin**

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**Change of network structure in agarose solution during gelation studied by multiple particle tracking and NMR measurements**

Hwabin Jung, Lester C. Geonzon, Won Byong Yoon and Shingo Matsukawa

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**Structural support of zein network to rice flour gluten-free dough: Rheological, textural and thermal properties**

Xinrui Zhang, Zhen Wang, Luyang Wang, Xingqi Ou, Jihong Huang and Guangzhong Luan

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**An insight into Iranian natural hydrocolloids: Applications and challenges in health-promoting foods**

Bahareh Emadzadeh, Sara Naji-Tabasi, Aram Bostan and Behrouz Ghorani

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**Schiff base cross-linked dialdehyde  $\beta$ -cyclodextrin/gelatin-carrageenan active packaging film for the application of carvacrol on ready-to-eat foods**

Haiying Cui, Qun Cheng, Changzhu Li, Myat Noe Khin and Lin Lin

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**108693**

***In vitro* fermentation characteristics of oxidized konjac glucomannan and its modulation effects on gut microbiota**

Yao Li, Ting Gong, Hongjia Lu, Senquan Ma and Xiong Liu

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**108751**

**Fabrication and characterization of heat-set composite gels obtained from complexation of electro-activated whey/canola proteins mixture**

Shima Momen, Denis Rodrigue and Mohammed Aider

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**Gelation of cereal  $\beta$ -glucan after partial dissolution at physiological temperature: Effect of molecular structure**

Miikka Laitinen, Noora Mäkelä-Salmi and Ndegwa H. Maina

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**Impact of chitosan and/or transglutaminase treatment on the colloidal stability and air-water interfacial properties of gliadin based nanoparticles**

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

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**Proteins from different sources in a high-fat food matrix influence lipid hydrolysis through bolus coalescence and interactions with bile salts**

Mengzhen Ding, Zixin Huang, Zhiji Huang, Zerun Zhao, Di Zhao, Kai Shan, Weixin Ke, Miao Zhang, Guanghong Zhou and Chunbao Li

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**108719**

**Water-in-water Pickering emulsion stabilized by cellulose nanocrystals as space-confined encapsulating systems: From establishment to stability**

Yunxiao Xie, Mengjiao Ruan, Jie Zhang, Maria Kibitia, Yan Li, Bin Li, Yangyang Zhang and Shilin Liu

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**Fabrication and characterization of O/W emulsion stabilized by Octenyl Succinic Anhydride (OSA) modified resistant starch**

Li Wang, Suping Zhu, Yong Chen, Pothiyappan Karthik and Jianshe Chen

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**Confocal Raman microspectroscopy combined with spectral screening algorithms for quantitative analysis of starch in rice**

Xiao Wei, Fang Li, Anand Babu Perumal, Alireza Sanaeifar, Mahamed Lamine Guindo, Yongqiang Shi, Yong He and Fei Liu

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**Effect of pH-shifting and sonication-assisted treatment on properties and stability of vegetable oil-based whipped cream stabilized by kidney bean protein aggregates**

Sisi Wu, Zifan Zhang, Chunxiu Liu and Tiezheng Ma

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**Using starch structure to choose rices with an optimal combination of palatability and digestibility**

Jihui Zhu, Keyu Tao, Sangeeta Prakash, Changquan Zhang, Robert G. Gilbert and Qiaoquan Liu

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**108765**

**Hydrogel formation from peptides of a  $\beta$ -lactoglobulin tryptic hydrolysate: Contribution of self-assembling peptide  $\beta$ -Lg f1-8**

Mathilde Pimont-Farge, Véronique Perreault, Guillaume Brisson, François Otis, Normand Voyer, Shyam Suwal, Yves Pouliot and Alain Doyen

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**The role of amide groups in the mechanism of acid-induced pectin gelation: A potential pH-sensitive hydrogel based on hydrogen bond interactions**

Shuhan Feng, Jianyong Yi, Youchuan Ma and Jinfeng Bi

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**108746**

**Study on high moisture extruded pea protein isolate based on acid-induced process: Physicochemical properties, conformational changes and fibrous structure mechanism**

Dongyu Sun, Bowen Zhang, Chengyi Zhou, Bo Wang and Min Wu

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**108759**

**Enhancement of sodium salty taste modulate by protease-hydrolyzed Gum Arabic**

Kailin Ye, Jiaming Qi, Yang Zhang, Jinmei Wang, Jian Guo and Xiaoquan Yang



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**108755**

**Effects of thermal treatments on the extraction and *in vitro* fermentation patterns of pectins from pomelo (*Citrus grandis*)**

Yuxin Wang, Jiaxin Liu, Li chen, Shuang Jin, Can An, Long Chen, Bao Yang, Henk A. Schols, Paul de Vos, Weibin Bai and Lingmin Tian

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**108732**

**Ultrafast gelation of hyaluronan hydrogels via alternate compression-decompression**

Pu Qiao, Kaiyuan Shi, Yanlong Wang, Bo Li, Lei Su, Ke Zhang, Katsuyoshi Nishinari and Guoqiang Yang

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**108745**

**Tuning of rheological behavior of soybean lipophilic protein-stabilized emulsions**

Jiraporn Sirison, Toya Ishii, Kentaro Matsumiya, Yuki Higashino, Yuko Nambu, Masahiko Samoto, Masahiro Sugiyama and Yasuki Matsumura