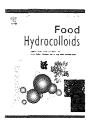
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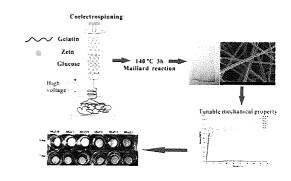
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Lingli Deng, Yang Li, Fengqin Feng, Hui Zhang

National Engineering Laboratory of Intelligent Food Technology and Equipment, Key Laboratory for Agro-Products

Postharvest Handling of Ministry of Agriculture, Key Laboratory for Agro-Products Nutritional Evaluation of Ministry of Agriculture, Zhejiang Key Laboratory for Agro-Food Processing, Fuli Institute of Food Science, College of Biosystems Engineering and Food Science, Zhejiang University, Hangzhou, 310058, China



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Maissa Khemakhema, Hamadi Attiac, Mohamed Ali Ayadic

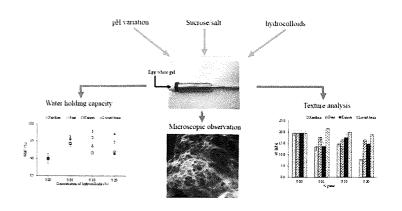
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BP 3038, Sfax, Tunisia



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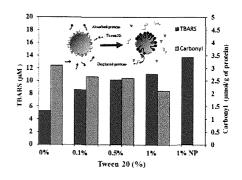
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Jianhua Yia, Jiangin Ninga, Zhenbao Zhua, Legi Cuib, Eric A. Deckerc, David Iulian McClements<sup>c</sup>

aSchool of Food and Biological Engineering, Shaanxi University of Science and Technology, Xuefu Road, Xi'an Shaanxi, 710021, China

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Department of Food Science, University of Massachusetts, Amherst, MA 01003, United States

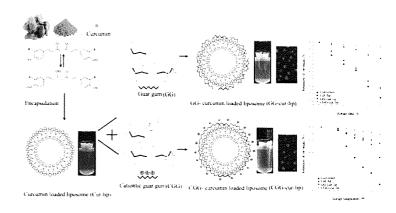


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School of Food Science and Engineering, Qingdao Agricultural University, Qingdao, 266109, China

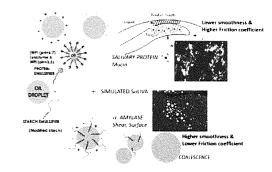


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Rituja Upadhyay, Jianshe Chen

Food Oral Processing Laboratory, School of Food Science and Biotechnology, Zhejiang Gongshang University, Hangzhou 310018, China

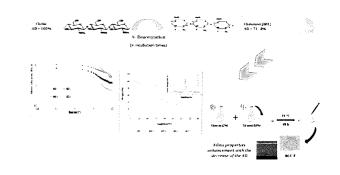


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<sup>a</sup>Laboratory of Enzyme Engineering and Microbiology, University of Sfax, National Engineering School of Sfax, B.P. 1173, 3038, Sfax, Tunusia <sup>b</sup>European Institute of Membranes, UMR CNRS 5635, University of Montpellier, Place Eugene Bataillon, 34095 Montpellier Cedex 5, France <sup>c</sup>UMR IATE, University of Montpellier, Place Pierre Viala, 34060 Montpellier Cedex 02, France

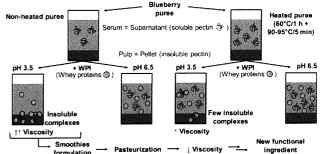


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Laura M. Chevaliera, Laurie-Eve Riouxa,b, Paul Angersa, Sylvie L. Turgeona,b

<sup>a</sup>Institute of Nutrition and Functional Foods, Department of Food Science, Université Laval, Québec, QC, G1V 0A6, Canada <sup>b</sup>GastronomiQc Lab Joint Research Unit, Canada

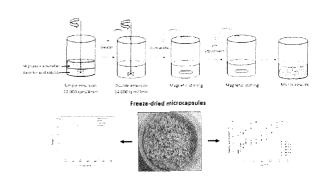


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<sup>a</sup>Department of Chemical Engineering, Graduate Program in Food Engineering, Federal University of Paraná, Av. Francisco Hoffmann dos Santos s.n., CEP 81530-900, Curitiba, PR, Brazil

<sup>b</sup>Dublin Institute of Technology, Environmental Sustainability and Health Institute, Grangegorman, D07 H6K8, Dublin, Ireland

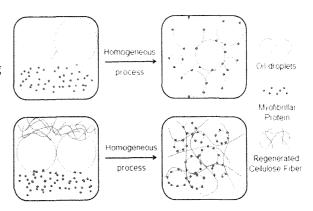


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Key Lab of Meat Processing and Quality Control, MOE, Key Laboratory of Meat Products Processing, MOA, Jiangsu Collaborative Innovation Center of Meat Production and Processing, Quality and Safety Control, MOE Joint International Research Laboratory of Animal Health and Food Safety, Nanjing Agricultural University, Nanjing, 210095, PR China



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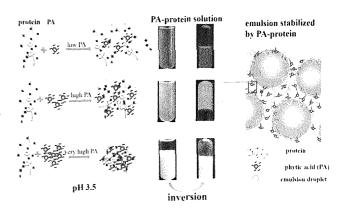
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<sup>b</sup>Key Laboratory of Environment Correlative Dietology (Huazhong Agricultural University), Ministry of Education, 430070, China

<sup>c</sup>Department of Food Science, University of Massachusetts Amherst, Amherst, MA, 01003, USA

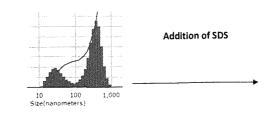


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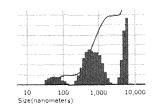
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Ahmed S. Eissa

Department of Chemical Engineering, Faculty of Engineering, wCairo University, Cairo, 12613, Egypt



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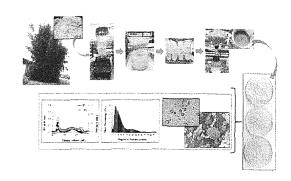
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 $^a$ Department of Food Technology, School of Food Engineering, University of Campinas (UNICAMP) – Cidade

Universitária Zeferino Vaz, Monteiro Lobato, 80, Campinas, São Paulo, Brazil <sup>b</sup>Technology College, State University of Campinas (UNICAMP), Limeira, São Paulo, Brazil <sup>c</sup>Department of Food Engineering and Technology, UNESP – São Paulo State University, São José do Rio Preto, São Paulo, Brazil



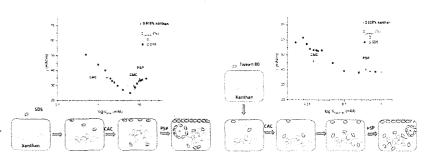
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Veljko Krstonošića, Maja Milanovića, Ljubica Dokićb

<sup>a</sup>University of Novi Sad, Faculty of Medicine, Hajduk Veljkova 3, Novi Sad, Serbia

<sup>b</sup>University of Novi Sad, Faculty of Technology Novi Sad, Bulevar Cara Lazara 1, Novi Sad, Serbia

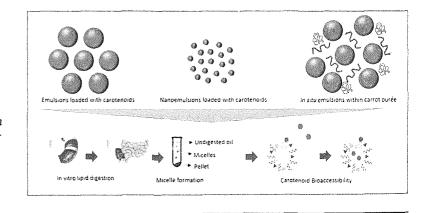


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Laboratory of Food Technology, Leuven Food Science and Nutrition Research Centre (LFoRCe), Department of Microbial and Molecular Systems (M2S), KU Leuven, Kasteelpark Arenberg 22, PB 2457, 3001, Leuven, Belgium

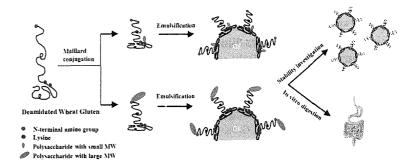


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Yongquan Wang<sup>a</sup>, Jing Gan<sup>a</sup>, Yang Li<sup>a</sup>, Satoru Nirasawa<sup>b</sup>, Yongqiang Cheng<sup>a</sup>

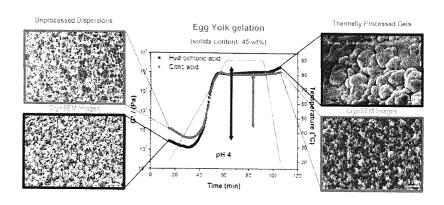
<sup>a</sup>Beijing Advanced Innovation Center for Food Nutrition and Human Health, Beijing Key Laboratory of Functional Food from Plant Resources, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China <sup>b</sup>Japan International Research Center for Agricultural Sciences, Tsukuba 305-8686, Japan



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J.M. Aguilar, F. Cordobés, C. Bengoechea, A. Guerrero

Department of Chemical Engineering, Escuela Politécnica Superior, Universidad de Sevilla, Sevilla, Spain



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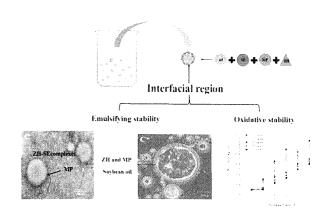
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Yuanyuan Lia, Haotian Liu, Qian Liu, Baohua Kong, Xinping Diao

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<sup>c</sup>College of Animal Science, Northeast Agricultural University, Harbin, Heilongjiang, 150030, China

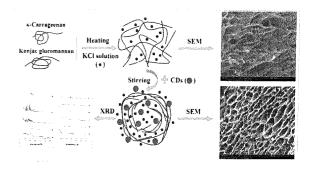


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Chao Yuana,b, Dongyan Xua,b, Bo Cuia,b, Yanli Wanga,b

<sup>a</sup>State Key Laboratory of Biobased Material and Green Papermaking, Qilu University of Technology, Shandong Academy of Sciences, Jinan, 250353, China <sup>b</sup>School of Food Science and Engineering, Qilu University of Technology, Shandong Academy of Sciences, Jinan 250353, China



