Food Hydrocolloids 32 (2013) iii–x

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Food Hydrocolloids

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Graphical abstracts

Supplementation of gluten-free bread with non-gluten proteins. Effect on dough rheological properties and bread characteristic

Food Hydrocolloids **2013**, 32, 213–220

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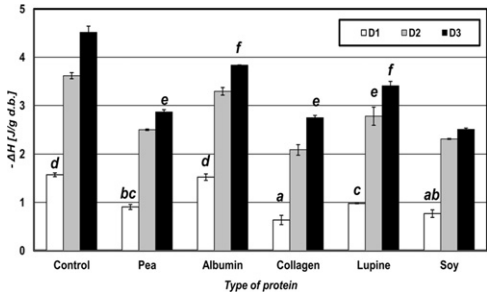
[b]*Department of Engineering and Machinery for Food Industry, University of Agriculture, Balicka 122 Str., 30-149 Krakow, Poland*
[c]*Department of Analysis and Evaluation of Food Quality, University of Agriculture, Balicka 122 Str., 30-149 Krakow, Poland*



Enthalpy of melting of amylopectin crystallites (□ day 1, ■ day 2, ■ day 3) of control gluten-free bread.

The core carbohydrate structure of *Acacia seyal var. seyal* (Gum arabic)

Food Hydrocolloids **2013**, 32, 221–227

Shao-Ping Nie[a,b], Cathy Wang[b], Steve W. Cui[a,b,*], Qi Wang[b], Ming-Yong Xie[a], Glyn O. Phillips[c,d]

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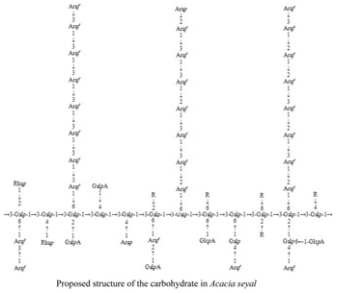
[b]*Guelph Food Research Centre, Agriculture and Agri-Food Canada, 93 Stone Road West, Guelph, Ont., Canada N1G 5C9*
[c]*Glyn O. Phillips Hydrocolloid Research Centre, Glyndŵr, University, Wrexham, LL11 2AW, Wales, UK*
[d]*Phillips Hydrocolloids Research Ltd, 45 Old Bond Street, London W1S 4QT, UK*



Proposed structure of the carbohydrate in *Acacia seyal*. R is one of these following residues: T-Rhap1. → , T-L-Araf 1. → , T-L-Arap 1. → , TGlcpA1. → , T-GalpA1. → , T-L-Araf 1. → 3-L-Araf 1. → , T-L-Araf 1. → 2-L-Araf 1→. The galactose moieties are in -β-D form, with the galacturonic acid, arabinose and rhamnose in α-L form.

Calcium cation triggers and accelerates the gelation of high methoxy pectin

Food Hydrocolloids **2013**, 32, 228–234

Ying Yang[a,b], Genyi Zhang[a], Yan Hong[a], Zhengbiao Gu[a,*], Fang Fang[a]

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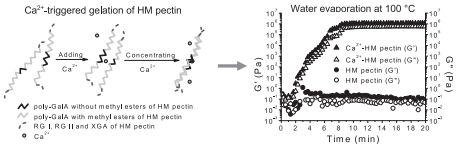
[b]*National Engineering Laboratory for Rice and By-Product Deep Processing and College of Food Science and Engineering, Central South University of Forestry and Technology, Changsha 410004, Hunan Province, People's Republic of China*



β-Lactoglobulin–sodium alginate interaction as affected by polysaccharide depolymerization using high intensity ultrasound

Food Hydrocolloids **2013**, 32, 235–244

Seyed Mohammad Hashem Hosseini[a,d], Zahra Emam-Djomeh[a,*], Seyed Hadi Razavi[a], Ali Akbar Moosavi-Movahedi[b], Ali Akbar Saboury[b], Maliheh Sadat Atri[c], Paul Van der Meeren[d]

