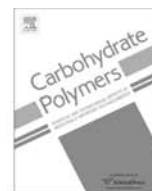




Contents lists available at ScienceDirect

Carbohydrate Polymers

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

Bibliography of carbohydrate polymers

(3 weeks journals. Search completed at 1st. July 2009)

1. Reviews

Dukic-Ott A, Thommes M, Remon JP, Kleinebudde P, Vervaeck C// *University Ghent, Pharmaceutical Technology Lab, Harelbekestr 72, BE-9000 Ghent, Belgium

Eur J Pharm Biopharm 2009 **71** (1) 38

Production of pellets via extrusion-spheronisation without the incorporation of microcrystalline cellulose: A critical review

Kamel S, Ali N, Jahangir K, Shah SM, El-Gendy AA// Univ Malakand, Dept Pharm, Chakdara, NW Frontier Prov, Pakistan

Express Polym Lett 2008 **2** (11) 758

Pharmaceutical significance of cellulose: A review

Kasaai MR// Sari Agric & Nat Resources Univ, Fac Agric Engrn, Khazar Abad Rd km 9, POB 578, Sari, Mazandaran, Iran

J Agric Food Chem 2009 **57** (5) 1667

Various methods for determination of the degree of N-acetylation of chitin and chitosan: A review

Lin YC, Huber GW// Univ Massachusetts, Dept Chem Engrn, 159 Goessmann Lab, 686 Nth Pleasant St, Amherst, MA 01003, USA

Energy Environ Sci 2009 **2** (1) 68

The critical role of heterogeneous catalysis in lignocellulosic biomass conversion

Nordon RE, Craig SJ, Foong FC// Univ New Sth Wales, Grad Sch Biomed Engrn, Sydney, NSW 2052, Australia

Biotechnol Lett 2009 **31** (4) 465

Molecular engineering of the cellulosome complex for affinity and bioenergy applications

Ohno H, Fukaya Y// Tokyo Univ Agric & Technol, Dept Biotechnol, 2-24-16

Naka cho, Koganei, Tokyo 184 8588, Japan

Chem Lett 2009 **38** (1) 2

Task specific ionic liquids for cellulose technology

Tan ML, Choong PFM, Dass CR// *Univ Melbourne, St Vincent's Hosp Melbourne, Dept Orthopaedics, POB 2900, Fitzroy, Vic 3065, Australia

J Pharm Pharmacol 2009 **61** (1) 3

Cancer, chitosan nanoparticles and catalytic nucleic acids

Tan ML, Choong PFM, Dass CR// *Univ Melbourne, St Vincents Hosp Melbourne, Dept Orthopaedics, POB 2900, Fitzroy, Vic 3065, Australia

J Pharm Pharmacol 2009 **61** (2) 131

Review: Doxorubicin delivery systems based on chitosan for cancer therapy

2. Cellulose

Abitbol T, Gray DG// *McGill Univ, Dept Chem, Pulp & Paper Bldg, 3420 University St, Montreal, Quebec, Canada H3A 2A7

Cellulose 2009 **16** (2) 319

Incorporation into paper of cellulose triacetate films containing semiconductor nanoparticles

Balaxi M, Nikolakakis I*, Kachrimanis K, Malamataris S// *Univ Thessaloniki, Sch Pharm, Department Pharmaceutical Technology, GR-54124 Thessaloniki, Greece

J Pharm Sci 2009 **98** (2) 676

Combined effects of wetting, drying, and microcrystalline cellulose type on the mechanical strength and disintegration of pellets

Barsbay M, Guven O*, Davis TP, Barner-Kowollik C, Barner L// *Hacettepe Univ, Dept Chem, TR-06800 Ankara, Turkey

Polymer 2009 **50** (4) 973

RAFT-mediated polymerization and grafting of sodium 4-styrenesulfonate from cellulose initiated via γ -radiation

Beushev AA, Kon'shin VV, Chemeris NA, Chemeris MM// Polzunov Altai State Tech Univ, Barnaul, Russia

Russ J Appl Chem Eng Tr 2008 **81** (10) 1856

Acylation of lignocellulose material with aliphatic amino acids

Biganska O, Navard P// *Ecole Nat Supérieure Mines Paris, CEMEF Ctr Mise Forme Matériaux, CNRS UMR 7635, BP 207 1 rue Claude Daunesse, FR-06904 Sophia Antipolis, France

Cellulose 2009 **16** (2) 179

Morphology of cellulose objects regenerated from cellulose-N-methylmorpholine N-oxide-water solutions

Bin Choy Y, Choi H*, Kim K// *Univ Illinois Urbana Champaign, Dept Elect & Comput Engrn, Urbana, IL 61801, USA