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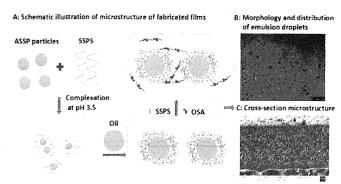
Qian-Ru Liu<sup>a,b</sup>, Wenbo Wang<sup>c</sup>, Junru Qi<sup>d</sup>, Qingrong Huang<sup>b</sup>, Jie Xiao<sup>a</sup>

<sup>a</sup>College of Food Science, South China Agricultural University, Guangzhou, 510640, China

<sup>b</sup>Department of Food Science, Rutgers University, 65 Dudley Road, New Brunswick, NJ, 08901, United States

<sup>c</sup>College of Electronic Engineering, South China Agricultural University, Guangzhou, 510642, China

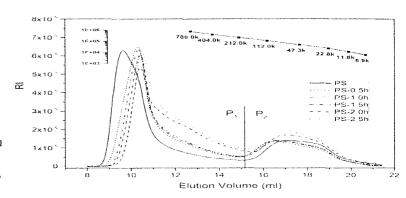
<sup>d</sup>School of Food Science and Engineering, South China University of Technology, Guangzhou, 510642, China



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Hui Zhang<sup>a</sup>, Hanxue Hou<sup>a</sup>, Pengfei Liu<sup>b</sup>, Wentao Wang<sup>a</sup>, Haizhou Dong<sup>a</sup>

<sup>a</sup>Department of Food Science and Engineering, Shandong Agricultural University, Engineering and Technology Center for Grain Processing of Shandong Province, Tai'an, PR China <sup>b</sup>State Key Laboratory of Biobased Material and Green Papermaking, School of Food Science and Engineering, Qilu University of Technology, Shandong Academy of Sciences, Ji'nan, PR China

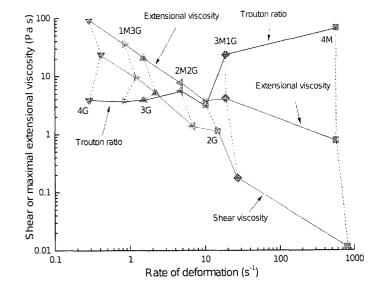


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Bo Yuan, Christos Ritzoulis, Jianshe Chen

School of Food Science and Biotechnology, Zhejiang Gongshang University, Xiasha, Hangzhou, Zhejiang, 310018, China

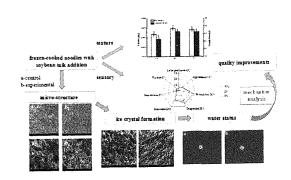


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Lu-Dan Hea,b, Xiao-Na Guoa,b, Ke-Xue Zhua,b

<sup>a</sup>State Key Laboratory of Food Science and Technology, Jiangnan University, 1800 Lihu Avenue, Wuxi, 214122, Jiangsu Province, People's Republic of China <sup>b</sup>School of Food Science and Technology, Jiangnan University, 1800 Lihu Avenue, Wuxi, 214122, Jiangsu Province, People's Republic of China



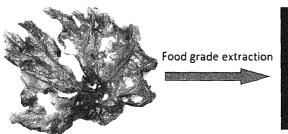
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Meital Kazir<sup>a</sup>, Yarden Abuhassira<sup>a</sup>, Arthur Robin<sup>b</sup>, Omri Nahor<sup>b,c</sup>, Jincheng Luo<sup>b</sup>, Alvaro Israel<sup>c</sup>, Alexander Golberg<sup>b</sup>, Yoav D. Livney<sup>a</sup>

<sup>a</sup>Laboratory of Biopolymers for Food and Health, Department of Biotechnology and Food Engineering, Technion-Israel Institute of Technology, Haifa, Israel

<sup>b</sup>Porter School of Environmental Studies, Tel Aviv University, Tel Aviv, Israel

<sup>c</sup>Israel Oceanographic and Limnological Research, The National Institute of Oceanography, Haifa, Israel



Raw Ulva sp.



Algal protein concentrate

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J. Velásquez-Cock<sup>a</sup>, A. Serpa<sup>a</sup>, L. Vélez<sup>a</sup>, P. Gañán<sup>b</sup>, C. Gómez Hoyos<sup>d</sup>, C. Castro<sup>c</sup>, L. Duizer<sup>e</sup>, H.D. Goff<sup>e</sup>, R. Zuluaga<sup>a</sup>

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<sup>b</sup>Facultad de Ingeniería Química, Universidad Pontificia Bolivariana,

Circular 1° N° 70-01, Medellín, Colombia

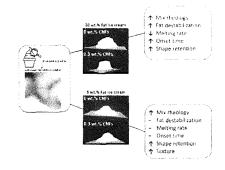
cFacultad de Ingeniería Textil, Universidad Pontificia Bolivariana,

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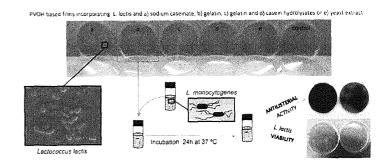


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Laura Settier-Ramírez, Gracia López-Carballo, Rafael Gavara, Pilar Hernández-Muñoz

Packaging Lab, Instituto de Agroquímica y Tecnología de Alimentos, IATA-CSIC, Av. Agustín Escardino 7, 46980, Paterna, Spain



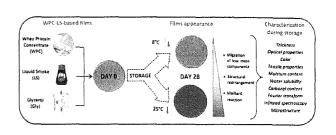
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G.N. Piccirillia,b, M. Soazoa,b, L.M. Péreza, N.J. Delorenzic, R.A. Verdinia,b

<sup>a</sup>Instituto de Química Rosario (IQUIR, UNR-CONICET), Facultad de Ciencias Bioquímicas y Farmacéuticas, Universidad Nacional de Rosario, Suipacha 531, S2002LRK Rosario, Argentina

bÁrea Bromatología y Nutrición, Departamento de Ciencias de los Alimentos y del Medio Ambiente, Facultad de Ciencias Bioquímicas y Farmacéuticas, Universidad Nacional de Rosario, Suipacha 531, S2002LRK Rosario, Argentina

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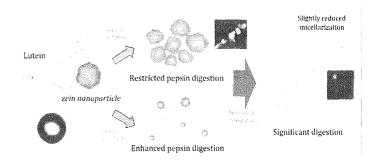


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Christopher J. Chenga,b, Mario Ferruzzib,c, Owen G. Jonesa,b

<sup>a</sup>Purdue University, Department of Food Science, West Lafayette, IN, USA <sup>b</sup>Whistler Center for Carbohydrate Research, West Lafayette, IN, USA <sup>c</sup>North Carolina State University, Plants for Human Health Institute, Kannapolis, NC, USA

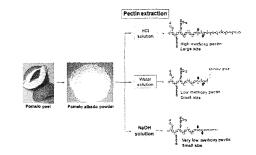


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Yuree Wandee<sup>a</sup>, Dudsadee Uttapap<sup>a</sup>, Petra Mischnick<sup>b</sup>

<sup>a</sup>Division of Biochemical Technology, School of Bioresources and Technology, King Mongkut's University of Technology Thonburi, Bangkhuntien, Bangkok 10150, Thailand <sup>b</sup>Faculty of Life Science, Institute of Food Chemistry, Technische Universität Braunschweig, Schleinitzstr. 20, D-38106, Braunschweig, Germany



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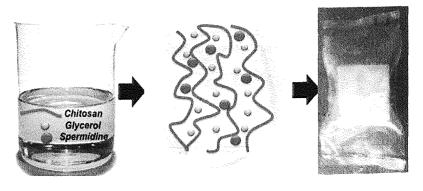
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Mohammed Sabbah<sup>a,b</sup>, Prospero Di Pierro<sup>a</sup>, Marcella Cammarota<sup>c</sup>, Eliana Dell'Olmo<sup>a</sup>, Angela Arciello<sup>a</sup>, Raffaele Porta<sup>a</sup>

<sup>a</sup>Department of Chemical Sciences, University of Naples
"Federico II", Complesso Universitario di Montesantangelo,
Via Cintia 21, 80126, Naples, Italy

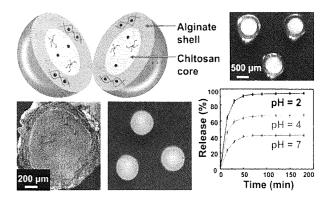
<sup>b</sup>Department of Nutrition and Food Technology, An-Najah
National University, P.O. Box: 7, Nablus, Palestine

<sup>c</sup>Department of Experimental Medicine, Section of
Biotechnology and Molecular Biology, University of
Campania "Luigi Vanvitelli", Via De Crecchio 7, 80138, Naples, Italy



# Convenient one-step approach based on stimuli-responsive sol-gel transition properties to directly build chitosan-alginate core-shell beads

Chaoran Qin, Jing Zhou, Zheng Zhang, Wei Chen, Qian Hu, Yifeng Wang School of Materials Science and Engineering, Wuhan University of Technology, 122 Luoshi Road, Wuhan, 430070, China

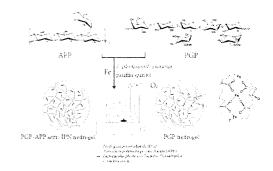


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# Preparation, characterization and controlled-release property of Fe<sup>3+</sup> cross-linked hydrogels based on peach gum polysaccharide

Kai Zhu, Da Yu, Xiaoyuan Chen, Guanglei Song

School of Food Science and Biotechnology, Zhejiang Gongshang University, 18 Xuezheng Str., Hangzhou, Zhejiang, 310018, China



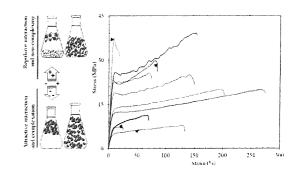
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Stephen Gitonga Giterua,b, M. Azam Alia, Indrawati Oeya,b

<sup>a</sup>Department of Food Science, University of Otago, PO Box 56, Dunedin, 9054, New Zealand

<sup>b</sup>Riddet Institute, Palmerston North, New Zealand



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# Effect of egg white solids on the rheological properties and bread making performance of gluten-free batter