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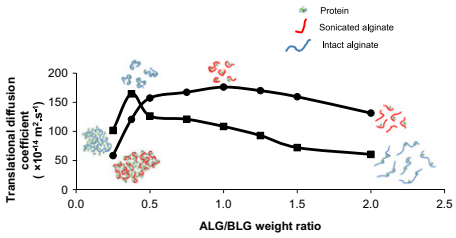
[b]*Institute of Biochemistry and Biophysics (IBB), University of Tehran, Tehran, Iran*
[c]*Molecular and Cell Biology Department, University of Mazandaran, Babolsar, Iran*
[d]*Particle and Interfacial Technology Group, Faculty of Bioscience Engineering, Ghent University, Coupure Links 653, B-9000 Gent, Belgium*



Properties of red tilapia (*Oreochromis niloticus*) protein based film as affected by cryoprotectants

Food Hydrocolloids **2013**, 32, 245–251

Amin Oujifard[a], Soottawat Benjakul[b,*], Thummanoon Prodpran[c], Jafar Seyfabadi[d]

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[b]*Department of Food Technology, Faculty of Agro-Industry, Prince of Songkla University, Hat Yai, Songkhla 90112, Thailand*
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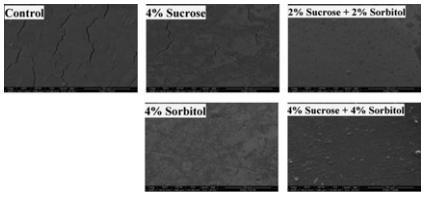
[d]*Department of Marine Biology, Faculty of Marine Sciences, Tarbiat Modares University, Noor, Mazandaran, Iran*



Impact of viscous dietary fibres on the viscoelastic behaviour of gluten-free formulated rice doughs: A fundamental and empirical rheological approach

Food Hydrocolloids **2013**, 32, 252–262

Felicidad Ronda[a], Sandra Pérez-Quirce[a], Alessandro Angioloni[b], Concha Collar[b,*]

[a]*Department of Agriculture and Forestry Engineering, Food Technology, College of Agricultural and Forestry Engineering, University of Valladolid, Av. Madrid, 44, 34004 Palencia, Spain*
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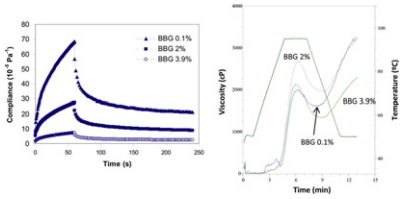
Effect of barley beta-glucan (BBG) addition on creep test curves and pasting profiles of gluten-free doughs at intermediate doses (0 level) of dietary fibres (1.3% SFE; 1.3% NE; 2% BBG) and water (90% WATER) addition.



Designing reduced-fat food emulsions: Locust bean gum–fat droplet interactions

Food Hydrocolloids **2013**, 32, 263–270

Cheryl Chung[a], Brian Degner[b], David Julian McClements[a,*]

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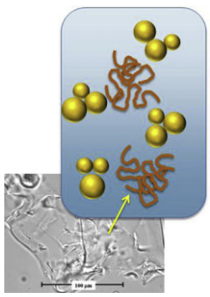
[b]*ConAgra Foods, Six ConAgra Drive, Omaha, NE 68102, USA*

Mixed colloidal systems consisting of fat droplets and biopolymer molecules can be used as model systems for complex food products such as sauces, soups and dressings.



Interfacial cross-linking of β-casein changes the structure of the adsorbed layer

Food Hydrocolloids **2013**, 32, 271–277

Riitta Partanen[a,*], Pirkko Forssell[a], Alan Mackie[b], Eva Blomberg[c,d]

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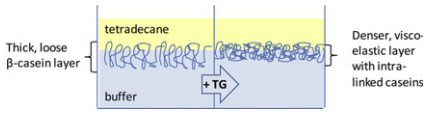

Ultra high pressure homogenized soy flour for tofu making

Food Hydrocolloids **2013**, 32, 278–285

Hsiao-Hui Liu[a], John-Tung Chien[b], Meng-I. Kuo[b,*]

