Food Hydrocolloids 31 (2013) iii–vi

Contents lists available at SciVerse ScienceDirect

Food Hydrocolloids

journal homepage: www.elsevier.com/locate/foodhyd

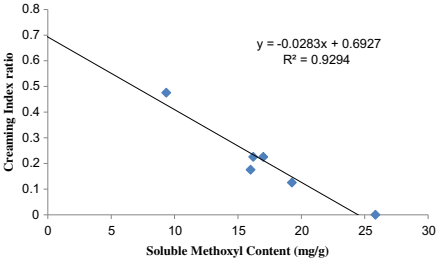
Graphical abstracts

Stabilization of emulsions by gum tragacanth (*Astragalus* spp.) correlates to the galacturonic acid content and methoxylation degree of the gum

Hassan Ahmadi Gavlighi[a,b], Anne S. Meyer[a,*], Dayang N.A. Zaidel[a,d], Mohammad Amin Mohammadifar[c], J. Dalgaard Mikkelsen[a]

[a]*Center for Bioprocess Engineering, Department of Chemical and Biochemical Engineering, Technical University of Denmark (DTU), Building 229, DK-2800 Kgs. Lyngby, Denmark*

Food Hydrocolloids **2013**, 31, 1–4

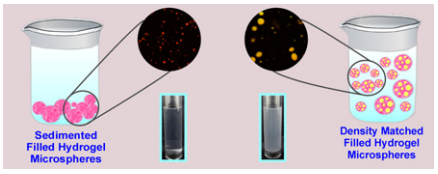


Hydrogel microspheres for encapsulation of lipophilic components: Optimization of fabrication & performance

Alison Matalanis, David Julian McClements[*]

Biopolymers and Colloids Research Laboratory, Department of Food Science, University of Massachusetts, 100 Holdsworth Way, 220 Chenoweth Laboratory, Amherst, MA 01003, USA

Food Hydrocolloids **2013**, 31, 5–14

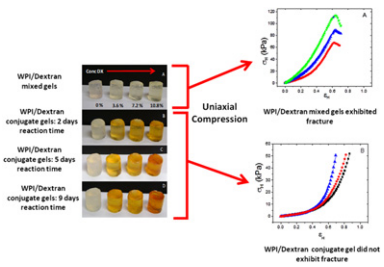


Gel mechanical properties of milk whey protein–dextran conjugates obtained by Maillard reaction

María Julia Spotti[a,*], Martina J. Perduca[b], Andrea Piagentini[a], Liliana G. Santiago[a], Amelia C. Rubiolo[a], Carlos R. Carrara[a]

[a]*Grupo de Biocoloides, Instituto de Tecnología de Alimentos, Facultad de Ingeniería Química, Universidad Nacional del Litoral, 1 de Mayo 3250, 3000 Santa Fe, Argentina*
[b]*Facultad de Ingeniería, Universidad de la Cuenca del Plata, Lavalle 50, 3400 Corrientes, Argentina*

Food Hydrocolloids **2013**, 31, 15–25

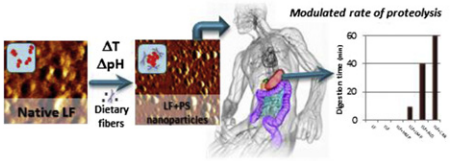


Food Hydrocolloids **2013**, 31, 26–32

Impact of dietary fibers on the properties and proteolytic digestibility of lactoferrin nano-particles

Tatyana David-Birman[a], Alan Mackie[b], Uri Lesmes[a,*]

[a]*Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel*
[b]*Food Structure and Health Group, Institute of Food Research, Norwich, UK*



Food Hydrocolloids **2013**, 31, 33–41

A further amendment to the classical core structure of gum arabic (*Acacia senegal*)

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]

[a]*State Key Laboratory of Food Science and Technology, Nanchang University, Nanchang, Jiangxi 330047, China*
[b]*Guelph Food Research Centre, Agriculture and Agri-Food Canada, 93 Stone Road West, Guelph, Ontario, Canada N1G 5C9*

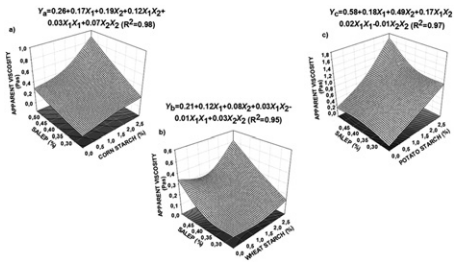
Proposed structure of gum arabic (*Acacia senegal*). A schematic structure is proposed as follows (with the newly identified residues identified in red).