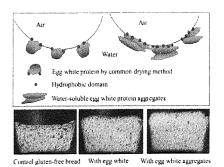
Aiyun Han<sup>a,d</sup>, Hollman Motta Romero<sup>a</sup>, Noriaki Nishijima<sup>b,c</sup>, Tsukasa Ichimura<sup>b</sup>, Akihiro Handa<sup>b</sup>, Changmou Xu<sup>a</sup>, Yue Zhang<sup>a</sup>

<sup>a</sup>Department of Food Science and Technology, University of Nebraska-Lincoln, Lincoln, NE, 68588, United States

<sup>b</sup>Institute of Technology Solution, R&D Division, Kewpie Corporation, 2-5-7 Sengawa, Chofu, Tokyo, 1820002 Japan

CHenningsen Foods, Inc., Omaha, NE, 68144, United States

<sup>d</sup>Department of Food Science and Engineering, Shijiazhuang University, Shijiazhuang, Hebei, 050035, PR China

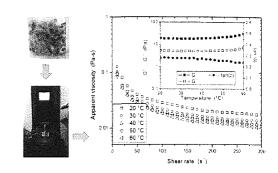


# Effect of concentration, temperature, pH, co-solutes on the rheological properties of *Hyptis suaveolens* L. mucilage dispersions

Juan Pablo Pérez-Orozco<sup>a</sup>, Leticia Mónica Sánchez-Herrera<sup>b</sup>, Rosa Isela Ortiz-Basurto<sup>c</sup>

<sup>a</sup>Departamento de Ingeniería Química y Bioquímica, Instituto Tecnológico de Zacatepec, Tecnológico Nacional de México, Calzada Tecnológico # 27, Col. Centro, Zacatepec, Morelos, C.P. 62780, Mexico

bUnidad de Tecnología de Alimentos, Universidad Autónoma de Nayarit, Ciudad de la Cultura Amado Nervo S/N, Col. Los Fresnos, Tepic, Nayarit, C.P. 63155, Mexico CLaboratorio Integral de Investigación en Alimentos, Instituto Tecnológico de Tepic, Tecnológico Nacional de México, Av. Tecnológico # 2595, Col. Lagos del Country, Tepic, Nayarit, C.P. 63175, Mexico



#### 307-320

# High pressure processing of food-grade emulsion systems: Antimicrobial activity, and effect on the physicochemical properties

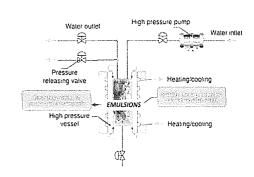
Seyed Mohammad Taghi Gharibzahedi<sup>a</sup>, César Hernández-Ortega<sup>b</sup>, Jorge Welti-Chanes<sup>b</sup>, Predrag Putnik<sup>c</sup>, Francisco J. Barba<sup>d</sup>, Kumar Mallikarjunan<sup>e</sup>, Zamantha Escobedo-Avellaneda<sup>b</sup>, Shahin Roohinejad<sup>e,f</sup>

<sup>a</sup>Young Researchers and Elites Club, Lahijan Branch, Islamic Azad University, Lahijan, Iran <sup>b</sup>Escuela de Ingeniería y Ciencias, Tecnolgico de Monterrey, Av. Eugenio Garza Sada 2501 Sur, Col. Tecnológico, 64849, Monterrey, NL, Mexico

<sup>c</sup>Faculty of Food Technology and Biotechnology, University of Zagreb, Pierottijeva 6, 10000, Zagreb, Croatia

<sup>d</sup>Nutrition and Food Science Area, Preventive Medicine and Public Health, Food Science, Toxicology and Forensic Medicine Department, Faculty of Pharmacy, Universitat de Valencia, Avda. Vicent Andres Estelles, s/n, 46100, Burjassot, Valencia, Spain <sup>e</sup>Department of Food Science and Nutrition, University of Minnesota, St. Paul, MN, 55108, USA

<sup>f</sup>Burn and Wound Healing Research Center, Division of Food and Nutrition, Shiraz University of Medical Sciences, Shiraz, Iran



### 321-330

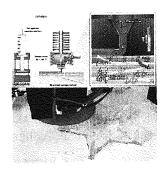
# 3D printing in situ gelification of $\kappa$ -carrageenan solutions: Effect of printing variables on the rheological response

I. Diañez<sup>a</sup>, C. Gallegos<sup>b</sup>, E. Brito-de la Fuente<sup>b</sup>, I. Martínez<sup>a,c</sup>, C. Valencia<sup>a,c</sup>, M.C. Sánchez<sup>a,c</sup>, M.J. Diaz<sup>a,c</sup>, J.M. Franco<sup>a,c</sup>

<sup>a</sup>Dept. Ingeniería Química, Universidad de Huelva, Campus de El Carmen, 21071 Huelva, Spain

<sup>b</sup>Product & Process Engineering Centre, Fresenius Kabi Deutschland GmbH, 61352 Bad Homburg, Germany

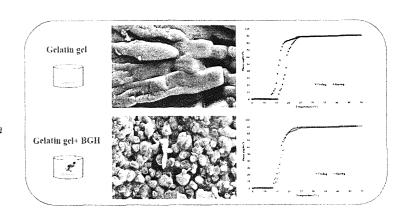
<sup>c</sup>Chemical Process and Product Technology Research Centre (Pro2TecS), 21071 Huelva, Spain



# Rheological and structural properties of *Hemiramphus* far skin gelatin: Potential use as an active fish coating agent

Ola Abdelhedi<sup>a</sup>, Mourad Jridi<sup>a</sup>, Rim Nasri<sup>a</sup>, Leticia Mora<sup>b</sup>, Fidel Toldrá<sup>b</sup>, Moncef Nasri<sup>a</sup>

<sup>a</sup>Laboratoire de Génie Enzymatique et de Microbiologie, Université de Sfax, Ecole Nationale d'Ingénieurs de Sfax, B.P. 1173-3038, Sfax, Tunisia <sup>b</sup>Instituto de Agroquímica y Tecnología de Alimentos (CSIC), Avenue Agustín Escardino 7, 46980, Paterna (Valencia), Spain



### 342-351

# Fabrication of stable zein nanoparticles coated with soluble soybean polysaccharide for encapsulation of quercetin

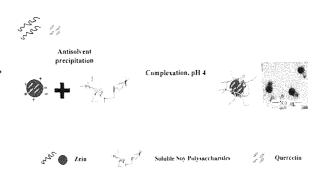
Hao Li<sup>a</sup>, Dongfeng Wang<sup>a</sup>, Chengzhen Liu<sup>a</sup>, Junxiang Zhu<sup>b,c</sup>, Minghao Fan<sup>a</sup>, Xun Sun<sup>a</sup>, Teng Wang<sup>a</sup>, Ying Xu<sup>a</sup>, Yanping Cao<sup>d</sup>

<sup>a</sup>College of Food Science and Engineering, Ocean University of China, Qingdao, Shandong Province, 266003, China

<sup>b</sup>Marine Fisheries Research Institute of Zhejiang, Zhoushan, 316021, China

<sup>c</sup>Marine and Fisheries Research Institute, Zhejiang Ocean University, Zhoushan, 316021, China

<sup>d</sup>Beijing Advanced Innovation Center for Food Nutrition and Human Health, Beijing Technology and Business University, Beijing, 100048, China



### 352-359

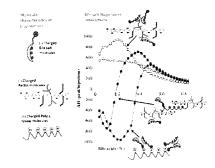
# Interaction of a bile salt (sodium taurocholate) with cationic ( $\epsilon$ -polylysine) and anionic (pectin) biopolymers under simulated gastrointestinal conditions

Cynthia Lopez-Pena<sup>a</sup>, Izlia J. Arroyo-Maya<sup>b</sup>, David Julian McClements<sup>c</sup>

aScience and Technology, Nestlé Nutrition, NDC Fremont, Mi, 49413, USA

<sup>b</sup>Departamento de Procesos y Tecnología, Universidad Autónoma Metropolitana-Cuajimalpa, Cuajimalpa, D.F. 05300, Mexico

<sup>c</sup>Department of Food Science, University of Massachusetts, Amherst, MA, 01003, USA



## 360-370

# Phase separation, antiplasticization and moisture sorption in ternary systems containing polysaccharides and polyols

R.G.M. van der Smana,b

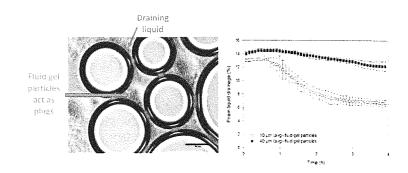
<sup>a</sup>Wageningen-Food Biobased Research, Wageningen University & Research, the Netherlands

<sup>b</sup>Food Process Engineering, Wageningen University & Research, the Netherlands

# The effect of sugars on agar fluid gels and the stabilisation of their foams

A.L. Ellis, T.B. Mills, I.T. Norton, A.B. Norton-Welch

School of Chemical Engineering, University of Birmingham, Edgbaston, B15 2TT, UK

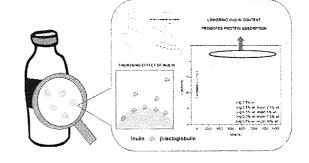


# 382-393

# Characterization of prebiotic emulsions stabilized by inulin and $\beta$ -lactoglobulin

María Luisa López-Castejón, Carlos Bengoechea, Sixto Espinosa, Cecilio Carrera

Departamento de Ingeniería Química, Universidad de Sevilla, Escuela Politécnica Superior, Calle Virgen de África 7, 41011 Sevilla Spain



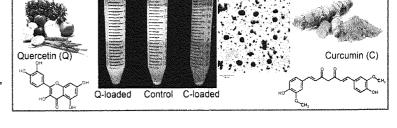
### 394-403

# Nanoencapsulation of quercetin and curcumin in casein-based delivery systems

Nazanin Ghayour<sup>a</sup>, Seyed Mohammad Hashem Hosseini<sup>a</sup>, Mohammad Hadi Eskandari<sup>a</sup>, Sara Esteghlal<sup>a</sup>, Abdo-Reza Nekoei<sup>b</sup>, Hadi Hashemi Gahruie<sup>a</sup>, Mohsen Tatar<sup>c</sup>, Fakhraddin Naghibalhossaini<sup>c</sup>