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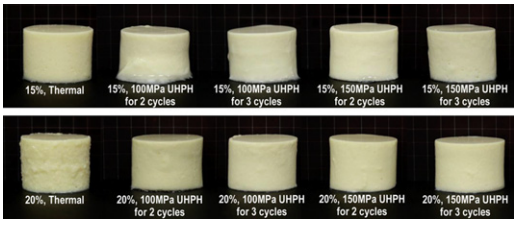
[b]*Department of Food Science, Fu-Jen Catholic University, 510 Jhong-Jheng Road, New Taipei City 24205, Taiwan*

The appearance of tofu made from different concentrations (15% and 20%) of soy flour suspension with thermal treatment and ultra high pressure homogenization (UHPH).



Effect of high hydrostatic pressure on the structural properties and bioactivity of immunoglobulins extracted from whey protein

Food Hydrocolloids **2013**, 32, 286–293

Paul George[a], Stefan Kasapis[a,*], Anna Bannikova[a], Nitin Mantri[a], Martin Palmer[b], Barbara Meurer[b], Leif Lundin[c]

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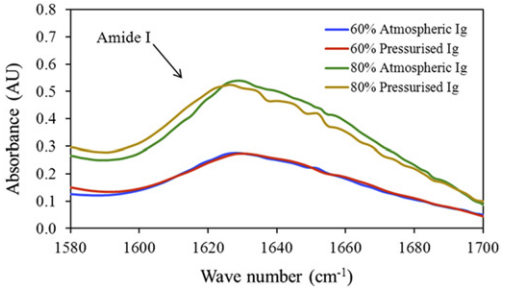
[c]*Animal, Food and Health Sciences, CSIRO, Werribee, Vic 3030, Australia*



Influence of pH and soy protein isolate addition on the physicochemical properties of functional grape pectin confections

Food Hydrocolloids **2013**, 32, 294–302

Tobias Sessler[a], Jochen Weiss[a], Yael Vodovotz[b,*]

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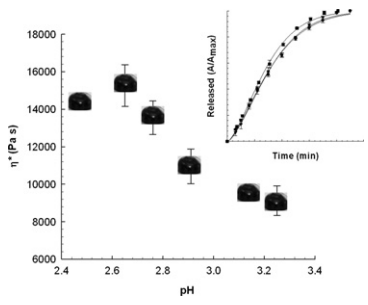

Food Hydrocolloids **2013**, 32, 303–311

The effect of high intensity ultrasonic pre-treatment on the properties of soybean protein isolate gel induced by calcium sulfate

Hao Hu[a,b], Eunice C.Y. Li-Chan[b,**], Li Wan[c], Ming Tian[a], Siyi Pan[a,*]

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[b]*The University of British Columbia, Faculty of Land and Food Systems, Food Nutrition and Health Program, 2205 East Mall, Vancouver, British Columbia, Canada V6T 1Z4*
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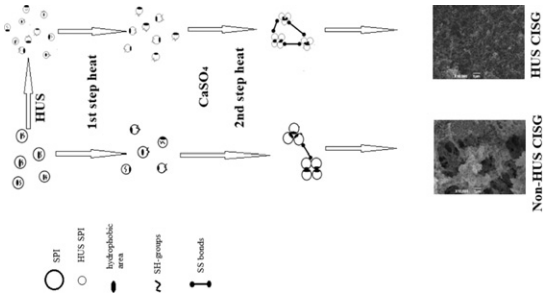

Food Hydrocolloids **2013**, 32, 312–321

Effect of phospholipid molecular structure on its interaction with whey proteins in aqueous solution

M. Kasinos[a], P. Sabatino[a,b], B. Vanloo[c,d], K. Gevaert[c,d], J.C. Martins[b], P. Van der Meeren[a,*]

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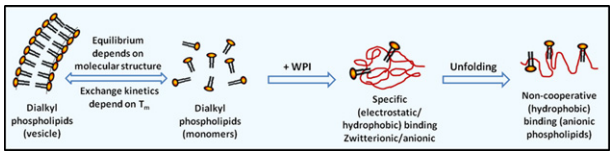
[b]*NMR-structure unit, Department of Organic Chemistry, Faculty of Sciences, Ghent University, Krijgslaan 281, B-9000 Ghent, Belgium*
[c]*Department of Medical Protein Research, VIB, B-9000 Ghent, Belgium*
[d]*Department of Biochemistry, Ghent University, B-9000 Ghent, Belgium*