J Appl Polym Sci 2009 **112** (2) 850

Uniform ethyl cellulose microspheres of controlled sizes and polymer viscosities and their drug-release profiles

Cao X, Chen Y, Chang PR*, Muir AD, Falk G// *Agric & Agri-Food Canada, Bioproduct & Bioprocess Natl Sci Program, 107 Science Pl, Saskatoon, Saskatchewan, Canada S7N 0X2

Express Polym Lett 2008 **2** (7) 502

Starch-based nanocomposites reinforced with flax cellulose nanocrystals

Chen K, Baker AN, Vyazovkin S// *Univ Alabama, Dept Chem, 901 Sth 14th St, Birmingham, AL 35294, USA

Macromol Chem Phys 2009 **210** (3-4) 211

Concentration effect on temperature dependence of gelation rate in aqueous solutions of methylcellulose

Chen LM, Wang XS, Liu X*, Jiang SX// *Chinese Academy Sci, Lanzhou Inst Chem Phys, Key Lab Nat Med Gansu Prov, CN-730000 Lanzhou, Peoples Rep China

Int J Polym Anal Charact 2009 **14** (2) 160

The influence of coating thickness of polymer on chiral discrimination of cellulose tris(3,5-dimethyl phenylcarbamate) chiral stationary phase

De Maria D, Martinsson A// AkzoNobel BV, Process & Product Technol, Department RTC-CPT, Velperweg 76, POB 9300, NL-6800 SB Arnhem, The Netherlands

Analyst 2009 **134** (3) 493

Ionic-liquid-based method to determine the degree of esterification in cellulose fibers

De Menezes AJ, Pasquini D, Curvelo AAD, Gandini A// *Univ Aveiro, CICECO, PT-3800 Aveiro, Portugal

Cellulose 2009 **16** (2) 239

Self-reinforced composites obtained by the partial oxypropylation of cellulose fibers. 2. Effect of catalyst on the mechanical and dynamic mechanical properties

De Paula MP, Lacerda TM, Frollini E// *Univ Sao Paulo, Inst Quim Sao Carlos, 400 Av Trabalhador Saocarlenense, CP 780, BR-13560-960 Sao Carlos, SP, Brazil

Express Polym Lett 2008 **2** (6) 423

Sisal cellulose acetates obtained from heterogeneous reactions

As a service to subscribers of the journal, this bibliography contains newly published material in the field of carbohydrate polymers. The bibliography is divided into thirteen sections: 1 Reviews; 2 Cellulose; 3 Cellulose-degrading enzymes; 4 Chitin/Chitosan; 5 Cyclodextrins; 6 Lignin; 7 Lipopolysaccharides; 8 Pectin; 9 Starch; 10 Starch-degrading enzymes; 11 Polysaccharides - Microbial; 12 Polysaccharides - Plant; 13 Polysaccharides - Other. Within each section, articles are listed in alphabetical order with respect to author. When there are no publications to appear under one of these headings, that section will be omitted.