<sup>a</sup>Department of Food Science and Technology, School of Agriculture, Shiraz University, Shiraz, Iran

<sup>b</sup>Department of Chemistry, Shiraz University of Technology, Shiraz, Iran <sup>c</sup>Department of Biochemistry, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran



### 404-412

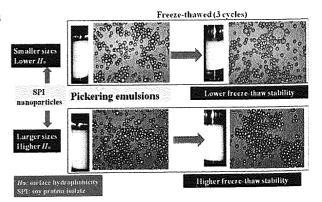
# Improving freeze-thaw stability of soy nanoparticle-stabilized emulsions through increasing particle size and surface hydrophobicity

Ye-Bao Chen<sup>a</sup>, Xue-Feng Zhu<sup>a</sup>, Tong-Xun Liu<sup>a</sup>, Wei-Feng Lin<sup>a</sup>, Chuan-He Tang<sup>a,b</sup>, Ruihai Liu<sup>c</sup>

<sup>a</sup>Department of Food Science and Technology, South China University of Technology, Guangzhou 510640, PR China

<sup>b</sup>Overseas Expertise Introduction Center for Discipline Innovation of Food Nutrition and Human Health (111 Center), Guangzhou, PR China

<sup>c</sup>Department of Food Science, Cornell University, New York, USA



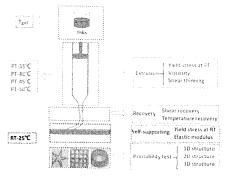
# Linking rheology and printability of a multicomponent gel system of carrageenan-xanthan-starch in extrusion based additive manufacturing

Zhenbin Liu<sup>a</sup>, Bhesh Bhandari<sup>b</sup>, Sangeeta Prakash<sup>b</sup>, Sylvester Mantihal<sup>b</sup>, Min Zhang<sup>a,c</sup>

<sup>a</sup>State Key Laboratory of Food Science and Technology Jiangnan University, 214122, Wuxi, Jiangsu, China

<sup>b</sup>School of Agriculture and Food Sciences, The University of Queensland, Brisbane, QLD, 4072, Australia

<sup>c</sup>International Joint Laboratory on Food Safety, Jiangnan University, 214122, Wuxi, Jiangsu, China



#### Igel: geletion temperature; P1 printing temperature, R1: room temperatu

### 425-435

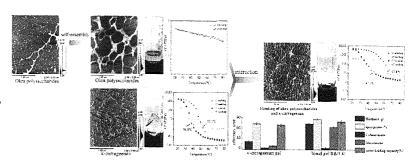
# The synergistic gelation of okra polysaccharides with kappa-carrageenan and its influence on gel rheology, texture behaviour and microstructures

Jie Chen<sup>a</sup>, Wantong Chen<sup>a</sup>, Feixia Duan<sup>a</sup>, Qixian Tang<sup>a</sup>, Xiao Li<sup>a</sup>, Li Zeng<sup>a</sup>, Jiaqi Zhang<sup>a,b</sup>, Zhihua Xing<sup>c</sup>, Yi Dong<sup>a</sup>, Lirong Jia<sup>a</sup>, Hong Gao<sup>a</sup>

<sup>a</sup>College of Light Industry, Textile and Food Engineering & Healthy Food Evaluation Research Center, Sichuan University, Chengdu 610065, PR China

<sup>b</sup>The Key Laboratory of Food Science and Technology of Ministry of Education of Sichuan Province, Sichuan University, Chengdu 610065, PR China

<sup>c</sup>Laboratory of Ethnopharmacology, West China Hospital, West China Medical School, Sichuan University, Chengdu 610041, PR China



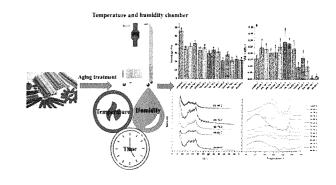
#### 436-447

# Effect of aging treatment on the physicochemical properties of collagen films

Donghui Shi<sup>a,b</sup>, Fei Liu<sup>a,b</sup>, Zhe Yu<sup>a,b</sup>, Bingyu Chang<sup>a,b</sup>, H. Douglas Goff<sup>c</sup>, Fang Zhong<sup>a,b</sup>

<sup>a</sup>State Key Laboratory of Food Science and Technology, Jiangnan University, Wuxi, 214122, China

<sup>b</sup>School of Food Science and Technology, Jiangnan University, Wuxi, 214122, China <sup>c</sup>Department of Food Science, University of Guelph, Guelph, ON, N1G 2W1, Canada

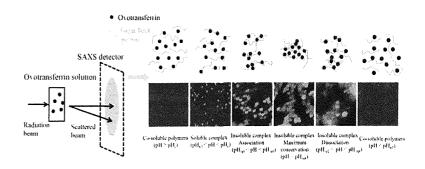


## 448-458

# Investigation of ovotransferrin conformation and its complexation with sugar beet pectin

Zihao Wei, Pei Zhu, Qingrong Huang

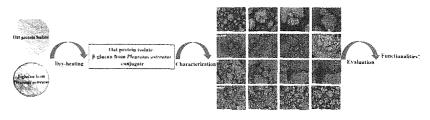
Department of Food Science, Rutgers University, 65 Dudley Road, New Brunswick, NJ 08901, United States



# Characterization and functional evaluation of oat protein isolate-Pleurotus ostreatus $\beta$ -glucan conjugates formed via Maillard reaction

Lei Zhong<sup>a</sup>, Ning Ma<sup>b</sup>, Yiliang Wu<sup>b</sup>, Liyan Zhao<sup>a</sup>, Gaoxing Ma<sup>a</sup>, Fei Pei<sup>b</sup>, Qiuhui Hu<sup>a</sup>

<sup>a</sup>College of Food Science and Technology, Nanjing Agricultural University, Nanjing, 210095, China <sup>b</sup>College of Food Science and Engineering, Nanjing University of Finance and Economics, Nanjing, 210023, China



### 470-476

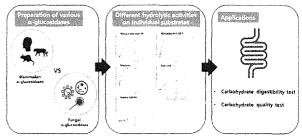
# Optimization of in vitro carbohydrate digestion by mammalian mucosal $\alpha$ -glucosidases and its applications to hydrolyze the various sources of starches

Hansol Shin<sup>a</sup>, Dong-Ho Seo<sup>b</sup>, Jungmin Seo<sup>a</sup>, Lisa M. Lamothe<sup>c</sup>, Sang-Ho Yoo<sup>d</sup>, Byung-Hoo Lee<sup>a</sup>

<sup>a</sup>Department of Food Science and Biotechnology, College of BioNano Technology, Gachon University, Seongnam, 13120, Republic of Korea

<sup>b</sup>Research Group of Healthcare, Korea Food Research Institute, Wanju, 55365,

<sup>c</sup>Nestle Research Center, Vers Chez Les Blanc, CP44, 1000, Lausanne 26, Switzerland <sup>d</sup>Department of Food Science and Biotechnology, And Carbohydrate Bioproduct Research Center, Sejong University, 209 Neungdong-ro, Gwangjin-gu, Seoul 05006, Republic of Korea



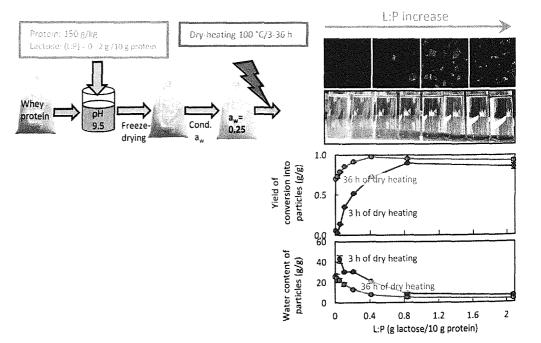
Can be applied to more precise digestion model of glycemic carbohydrates by mammalian mucosal  $\alpha$ -glucosidases

### 477-486

# Influence of lactose on the formation of whey protein microparticles obtained by dry heating at alkaline pH

Elise Schong, Marie-Hélène Famelart

STLO, UMR 1253, INRA, Agrocampus Ouest, 35000, Rennes Cedex, France



# Agarose-based freeze-dried capsules prepared by the oilinduced biphasic hydrogel particle formation approach for the protection of sensitive probiotic bacteria

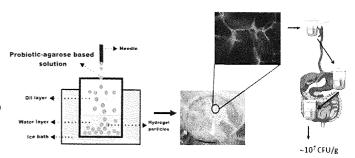
Ali Alehosseini<sup>a,b</sup>, Eva-María Gomez del Pulgar<sup>c</sup>, Maria José Fabra<sup>b</sup>, Laura G. Gómez-Mascaraqueb, Alfonso Benítez-Páezc, Mahboobe Sarabi-Jamab<sup>d</sup>, Behrouz Ghorani<sup>a</sup>, Amparo Lopez-Rubio<sup>b</sup>

<sup>a</sup>Department of Food Nanotechnology, Research Institute of Food Science and Technology (RIFST), Km 12 Mashhad-Quchan Highway, P.O. Box: 91895/157/ 356, Mashhad, Iran

<sup>b</sup>Food Preservation and Food Quality Department, IATA-CSIC, Avda. Agustin Escardino 7, 46980, Paterna, Valencia, Spain

<sup>c</sup>Microbial Ecology, Nutrition and Health Group, IATA-CSIC, Avda. Agustin Escardino 7, 46980, Paterna, Valencia, Spain

<sup>d</sup>Department of Food Biotechnology, Research Institute of Food Science and Technology (RIFST), Km 12 Mashhad-Quchan Highway, P.O. Box: 91895/157/ 356, Mashhad, Iran



### 497-505

# Air bubbles in calcium caseinate fibrous material enhances anisotropy

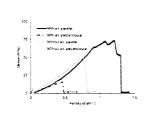
Zhaojun Wanga, Bei Tianb, Remko Booma, Atze Ian van der Goota

<sup>a</sup>Food Process Engineering, Wageningen University & Research, PO Box 17, 6700AA, Wageningen, the Netherlands <sup>b</sup>Department of Radiation Science and Technology, Faculty of Applied Science, Delft University of Technology, Mekelweg 15, 2629JB, Delft, the Netherlands