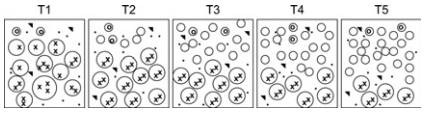


Food Hydrocolloids **2013**, 32, 322–330

pH-induced demineralization of casein micelles modifies their physico-chemical and foaming properties

Naaman Nogueira Silva[a,b], Michel Piot[a,b], Antonio Fernandes de Carvalho[c], Frédéric Violleau[d], Anne-Laure Fameau[e], Frédéric Gaucheron[a,b,*]

[a]*INRA, UMR1253, Science et Technologie du Lait et de l'Œuf, F-35042 Rennes, France*
[b]*AGROCAMPUS OUEST, UMR1253, Science et Technologie du Lait et de l'Œuf, F-35042 Rennes, France*
[c]*Université Fédérale de Viçosa (UFV), Departamento de Tecnologia de Alimentos, Laboratório de Leite e Derivados, 36570-000 Viçosa, Minas Gerais, Brazil*
[d]*Université de Toulouse, INPT, Ecole d'Ingénieurs de Purpan, Département Sciences Agronomiques et Agroalimentaires, UPSP/DGER 115, F-31076 Toulouse Cedex 03, France*
[e]*INRA, Biopolymères Interactions Assemblages, Rue de la Géraudière, F-44316 Nantes, France*



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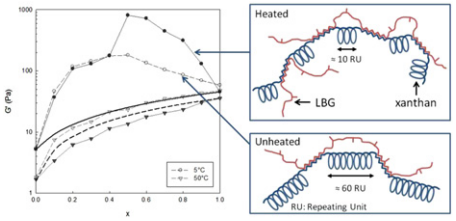
Food Hydrocolloids **2013**, 32, 331–340

Effect of xanthan structure on its interaction with locust bean gum: Toward prediction of rheological properties

Frédéric Renou[*], Odile Petibon, Catherine Malhiac, Michel Grisel

University of Le Havre, URCOM, EA 3221, FR CNRS 3038, 25 rue Philippe Lebon, B.P. 540, 76058 Le Havre Cedex, France

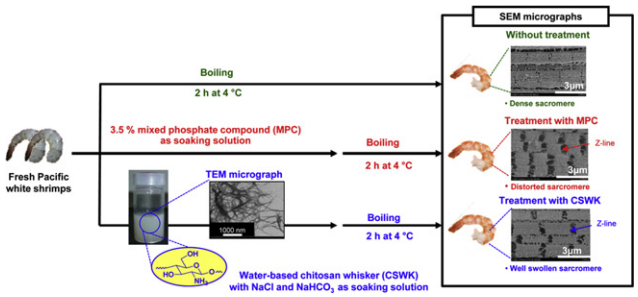


Food Hydrocolloids **2013**, 32, 341–348

Water-based nano-sized chitin and chitosan as seafood additive through a case study of Pacific white shrimp (*Litopenaeus vannamei*)

Patomporn Chantarasataporn[a], Rangrong Yoksan[b], Wonnop Visessanguan[c,**], Suwabun Chirachanchai[a,d,e,*]

[a]*The Petroleum and Petrochemical College, Chulalongkorn University, Soi Chula 12, Phyathai Rd., Pathumwan, Bangkok 10330, Thailand*
[b]*Department of Packaging and Materials Technology, Faculty of Agro-Industry, Kasetsart University, Bangkok 10900, Thailand*
[c]*National Center for Genetic Engineering and Biotechnology (BIOTEC), 113 Thailand Science Park, Phaholyothin Rd., Klong 1, Klong Luang, Pathumthani 12120, Thailand*
[d]*Center for Petroleum, Petrochemicals, and Advanced Materials, Chulalongkorn University, Bangkok 10330, Thailand*
[e]*Center of Innovative Nanotechnology, Chulalongkorn University, Bangkok 10330, Thailand*