Food Hydrocolloids **2013**, 31, 42–48

Mathematical approach for two component modeling of salep–starch mixtures using central composite rotatable design: Part I. Physicochemical and steady shear properties

Mustafa Tahsin Yilmaz[a], Safa Karaman[b], Ahmed Kayacier[b,*]

[a]*Yıldız Technical University, Chemical and Metallurgical Engineering Faculty, Food Engineering Department, 34210 İstanbul, Turkey*
[b]*Erciyes University, Engineering Faculty, Food Engineering Department, 38039 Kayseri, Turkey*

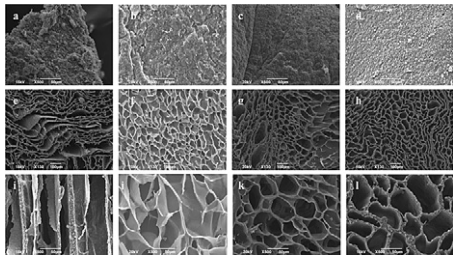


Food Hydrocolloids **2013**, 31, 49–60

The effect of freeze–thaw cycles on microstructure and physicochemical properties of four starch gels

Lan Wang[a,b], Bijun Xie[b,*], Guangquan Xiong[a], Wenjing Wu[a], Jun Wang[a], Yu Qiao[a], Li Liao[a]

[a]*Institute for Farm Products Processing and Nuclear-Agricultural Technology, Hubei Academy of Agricultural Science, Wuhan 430064, China*
[b]*College of Food Science and Technology, Huazhong Agricultural University, Wuhan, Hubei 430070, China*



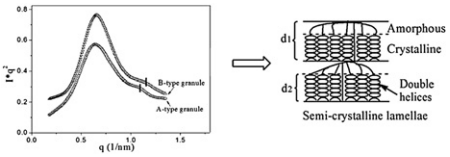
The effect of 7 freeze–thaw cycles on microstructure of four starch gels (gingko, Chinese water chestnut, potato, rice).

Supramolecular structure of A- and B-type granules of wheat starch

Food Hydrocolloids **2013**, 31, 61–67

Binjia Zhang[a], Xiaoxi Li[a], Jia Liu[a], Fengwei Xie[b], Ling Chen[a,*]

[a]*Ministry of Education Engineering Research Center of Starch & Protein Processing, Guangdong Province Key Laboratory for Green Processing of Natural Products and Product Safety, College of Light Industry and Food Sciences, South China University of Technology, Guangzhou 510640, China*
[b]*Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, Brisbane, Qld 4072, Australia*

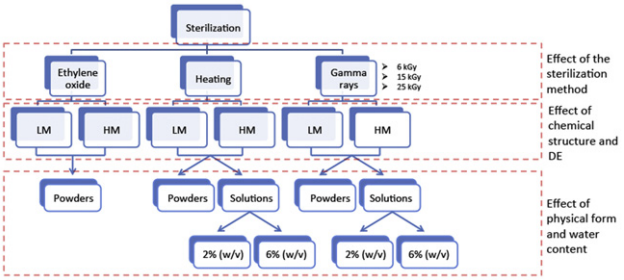


Sterilization treatments on polysaccharides: Effects and side effects on pectin

Food Hydrocolloids **2013**, 31, 68–73

Fabiola Munarin[a,*], Sabrina Bozzini[a], Livia Visai[b,c], Maria C. Tanzi[a], Paola Petrini[a]

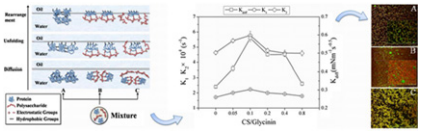
[a]*Laboratorio di Biomateriali, Bioengineering Department, Politecnico di Milano P.zza Leonardo da Vinci, 32-20133 Milan, Italy*
[b]*Dep. of Molecular Medicine, and Center for Tissue Engineering (C.I.T.), University of Pavia, 27100 Pavia, Italy*
[c]*Salvatore Maugeri Foundation, IRCCS, 27100 Pavia, Italy*



Formation and dynamic interfacial adsorption of glycinin/chitosan soluble complex at acidic pH: Relationship to mixed emulsion stability

Food Hydrocolloids **2013**, 31, 74–84

Yang Yuan[a], Zhi-Li Wan[a], Shou-Wei Yin[a], Zi Teng[b], Xiao-Quan Yang[a,*], Jun-Ru Qi[a], Xiao-Ying Wang[c]



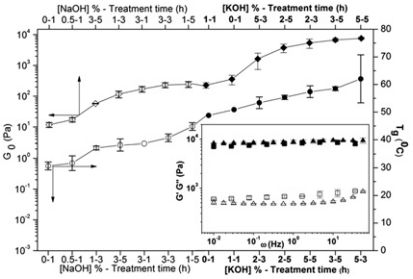
Left: Schematic representation of glycinin/chitosan mixture at oil–water interface; Middle: The coefficient of interfacial diffusion, unfolding and rearrangement of glycinin/chitosan mixture at pH 4.5; Right: The confocal observation of glycinin/chitosan mixed emulsion at pH 4.5 (A: Glycinin, B: Glycinin/chitosan soluble complex, C: Soluble complex with excessive chitosan). The photographs were plotted by Yang Yuan et al.