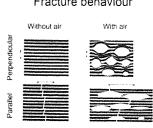
### Macrostructure



### Mechanical properties



### Fracture behaviour

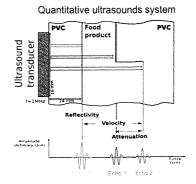


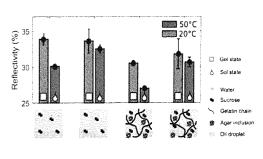
### 506-518

# Impact of sol-gel transition on the ultrasonic properties of complex model foods: Application to agar/gelatin gels and emulsion filled gels

Mathieu Manteleta, Maud Panouilléa, François Boué<sup>a</sup>, Véronique Bosc<sup>b</sup>, Frédéric Restagno<sup>c</sup>, Isabelle Souchon<sup>a</sup>, Vincent Mathieu<sup>a</sup>

aUMR GMPA, INRA, AgroParisTech, Université Paris-Saclay, Thiverval-Grignon, 78850, France bIngénierie Procédés Aliments, INRA, AgroParisTech, Université Paris-Saclay, Massy, 91300, France <sup>c</sup>Laboratoire de Physique des Solides, CNRS, Univ. Paris-Sud, Université Paris-Saclay, Orsay Cedex, 91405, France

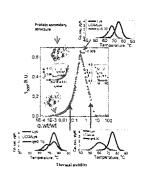




# Complexation of lysozyme with lambda carrageenan: Complex characterization and protein stability

Yurij A. Antonov, Irina L. Zhuravleva

N.M. Emanuel Institute of Biochemical Physics, Russian Academy of Sciences, Kosygin Str. 4, 119334 Moscow, Russia

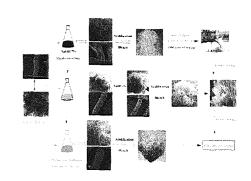


### 530-540

# Physicochemical and gel properties of agar extracted by enzyme and enzyme-assisted methods

Qiong Xiao<sup>a,b,d</sup>, Huifeng Weng<sup>a,b,d</sup>, Hui Ni<sup>a,c,d</sup>, Qinglin Hong<sup>b</sup>, Kunhui Lin<sup>b</sup>, Anfeng Xiao<sup>a,c,d</sup>

<sup>a</sup>College of Food and Biological Engineering, Jimei University, Xiamen, 361021, China <sup>b</sup>Green Fresh (Fujian) Foodstuff Co.,Ltd., Zhangzhou, 363100, China <sup>c</sup>Key Laboratory of Food Microbiology and Enzyme Engineering of Fujian Province, Xiamen, 361021, China <sup>d</sup>Fujian Provincial Engineering Technology Research Center of Marine Functional Food, Xiamen, 361021, China

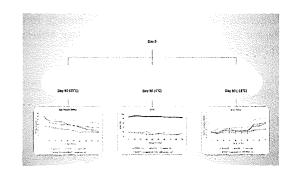


### 541-549

# Storage stability of soy protein isolate films incorporated with mango kernel extract at different temperature

Z.A. Maryam Adilaha, Z.A. Nur Hanania,b

<sup>a</sup>Department of Food Technology, Faculty of Food Science and Technology, Universiti Putra Malaysia, 43400, UPM, Serdang, Selangor, Malaysia <sup>b</sup>Halal Products Research Institute, Universiti Putra Malaysia, 43400, UPM, Serdang, Selangor, Malaysia

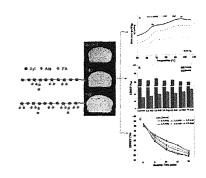


## 550-560

# Effect of Persian gum and Xanthan gum on foaming properties and stability of pasteurized fresh egg white foam

Mohsen Dabestania, Samira Yeganehzadb

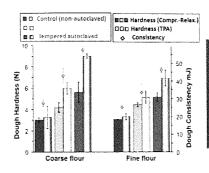
<sup>a</sup>Department of Food Nanotechnology, Research Institute of Food Science and Technology (RIFST), P.O. Box, 91895-157.356, Mashhad, Iran <sup>b</sup>Department of Food Processing, Research Institute of Food Science and Technology (RIFST), P.O. Box, 91895-157.356, Mashhad, Iran

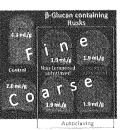


# Impact of flour particle size and hydrothermal treatment on dough rheology and quality of barley rusks

Athina Lazaridou, Anna Marinopoulou, Costas G. Biliaderis

Department of Food Science and Technology, School of Agriculture, Aristotle University of Thessaloniki, P.O. Box 235, Thessaloniki, 541 24, Greece



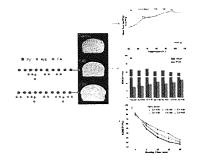


### 570-581

# Molecular characterization of water-extractable arabinoxylan from wheat bran and its effect on the heat-induced polymerization of gluten and steamed bread quality

Pei Wang, Cuidan Hou, Xiaohui Zhao, Mengqi Tian, Zhenxin Gu, Runqiang Yang

College of Food Science and Technology, Nanjing Agricultural University, Nanjing, Jiangsu, 210095, People's Republic of China

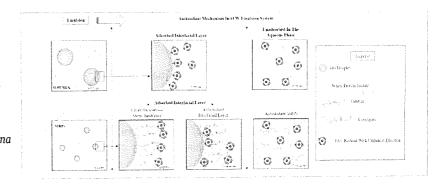


#### 582-592

# The antioxidant mechanism of Maillard reaction products in oil-in-water emulsion system

Yunqi Shi<sup>a,b</sup>, Rong Liang<sup>a,c</sup>, Ling Chen<sup>a,b</sup>, Huan Liu<sup>a,b</sup>, H. Douglas Goff<sup>d</sup>, Jianguo Ma<sup>b</sup>, Fang Zhong<sup>a,b</sup>

<sup>a</sup>Key Laboratory of Synthetic and Biological Colloids, Ministry of Education, Jiangnan University, Wuxi, 214122, China <sup>b</sup>School of Food Science and Technology, Jiangnan University, Wuxi, 214122, China <sup>c</sup>School of Chemical and Material Engineering, Jiangnan University, Wuxi, 214122, China <sup>d</sup>Department of Food Science, University of Guelph, Guelph, Ontario, N1G 2W1, Canada



### 593-601

# The mechanism of salt effects on starch gelatinization from a statistical thermodynamic perspective

Thomas W.J. Nicol<sup>a,b</sup>, Noriyuki Isobe<sup>c</sup>, James H. Clark<sup>b</sup>, Nobuyuki Matubayasi<sup>d,e</sup>, Seishi Shimizu<sup>a</sup>

<sup>a</sup>York Structural Biology Laboratory, Department of Chemistry, University of York, Heslington, York, YO10 5DD, United Kingdom

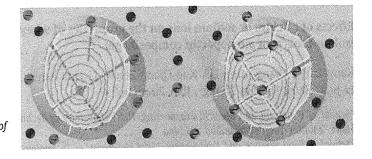
<sup>b</sup>Green Chemistry Centre of Excellence, Department of Chemistry, University of York, Heslington, York, YO10 5DD, United Kingdom

<sup>c</sup>Japan Agency for Marine-Earth Science and Technology (JAMSTEC), 2-15

Natsushima-cho, Yokosuka, Kanagawa, 237-0061, Japan

<sup>d</sup>Division of Chemical Engineering, Graduate School of Engineering Science, Osaka University, Toyonaka, Osaka, 560-8531, Japan

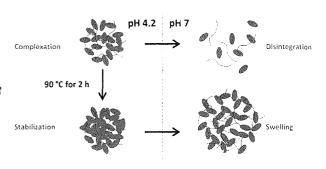
<sup>e</sup>Elements Strategy Initiative for Catalysts and Batteries, Kyoto University, Katsura, Kyoto, 615-8520, Japan



# Stimuli-responsive nanoparticles by thermal treatment of bovine serum albumin inside its complexes with chondroitin sulfate

Aristeidis Papagiannopoulos, Eleni Vlassi

Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, 48 Vassileos Constantinou Avenue, 11635, Athens, Greece



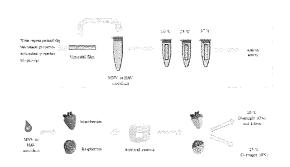
#### 611-618

# Antiviral activity of alginate-oleic acid based coatings incorporating green tea extract on strawberries and raspberries

Irene Falcó<sup>a,b</sup>, Patricia L. Flores-Meraz<sup>b</sup>, Walter Randazzo<sup>a,b</sup>, Gloria Sánchez<sup>b</sup>, Amparo López-Rubio<sup>b</sup>, María José Fabra<sup>b</sup>

<sup>a</sup>Department of Microbiology and Ecology, University of Valencia, Av. Dr. Moliner, 50, 46100, Burjassot, Valencia, Spain

<sup>b</sup>Department of Preservation and Food Safety Technologies, IATA-CSIC, Avda. Agustin Escardino 7, 46980, Paterna, Valencia, Spain



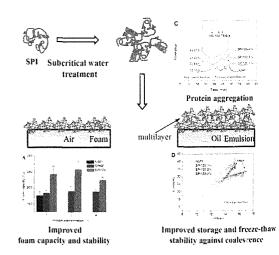
## 619-628

# Stabilization of foam and emulsion by subcritical water-treated soy protein: Effect of aggregation state

Meng-Ping Wang<sup>a</sup>, Xiao-Wei Chen<sup>b</sup>, Jian Guo<sup>a</sup>, Juan Yang<sup>a</sup>, Jin-Mei Wang<sup>a</sup>, Xiao-Quan Yang<sup>a</sup>

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<sup>b</sup>Lipid Technology and Engineering, School of Food Science and Engineering, Henan University of Technology, Zhengzhou, 450001, PR China