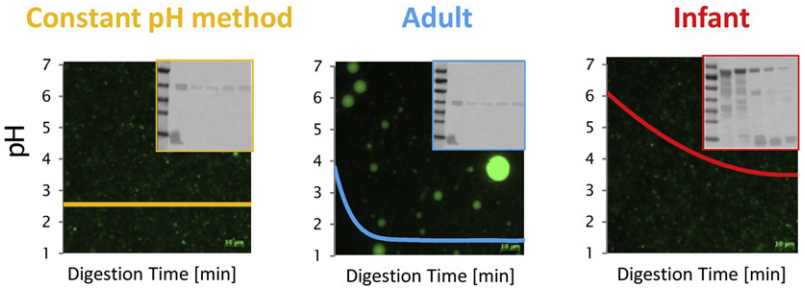


Food Hydrocolloids **2013**, 32, 349–357

Comparative performance of milk proteins and their emulsions under dynamic *in vitro* adult and infant gastric digestion

Carmit Shani Levi, Sharon Levi Tal, Uri Lesmes*

Laboratory of Chemistry of Foods and Bioactives, Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa 32000, Israel

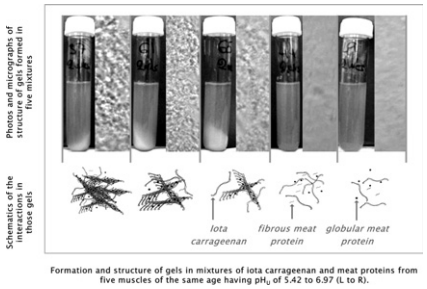


Food Hydrocolloids **2013**, 32, 358–364

Ultimate pH and ageing of meat affect the phase behaviour of mixtures of its proteins and iota carrageenan

M.M. Farouk*, É. Francoise, D.A. Frost, G. Wu

AgResearch Limited, Ruakura Research Centre, East Street, Private Bag 3123, Hamilton, New Zealand



Food Hydrocolloids **2013**, 32, 365–372

The physicochemical properties of swelled maize starch granules complexed with lauric acid

Fengdan Chang, Xiaowei He, Qiang Huang*

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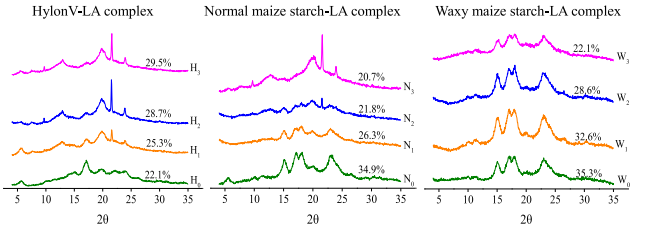
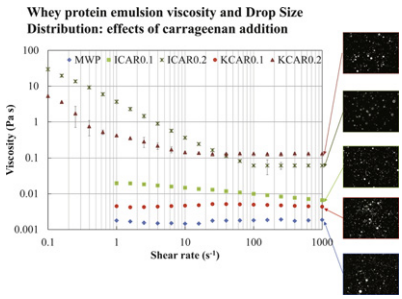


The influence of carrageenan on interfacial properties and short-term stability of milk whey proteins emulsions

Food Hydrocolloids **2013**, 32, 373–382

Lucia Seta, Noemi Baldino, Domenico Gabriele*, Francesca R. Lupi, Bruno de Cindio

Department of Engineering Modelling, University of Calabria, Via P. Bucci, Cubo 39C, I-87036 Arcavacata di Rende (CS), Italy



Microfibrillated cellulose from mangosteen (*Garcinia mangostana* L.) rind: Preparation, characterization, and evaluation as an emulsion stabilizer

Food Hydrocolloids **2013**, 32, 383–394

Thunnalin Winuprasith[a,b], Manop Suphantharika[a,b,*]