Tailoring kappa/iota-hybrid carrageenan from *Mastocarpus stellatus* with desired gel quality through pre-extraction alkali treatment

Food Hydrocolloids **2013**, 31, 85–93

Gabriela Azevedo[a], Loic Hilliou[a,*], Gabriel Bernardo[a], Isabel Sousa-Pinto[b], Ralph W. Adams[c], Mathias Nilsson[c,d], Ronald D. Villanueva[e]

[a]*Institute for Polymers and Composites/I3N, University of Minho, Campus de Azurém, 4800-058 Guimarães, Portugal*

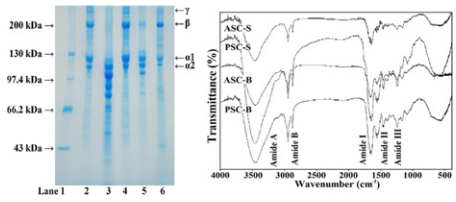


Isolation and characterization of acid soluble collagens and pepsin soluble collagens from the skin and bone of Spanish mackerel (*Scomberomorous niphonius*)

Food Hydrocolloids **2013**, 31, 94–102

Zhong-Rui Li, Bin Wang*, Chang-feng Chi, Qi-Hong Zhang, Yan-dan Gong, Jia-Jia Tang, Hong-yu Luo, Guo-fang Ding

School of Food and Pharmacy, Zhejiang Ocean University, Qixiangtai Road 51, Zhoushan 316004, PR China

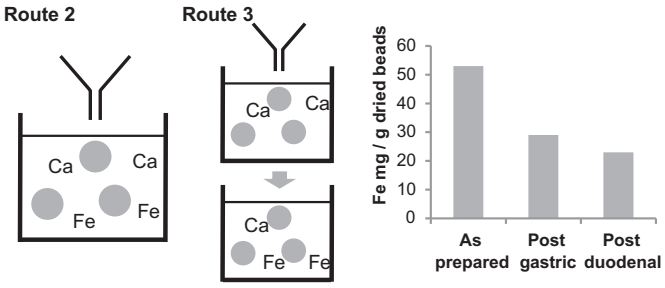


Preparation of iron-loaded alginate gel beads and their release characteristics under simulated gastrointestinal conditions

Food Hydrocolloids **2013**, 31, 103–113

Natalia Perez-Moral*, Marta Chueca Gonzalez, Roger Parker

Food Structure and Health, Institute of Food Research, Norwich Research Park, Norwich NR4 7UA, UK

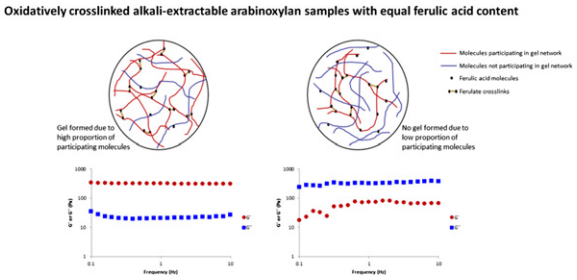


Alkaline extraction conditions determine gelling properties of corn bran arabinoxylans

Food Hydrocolloids **2013**, 31, 114–120

Madhuvanti S. Kale[a,b], Bruce R. Hamaker[a,b], Osvaldo H. Campanella[a,c,*]

[a]*Whistler Center for Carbohydrate Research, Purdue University, 745 Agriculture Mall Drive, West Lafayette, IN 47907, USA*
[b]*Department of Food Science, Purdue University, 745 Agriculture Mall Drive, West Lafayette, IN 47907, USA*
[c]*Department of Agricultural and Biological Engineering, Purdue University, 225 S. University Drive, West Lafayette, IN 47907, USA*



Rheological properties and protein quality of UV-C processed liquid egg products

Food Hydrocolloids **2013**, 31, 121–126

Poliana Mendes de Souza, Avelina Fernández*

Instituto de Agroquímica y Tecnología de Alimentos, CSIC, Campus La Coma s/n, Avda. Agustín Escardino, 7, 46980 Paterna, Spain