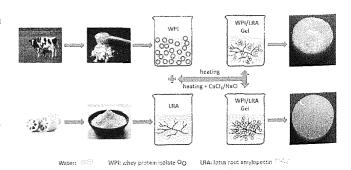


### 629-636

# Effects of calcium or sodium ions on the properties of whey protein isolate-lotus root amylopectin composite gel

Kang Liu<sup>a,b</sup>, Qiang-Ming Li<sup>b</sup>, Xue-Qiang Zha<sup>a,b</sup>, Li-Hua Pan<sup>b</sup>, Li-Juan Bao<sup>b</sup>, Hai-Lin Zhang<sup>b</sup>, Jian-Ping Luo<sup>b</sup>

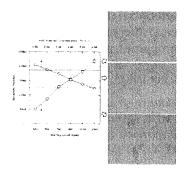
<sup>a</sup>School of Biological and Medical Engineering, Hefei University of Technology, Hefei, 230009, People's Republic of China <sup>b</sup>School of Food Science and Engineering, Hefei University of Technology, Hefei, 230009, People's Republic of China



# Effect of processing conditions on the morphology and oxidative stability of lipid microcapsules during complex coacervation

Tiezheng Ma, Hongliang Zhao, Jing Wang, Baoguo Sun

School of Food and Chemical Engineering, Beijing Advanced Innovation Center for Food Nutrition and Human Health, Beijing Higher Institution Engineering Research Center of Food Additives and Ingredients, Beijing Technology and Business University, Beijing, 100048, PR China



#### 644-652

# Characteristics and emulsifying properties of two protein fractions derived from the emulsion formed during aqueous extraction of *Camellia oil*

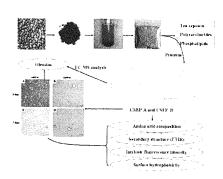
Jian-Yuan Yang<sup>a,b</sup>, Bin Peng<sup>a</sup>, Mei Wang<sup>c</sup>, Xian-Guo Zou<sup>a</sup>, Yu-Long Yin<sup>a,d</sup>, Ze-Yuan Deng<sup>a</sup>

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<sup>b</sup>College of Pharmaceutical and Life Sciences, Jiujiang University, Jiujiang, Jiangxi, 332005, China

<sup>c</sup>The State Centre of Quality Supervision and Inspection for Camellia Products, Ganzhou, Jiangxi, 341000, China

<sup>d</sup>Key Laboratory for Agro-ecological Processes in Subtropical Region, Institute of Subtropical Agriculture, The Chinese Academy of Sciences, Changsha, Hunan, 410125, China

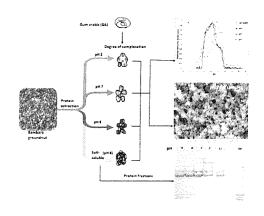


### 653-660

# Fractionation pH of bambara groundnut (Vigna subterranea) protein impacts the degree of complexation with gum arabic

Nyasha M. Busu, Eric O. Amonsou

Department of Biotechnology and Food Technology, Durban University of Technology, PO BOX 1344, Durban, 4000, South Africa



#### 661-669

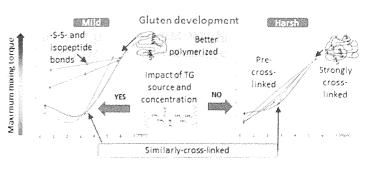
# Impact of gluten separation process and transglutaminase source on gluten based dough properties

Elaine Berger Ceresino<sup>a</sup>, Ramune Kuktaite<sup>b</sup>, Hélia Harumi Sato<sup>a</sup>, Mikael S. Hedenqvist<sup>c</sup>, Eva Johansson<sup>b</sup>

<sup>a</sup>Department of Food Science, School of Food Engineering, University of Campinas, 13083-862, São Paulo, SP, Brazil

<sup>b</sup>Department of Plant Breeding, The Swedish University of Agricultural Sciences, Box 101, SE, 23053, Alnarp, Sweden

<sup>c</sup>KTH Royal Institute of Technology, School of Chemical and Engineering, Fibre and Polymer Technology, SE, 10044, Stockholm, Sweden

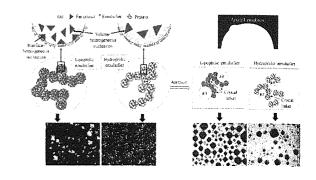


# Interfacial competitive adsorption of different amphipathicity emulsifiers and milk protein affect fat crystallization, physical properties, and morphology of frozen aerated emulsion

Jiang Jiang<sup>a</sup>, Weiqin Jing<sup>a</sup>, Youling L. Xiong<sup>b</sup>, Yuanfa Liu<sup>a</sup>

<sup>a</sup>School of Food Science and Technology, Jiangnan University, Wuxi, Jiangsu, 214122. China

<sup>b</sup>Department of Animal and Food Sciences, University of Kentucky, Lexington, KY, 40546, USA

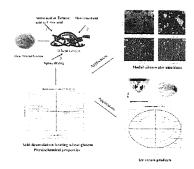


#### 679-690

# Effects of wheat gluten modified by deamidation-heating with three different acids on the microstructure of model oil-in-water emulsion and rheological-physical property of ice cream

Wenmeng Hea,b,c, Wei Zhaoa,b,c, Ruijin Yanga,b,c

aState Key Laboratory of Food Science and Technology, School of Food Science and Technology, Jiangnan University, 1800 Lihu Road, Wuxi, Jiangsu, 214122. PR China bNational Engineering Research Center for Functional Food, Jiangnan University, 1800 Lihu Road, Wuxi, Jiangsu, 214122, PR China Collaborative Innovation Center of Food Safety and Quality Control in Jiangsu Province, Jiangnan University, 1800 Lihu Road, Wuxi, Jiangsu, 214122, PR China

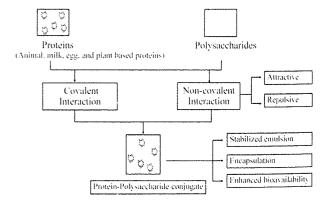


## 691-702

# Biopolymeric-based emulsions and their effects during processing, digestibility and bioaccessibility of bioactive compounds in food systems

Anil Kumar Anal, Smriti Shrestha, Muhammad Bilal Sadiq

Food Engineering and Bioprocess Technology, Department of Food, Agriculture and Bioresources, Asian Institute of Technology, Pathum Thani, Thailand



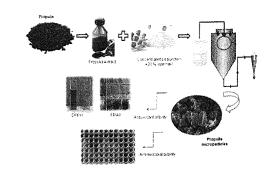
#### 703-711

# Propolis microparticles produced with pea protein: Characterization and evaluation of antioxidant and antimicrobial activities

Cristina Jansen-Alves<sup>a</sup>, Darla S.V. Maia<sup>a</sup>, Fernanda D. Krumreich<sup>a</sup>, Michele M. Crizel-Cardoso<sup>a</sup>, Júlia B. Fioravante<sup>a</sup>, Wladimir P. da Silva<sup>a</sup>, Caroline D. Borges<sup>b</sup>, Rui C. Zambiazi<sup>b</sup>

<sup>a</sup>Department of Agroindustrial Science and Technology, Federal University of Pelotas, Pelotas, RS, Brazil

<sup>b</sup>Center of Chemical, Pharmaceuticals and Food Sciences, Federal University of Pelotas, Pelotas, RS, Brazil

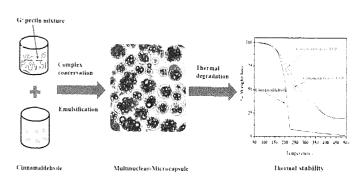


# Gelatin and pectin complex coacervates as carriers for cinnamaldehyde: Effect of pectin esterification degree on coacervate formation, and enhanced thermal stability

Bertrand Muhoza<sup>a</sup>, Shuqin Xia<sup>a,b</sup>, Jibao Cai<sup>b</sup>, Xiaoming Zhang<sup>a</sup>, Emmanuel Duhoranimana<sup>a</sup>, Jiakun Su<sup>b</sup>

<sup>a</sup>State Key Laboratory of Food Science and Technology, School of Food Science and Technology, Collaborative Innovation Center of Food Safety and Quality Control in Jiangsu Province, Jiangnan University, Lihu Road 1800, Wuxi, Jiangsu, 214122, People's Republic of China

bCenter of R&D, China Tobacco Jiangxi Industrial Co. Ltd, Nanchang, 330096, People's Republic of China

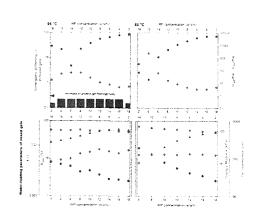


#### 723-733

## Rheological and water holding alterations in mixed gels prepared from whey proteins and rapeseed proteins

William Nicholas Ainisa, Carsten Erschb, Camille Farineta, Qiuhuizi Yanga, Zachary J. Gloverc, Richard Ipsena

<sup>a</sup>Section of Ingredient and Dairy Technology, Department of Food Science, Faculty of Science, University of Copenhagen, Denmark bArla Foods Amba, Arla Innovation Center, Skejby, Denmark <sup>c</sup>Department of Physics, Chemistry and Pharmacy, University of Southern Denmark, 5230, Odense M, Denmark

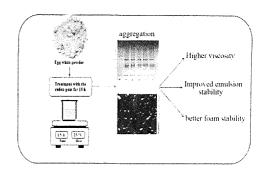


#### 734-746

# Effect of free radical-induced aggregation on physicochemical and interface-related functionality of egg white protein

Farhad Alavia, Zahra Emam-Djomeha,b,d, Shima Momena, Mehdi Mohammadiana, Maryam Salamia, Ali Akbar Moosavi-Movahedic,d

<sup>a</sup>Department of Food Science, Engineering and Technology, College of Agriculture & Natural Resources, University of Tehran, Karaj Campus, Karaj, Iran <sup>b</sup>Transfer Phenomena Laboratory (TPL), Controlled Release Center, Department of Food Science, Engineering and Technology, College of Agriculture & Natural Resources, University of Tehran, Karaj Campus, Karaj, Iran clnstitute of Biochemistry and Biophysics, University of Tehran, Tehran, Iran <sup>d</sup>Center of Excellence in Biothermodynamics, University of Tehran, Tehran, Iran