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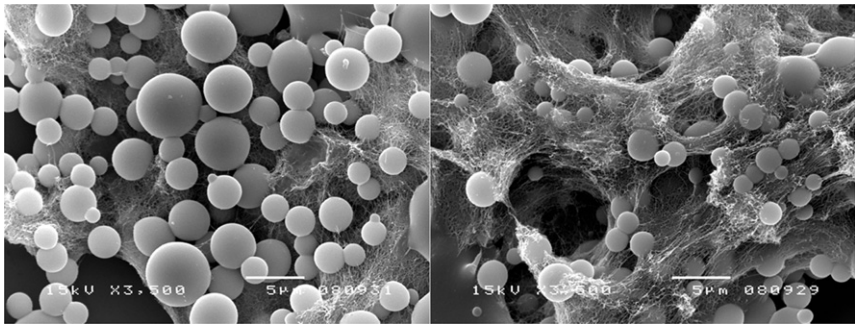
[b]*Center of Excellence on Agricultural Biotechnology (AG-BIO/PERDO-CHE), Bangkok 10900, Thailand*

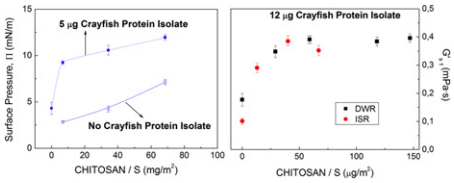


Interfacial properties of crayfish protein isolate/chitosan mixed films

Food Hydrocolloids **2013**, 32, 395–401

Alberto Romero[a,*], Tom Verwijlen[b], Antonio Guerrero[a], Jan Vermant[b]

[a]*Departamento de Ingeniería Química, Universidad de Sevilla, Facultad de Química, 41012 Sevilla, Spain*
[b]*Department of Chemical Engineering, KU Leuven, University of Leuven, W. de Croylaan 46-3001, Leuven, Belgium*



Influence of pH value and locust bean gum concentration on the stability of sodium caseinate-stabilized emulsions

Food Hydrocolloids **2013**, 32, 402–411

Amin Farshchi, Rammile Ettelaie, Melvin Holmes*

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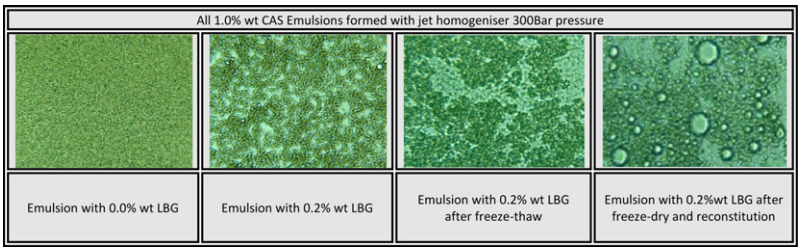
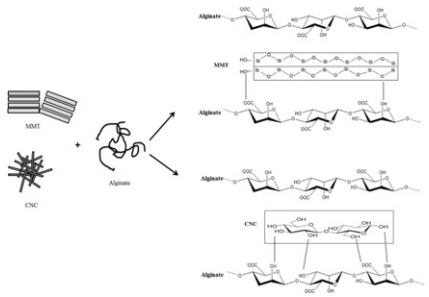


Comparing physico-mechanical and thermal properties of alginate nanocomposite films reinforced with organic and/or inorganic nanofillers

Food Hydrocolloids **2013**, 32, 416–424

Mehdi Abdollahi[a], Mehdi Alboofetileh[a], Masoud Rezaei[a,*], Rabi Behrooz[b]

[a]*Department of Fisheries, Faculty of Marine Sciences, Tarbiat Modares University, P.O. Box 46414-356, Noor, Iran*
[b]*Department of Wood and Paper Technology, Faculty of Natural Resource, Tarbiat Modares University, P.O. Box 46414-356, Noor, Iran*

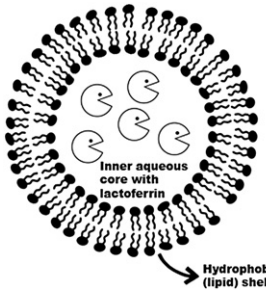


Nanoencapsulation of bovine lactoferrin for food and biopharmaceutical applications