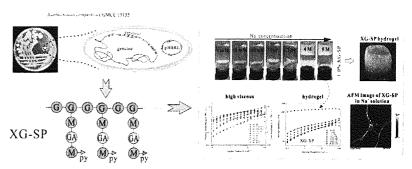
### 747-757

# Gel properties of xanthan containing a single repeating unit with saturated pyruvate produced by an engineered Xanthomonas campestris CGMCC 15155

Mengmeng Wua, Jianmei Qua, Yaqi Shena, Xiaohui Daia, Weiying Wei<sup>a</sup>, Zhong Shi<sup>a</sup>, Guoqiang Li<sup>a,b</sup>, Ting Ma<sup>a,b</sup>

<sup>a</sup>Key Laboratory of Molecular Microbiology and Technology, Ministry of Education, College of Life Sciences, Nankai University, Tianjin, China

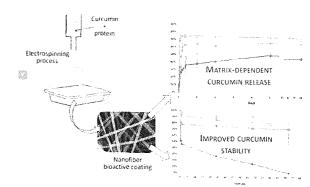
<sup>b</sup>Tianjin Engineering Technology Center of Green Manufacturing Biobased Materials, Tianjin, 300071, China



# Electrospun curcumin-loaded protein nanofiber mats as active/ bioactive coatings for food packaging applications

Ali Alehosseini $^{a,b}$ , Laura G. Gómez-Mascaraque $^b$ , Marta Martínez-Sanz $^b$ , Amparo López-Rubio $^b$ 

<sup>a</sup>Department of Food Nanotechnology, Research Institute of Food Science & Technology (RIFST), Km 12 Mashhad-Quchan Highway, P.O. Box: 91895/157/356, Mashhad, Iran <sup>b</sup>Food Safety and Preservation Department, IATA-CSIC, Avda. Agustin Escardino 7, 46980, Paterna (Valencia), Spain



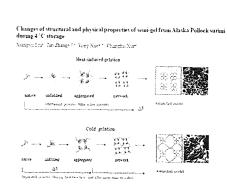
### 772-782

# Changes of structural and physical properties of semi-gel from Alaska pollock surimi during 4 °C storage

Xiangyu Liu<sup>a</sup>, Tao Zhang<sup>a,b</sup>, Yong Xue<sup>a</sup>, Changhu Xue<sup>a</sup>

<sup>a</sup>Department of Food Science and Engineering, Ocean University of China, Qingdao, 266003, PR China

 $^bPhysical$  Chemistry and Soft Matter, Wageningen University & Research, Stippeneng 4, 6708, WE Wageningen, The Netherlands



### 783-791

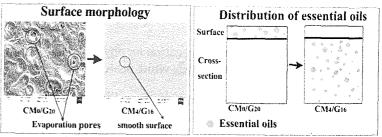
# Sustained-release antimicrobial gelatin film: Effect of chia mucilage on physicochemical and antimicrobial properties

Minna Luo<sup>a</sup>, Yong Cao<sup>a</sup>, Wenbo Wang<sup>b</sup>, Xia Chen<sup>c</sup>, Jiyang Cai<sup>a</sup>, Ling Wang<sup>a</sup>, Jie Xiao<sup>a</sup>

<sup>a</sup>College of Food Science, South China Agricultural University, Guangzhou, 510642, China

<sup>b</sup>College of Electronic Engineering, South China Agricultural University, Guangzhou, 510642, China

cSchool of Food Science and Engineering, South China University of Technology, Guangzhou, 510642, China



Mechanism for sustained-release antimicrobial property Immatrix: Chia mucilage (CM) and Gelatin (G)

### 792-804

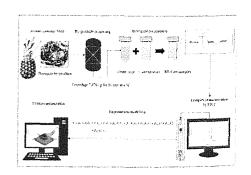
# Optimization of bromelain isolation from pineapple byproducts by polysaccharide complex formation

Débora A. Campos<sup>a</sup>, Ezequiel R. Coscueta<sup>a</sup>, Nadia Woitovich Valetti<sup>b</sup>, Lorenzo M. Pastrana-Castro<sup>c</sup>, José A. Teixeira<sup>d</sup>, Guillermo A. Picó<sup>b</sup>, Maria Manuela Pintado<sup>a</sup>

<sup>a</sup>Universidade Católica Portuguesa, CBQF – Centro de Biotecnologia e Química Fina – Laboratório Associado, Escola Superior de Biotecnologia, Rua Arquiteto Lobão Vital, 172, 4200-374 Porto, Portugal

bIPROBYQ - Biotechnological and Chemical Processes Institute, UNR-CONICET. College of Biochemical and Pharmaceutical Sciences, National University of Rosario (UNR), Suipacha 570, S2002LRK Rosario, Argentina

<sup>c</sup>INL – International Iberian Nanotechnology Laboratory, 4710-330, Braga, Portugal <sup>d</sup>Centro de Engenharia Biológica, Universidade Do Minho, Campus Gualtar, 4710-057, Braga, Portugal

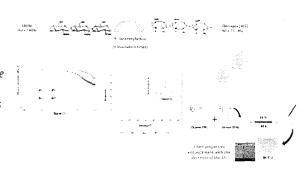


## pH-induced cold gelation of caseinglycomacropeptide emulsions

R. Moralesa,b, M.J. Martineza,b, A.M.R. Pilosofa,b

<sup>a</sup>Universidad de Buenos Aires, Facultad de Ciencias Exactas y Naturales, Departamento de Industrias, Buenos Aires, Argentina

<sup>b</sup>CONICET - Universidad de Buenos Aires, Instituto de Tecnología de Alimentos y Procesos Químicos (ITAPROQ), Buenos Aires, Argentina



#### 814-829

# Interaction of soybean protein isolate and phosphatidylcholine in nanoemulsions: A fluorescence analysis

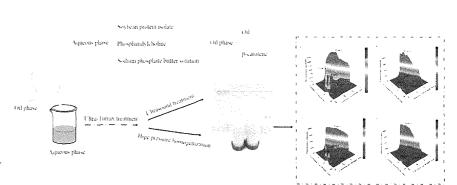
Yang Li<sup>a,b,d,e</sup>, Baohua Liu<sup>b</sup>, Lianzhou Jiang<sup>a,b</sup>, Joe M. Regenstein<sup>c</sup>, Nan Jiang<sup>b</sup>, Viacheslav Poias<sup>b</sup>, Xiaonan Zhang<sup>b</sup>, Baokun Qi<sup>b</sup>, Aili Li<sup>a</sup>, Zhongjiang Wang<sup>a,b</sup>

<sup>a</sup>Key Laboratory of Soybean Biology in Chinese Ministry of Education, Northeast Agricultural University, Harbin, Heilongjiang, 150030, China <sup>b</sup>College of Food Science, Northeast Agricultural University, Harbin, Heilongjiang, 150030, China <sup>c</sup>Department of Food Science, Cornell University, Ithaca, NY, 14853, 7201, LISA

14853-7201, USA

<sup>d</sup>Harbin Institute of Food Industry, Harbin, Heilongjiang,
150030. China

<sup>e</sup>Heilongjiang Academy of Green Food Science, Harbin, Heilongjiang, 150030, China

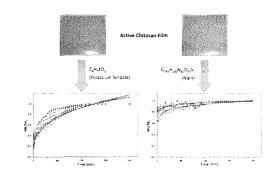


## 830-838

# Characterization of active chitosan films as a vehicle of potassium sorbate or nisin antimicrobial agents

Leandro Neodini Remedio<sup>a</sup>, Jackson Wesley Silva dos Santos<sup>b</sup>, Vinícius Borges Vieira Maciel<sup>a</sup>, Cristiana Maria Pedroso Yoshida<sup>b</sup>, Rosemary Aparecida de Carvalho<sup>a</sup>

<sup>a</sup>USP – University of São Paulo, Faculty of Animal Science and Food Engineering, Av. Duque de Caxias Norte, 225 – Pirassununga-SP, Brazil <sup>b</sup>UNIFESP – Federal University of São Paulo, Department of Exact and Earth Science, Rua São Nicolau, 210 – Diadema-SP, Brazil



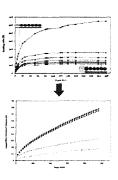
### 839-846

# Diffusion and relaxation contributions in the release of vitamin B6 from a moving boundary of genipin crosslinked gelatin matrices

Shahla Teimouria, Courtney Morrish<sup>a</sup>, Naksit Panyoyai<sup>b</sup>, Darryl M. Small<sup>c</sup>, Stefan Kasapis<sup>a</sup>

<sup>a</sup>School of Science, RMIT University, Bundoora West Campus, Melbourne, Vic, 3083,

<sup>b</sup>Department of Agro-industry, Rajabhat Chiang Mai University, Chiang Mai, Thailand <sup>c</sup>School of Science, RMIT University, City Campus, Melbourne, Vic, 3001, Australia

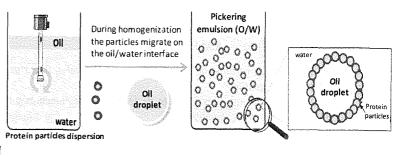


# Food-grade Pickering stabilizers obtained from a protein-rich lupin cultivar (Alu*Prot*-CGNA®): Chemical characterization and emulsifying properties

César Burgos-Díaz<sup>a</sup>, Traudy Wandersleben<sup>b</sup>, Marcos Olivos<sup>a</sup>, Nicole Lichtin<sup>a</sup>, Mariela Bustamante<sup>c</sup>, Conxita Solans<sup>d</sup>

<sup>a</sup>Agriaquaculture Nutritional Genomic Center, CGNA, Temuco, Chile <sup>b</sup>Department of Chemical Sciences and Natural Resources, Universidad de La Frontera, Temuco, Chile

Center of Food Biotechnology and Bioseparations, Scientific and Technological Bioresource Nucleus, BIOREN, and Department of Chemical Engineering, Universidad de La Frontera, Temuco, Chile dInstitute of Advanced Chemistry of Catalonia, Spanish National Research Council (IQAC-CSIC) and CIBER de Bioingeniería Biomateriales y Nanomedicina (CIBER-BBN), Barcelona, Spain



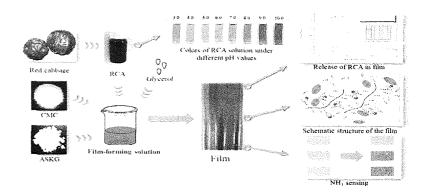
#### 858-868

# A pH and NH3 sensing intelligent film based on Artemisia sphaerocephala Krasch. gum and red cabbage anthocyanins anchored by carboxymethyl cellulose sodium added as a host complex

Tieqiang Liang<sup>a,b</sup>, Guohou Sun<sup>a,b</sup>, Lele Cao<sup>a,b</sup>, Jian Li<sup>a,b</sup>, Lijuan Wang<sup>a,b</sup>

<sup>a</sup>Key Laboratory of Bio-based Materials Science and Technology of Ministry of Education, Northeast Forestry University, Harbin, PR China

<sup>b</sup>Research Center of Wood Bionic Intelligent Science, Northeast Forestry University, Harbin, PR China



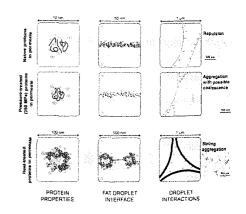
## 869-879

# Multi-scale understanding of the effects of the solvent and process on whey protein emulsifying properties: Application to dairy emulsion

Marine Moussier<sup>a</sup>, Véronique Bosc<sup>a</sup>, Camille Michon<sup>a</sup>, Violaine Pistre<sup>b</sup>, Cyril Chaudemanche<sup>b</sup>, Delphine Huc-Mathis<sup>a</sup>

<sup>a</sup>Ingénierie Procédés Aliments, Inra, AgroParisTech, Université Paris-Saclay, 91300, Massy, France

<sup>b</sup>Vienne Technical Center, Yoplait/General Mills, Chemin des Mines, 38200, Vienne, France



## Betanin loaded nanocarriers based on quinoa seed 11S globulin. Impact on the protein structure and antioxidant activity

Jimena H. Martínez<sup>a,b</sup>, Francisco Velázquez<sup>a,b</sup>, Hernán P. Burrieza<sup>c,d</sup>, Karina D. Martínez<sup>e,g</sup>, A. Paula Domínguez Rubio<sup>a,b</sup>, Cristina dos Santos Ferreira<sup>f</sup>, María del Pilar Buera<sup>e,g</sup>, Oscar E. Pérez<sup>a,b,h</sup>

<sup>a</sup>Universidad de Buenos Aires, Facultad de Ciencias Exactas y Naturales, Departamento de Química Biológica, Buenos Aires, Argentina

<sup>b</sup>CONICET, Universidad de Buenos Aires, Instituto de Química Biológica de la Facultad de Ciencias Exactas y Naturales (IQUIBICEN), Buenos Aires, Argentina

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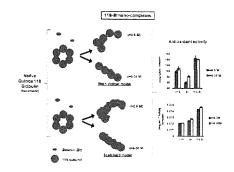
<sup>d</sup>CONICET, Universidad de Buenos Aires, Instituto de Biodiversidad y Biología Experimental y Aplicada (IBBEA), Buenos Aires, Argentina

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<sup>f</sup>Universidad de Buenos Aires, Facultad de Ciencias Exactas y Naturales, Departamento de Química Orgánica, Buenos Aires, Argentina

<sup>g</sup>CONICET, Universidad de Buenos Aires, Instituto de Tecnología de Alimentos y Procesos Químicos (ITAPROQ), Buenos Aires, Argentina

<sup>h</sup>Departamento de Desarrollo Productivo y Tecnológico, Universidad Nacional de Lanús, Provincia de Buenos Aires, Argentina

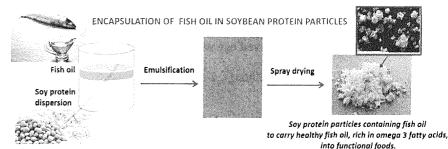


### 891-901

# Encapsulation of fish oil in soybean protein particles by emulsification and spray drying

Luciana Di Giorgio, Pablo R. Salgado, Adriana N. Mauri

Centro de Investigación y Desarrollo en Criotecnología de Alimentos (CIDCA), CONICET CCT La Plata y Facultad de Ciencias Exactas, Universidad Nacional de La Plata, 47 y 116 S/N°, (B1900JJ), La Plata, India



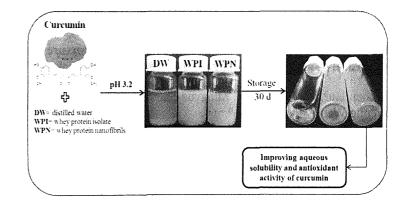
## 902-914

# Enhancing the aqueous solubility of curcumin at acidic condition through the complexation with whey protein nanofibrils

Mehdi Mohammadian<sup>a</sup>, Maryam Salami<sup>a</sup>, Shima Momen<sup>a</sup>, Farhad Alavi<sup>a</sup>, Zahra Emam-Djomeh<sup>a</sup>, Ali Akbar Moosavi-Movahedi<sup>b</sup>

<sup>a</sup>Department of Food Science and Engineering, University College of Agriculture & Natural Resources, University of Tehran, Karaj, Iran

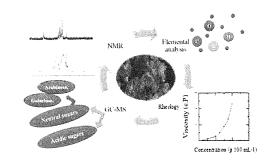
<sup>b</sup>Institute of Biochemistry and Biophysics, University of Tehran, Tehran, Iran



# Isolation and structural characterization of a polysaccharide derived from a local gum: Zedo (Amygdalus scoparia Spach)

Roxana Seyfia, Mohammad Reza Kasaaia, Mohammad Javad Chaichib

<sup>a</sup>Department of Food Science and Technology, Sari Agricultural Sciences and Natural Resources University, Khazar Abad road, Km. 9, P.O. Box, 578, Sari, Mazandaran, Iran <sup>b</sup>Faculty of Chemistry, Mazandaran University, Babolsar, Iran

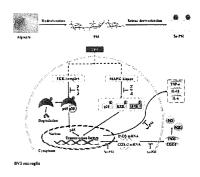


### 925-932

# Neuroimmunoregulatory potential of seleno-polymannuronate derived from alginate in lipopolysaccharide-stimulated BV2 microglia

Decheng Bi<sup>a</sup>, Qiuxian Lai<sup>a</sup>, Xiaofan Li<sup>a</sup>, Nan Cai<sup>a</sup>, Tong Li<sup>a</sup>, Weishan Fang<sup>b</sup>, Qingguo Han<sup>a</sup>, Boming Yu<sup>a</sup>, Lin Li<sup>a</sup>, Qiong Liu<sup>a</sup>, Hong Xu<sup>a</sup>, Zhangli Hu<sup>a</sup>, Xu Xu<sup>a</sup>

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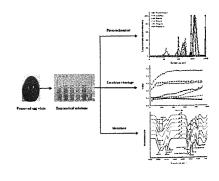
### 933-942

# Effects of different proteases on the emulsifying capacity, rheological and structure characteristics of preserved egg white hydrolysates

Minmin Ai<sup>a,b</sup>, Ting Tang<sup>a,b</sup>, Ledan Zhou<sup>a,b</sup>, Ziting Ling<sup>a,b</sup>, Shanguang Guo<sup>a,b,c</sup>, Aimin Jiang<sup>a,b,c</sup>

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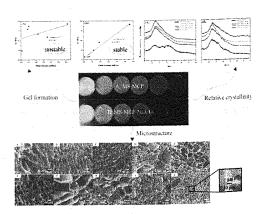
## 943-951

# Effect of sodium carbonate on the gelation, rheology, texture and structural properties of maize starch-Mesona chinensis polysaccharide gel

Suchen Liu<sup>a</sup>, Yuehuan Xiao<sup>a</sup>, Mingyue Shen<sup>a</sup>, Xiaowei Zhang<sup>b</sup>, Wenjie Wang<sup>a</sup>, Jianhua Xie<sup>a,b</sup>

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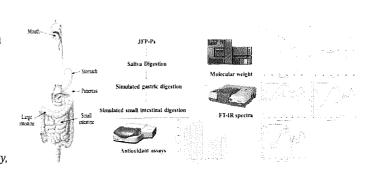


# Effects of *in vitro* saliva, gastric and intestinal digestion on the chemical properties, antioxidant activity of polysaccharide from *Artocarpus heterophyllus Lam.* (Jackfruit) Pulp

Kexue Zhu<sup>a</sup>, Siwen Yao<sup>a,b</sup>, Yanjun Zhang<sup>a</sup>, Qibing Liu<sup>c</sup>, Fei Xu<sup>a</sup>, Gang Wu<sup>a</sup>, sWenjiang Dong<sup>a</sup>, Lehe Tan<sup>a</sup>

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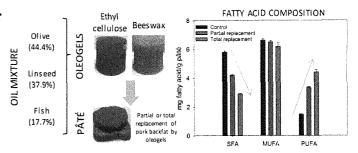


### 960-969

# Characterization of ethyl cellulose and beeswax oleogels and their suitability as fat replacers in healthier lipid pâtés development

Joaquín Gómez-Estaca, Ana María Herrero, Beatriz Herranz, María Dolores Álvarez, Francisco Jiménez-Colmenero, Susana Cofrades

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### 90-976

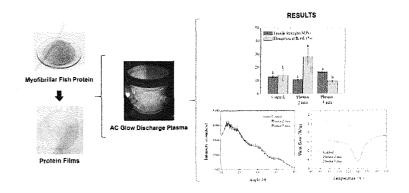
# Improvement of fish protein films properties for food packaging through glow discharge plasma application

Viviane Patrícia Romani<sup>a</sup>, Bradley Olsen<sup>b</sup>, Magno Pinto Collares<sup>c</sup>, Juan Rodrigo Meireles Oliveira<sup>c</sup>, Carlos Prentice-Hernández<sup>a</sup>, Vilásia Guimarães Martins<sup>a</sup>

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## 977-978

# Corrigendum to "Challenges to assumptions regarding oral shear rate during oral processing and swallowing based on sensory testing with thickened liquids" [Food Hydrocolloids 84C (2018) 173-180]

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