Food Hydrocolloids **2013**, 32, 425–431

Victor M. Balcão[a,b,d,*], Carla I. Costa[a], Carla M. Matos[a], Carla G. Moutinho[a,b], Manuela Amorim[c], Manuela E. Pintado[c], Ana P. Gomes[c], Marta M. Vila[d], José A. Teixeira[b]

[a]*Universidade Fernando Pessoa, Rua Carlos da Maia n° 296, P-4200-150 Porto, Portugal*
[b]*Instituto para a Biotecnologia e a Bioengenharia – IBB, Centro de Engenharia Biológica, Universidade do Minho, Campus de Gualtar, P-4710-057 Braga, Portugal*
[c]*Escola Superior de Biotecnologia, Universidade Católica Portuguesa, Rua Dr. António Bernardino de Almeida, P-4200-072 Porto, Portugal*
[d]*Laboratório para o Desenvolvimento e Avaliação de Substâncias Bioactivas, Universidade de Sorocaba, Cidade Universitária, Rod. Raposo Tavares km 92.5, 18023-000 Sorocaba, São Paulo, Brazil*



Lactoferrin is a subfraction of whey with antiviral, antimicrobial, anti-cancer and immune system modulating effects.

Production of lactoferrin derivatives encompassing full stabilization of its three-dimensional structure, has been attempted via nanoencapsulation within lipid nanovesicles, integrating a multiple water-in-oil-in-water emulsion.

Long-term storage of the multiple nanoemulsions did not lead to leaching of protein, thus proving the effectiveness of encapsulation. Furthermore, optimized lactoferrin nanovesicle derivatives were successfully employed at lab-scale antimicrobial trials.

Physicochemical properties and *in vitro* digestion of starches from different *Dioscorea* plants

Food Hydrocolloids **2013**, 32, 432–439

Qianqian Jiang[a], Wenyuan Gao[a,*], Yanpeng Shi[a], Xia Li[a], Haiyang Wang[b], Luqi Huang[c], Peigen Xiao[d]

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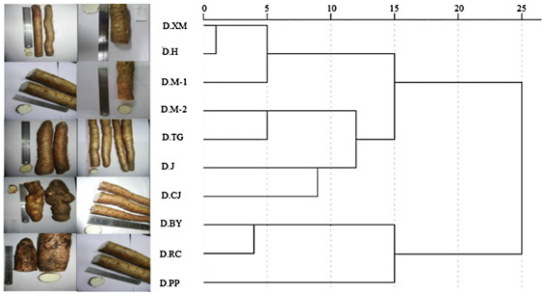

Surface properties and bulk rheology of *Sterculia apetala* gum exudate dispersions

Food Hydrocolloids **2013**, 32, 440–446

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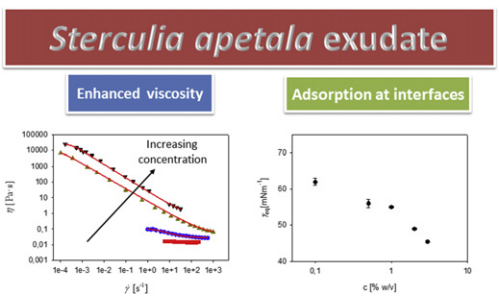

Food Hydrocolloids **2013**, 32, 447–452

Effects of bleaching on characteristics and gelling property of gelatin from splendid squid (*Loligo formosana*) skin

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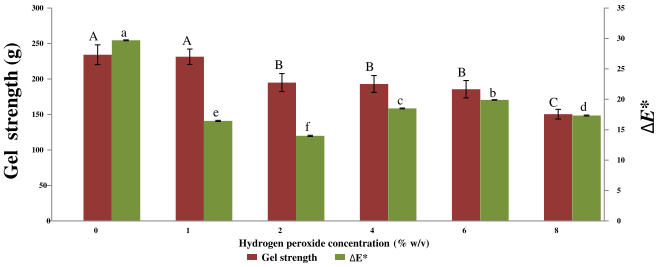

Food Hydrocolloids **2013**, 32, 453–462

Characterization of rheological interactions of *Gleditsia triacanthos* gum with some hydrocolloids: Effect of hydration temperature

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