- Du J, Hsieh YL*// *Univ Calif Davis, Davis, Ca 95616, USA
Cellulose 2009 **16** (2) 247
 Cellulose/chitosan hybrid nanofibers from electrospinning of their ester derivatives
- Egusa S, Yokota S, Tanaka K, Esaki K, Okutani Y, Ogawa Y, Kitaoka T*, Goto M, Wariishi H// *Kyushu Univ, Grad Sch Bioresource & Bioenvironm Sci, Dept Forest & Forest Product Sci, Higashi ku, Fukuoka 812 8581, Japan
J Mater Chem 2009 **19** (13) 1836
 Surface modification of a solid-state cellulose matrix with lactose by a surfactant-enveloped enzyme in a nonaqueous medium
- El-Arnaouty MB, Eid M, Atia KS, Dessouki AM// Natl Ctr Radiat Res & Technol, POB 29, EG-11731 Nasr City, Cairo, Egypt
J Appl Polym Sci 2009 **112** (2) 629
 Characterization and application of grafted polypropylene and polystyrene treated with epichlorohydrin coupled with cellulose or starch for immobilization processes
- Eronen P, Osterberg M, Jaaskelainen AS// Helsinki Univ Technol TKK, Dept Forest Product Technol, POB 3320, FI-02015 Espoo, Finland
Cellulose 2009 **16** (2) 167
 Effect of alkaline treatment on cellulose supramolecular structure studied with combined confocal Raman spectroscopy and atomic force microscopy
- Fazilah A, Azemi MNM, Karim AA, Norakma MN// Univ Sains Malaysia, Sch Ind Technol, MY-11800 Minden, Penang, Malaysia
J Agric Food Chem 2009 **57** (4) 1527
 Physicochemical properties of hydrothermally treated hemicellulose from oil palm frond
- Fernandes TV, Bos GJK, Zeeman G, Sanders JPM, Van Lier JB// Wageningen Univ, Subdept Environm Technol, POB 8129, NL-6700 EV Wageningen, The Netherlands
Bioresour Technol 2009 **100** (9) 2575
 Effects of thermo-chemical pre-treatment on anaerobic biodegradability and hydrolysis of lignocellulosic biomass
- Foglarova M, Prokop J, Milichovsky M*// *Univ Pardubice, Fac Chem Technol, Dept Wood Pulp & Paper, Studentska 95, CZ-53010 Pardubice, Czech Republic
J Appl Polym Sci 2009 **112** (2) 669
 Oxidized cellulose: An application in the form of sorption filter materials
- Gilbert R, Jalbert J, Tetreault P, Morin B, Denos Y// Inst Rech Hydro Quebec, 1800 Blvd Lionel Boulet, Varennes, Quebec, Canada J3X 1S1
Cellulose 2009 **16** (2) 327
 Kinetics of the production of chain-end groups and methanol from the depolymerization of cellulose during the ageing of paper/oil systems. Part 1: Standard wood kraft insulation
- Godinho MH, Filip D, Costa I, Carvalho AL, Figueirinhas JL, Terentjev EM// FCT UNL, Dept Materials Sci, PT-2829-516 Caparica, Portugal
Cellulose 2009 **16** (2) 199
 Liquid crystalline cellulose derivative elastomer films under uniaxial strain
- Gomez-Carracedo A, Alvarez-Lorenzo C, Coca R, Martinez-Pacheco R, Concheiro A, Gomez-Amoza JL*// *Univ Santiago de Compostela, Dept Farm & Tecnol Farmaceut, ES-15782 Santiago de Compostela, Spain
Acta Mater 2009 **51** (1) 295
 Fractal analysis of SEM images and mercury intrusion porosimetry data for the microstructural characterization of microcrystal line cellulose-based pellets
- Gong K, Rehman IU, Darr JA*// *UCL, Dept Chem, Clean Materials Technol Grp, Christopher Ingold Bldg, 20 Gordon St, London WC1H 0AJ, England
J Pharm Biomed Anal 2008 **48** (4) 1112
 Characterization and drug release investigation of amorphous drug-hydroxypropyl methylcellulose composites made via supercritical carbon dioxide assisted impregnation
- Goswami P, Blackburn RS*, El-Dessouky HM, Taylor J, White P// *Univ Leeds, Green Chem Group, Ctr Tech Textiles, Woodhouse Lane, Leeds LS2 9JT, England
Eur Polym J 2009 **45** (2) 455
 Effect of sodium hydroxide pre-treatment on the optical and structural properties of lyocell
- Han S, Lee M// Pusan Natl Univ, Dept Organ Materials Sci & Engrn, Pusan 609 735, South Korea
J Appl Polym Sci 2009 **112** (2) 709
 Crosslinking reactions of oxidised cellulose fiber. II. Reactions between dialdehyde cellulose and chito-oligosaccharides on lyocell fabric
- He XJ, Wu SZ, Fu DK, Ni JR*// *Beijing Univ, Dept Environm Engrn, CN-100871 Beijing, Peoples Rep China
J Chem Technol Biotechnol 2009 **84** (3) 427
 Preparation of sodium carboxymethyl cellulose from paper sludge
- Johnson RK, Zink-Sharp A*, Rennecker SH, Glasser WG// *Virginia Polytech Inst & State Univ, Dept Wood Sci & Forest Products, 230 Cheatham Hall, Blacksburg, Va 24061, USA
Cellulose 2009 **16** (2) 227
 A new bio-based nanocomposite: Fibrillated TEMPO-oxidized celluloses in hydroxypropylcellulose matrix
- Khullar R, Varshney VK*, Naithani S, Soni PL// *Forest Res Inst, Ctr Advanced Studies Chem Forest Products, PO New Forest, IN-248006 Dehra Dun, India
Express Polym Lett 2008 **2** (1) 12
 Grafting of acrylonitrile onto cellulosic material derived from bamboo (*Dendrocalamus strictus*)
- Lee EH, Kim HM, Lim SK, Kim KS, Chin IJ*// *Inha Univ, Dept Polymer Sci & Engrn, 253 Yonghyun dong, Nam gu, Incheon 402 751, South Korea
Mol Cryst Liq Cryst 2009 **499** 581
 Electro-active polymer actuator based on aligned cellulose nanofibrous membrane
- Li JF, Lu JH, Li YM// Shaoxing Univ, Dept Chem, CN-312000 Shaoxing, Zhejiang, Peoples Rep China
J Appl Polym Sci 2009 **112** (1) 261
 Carboxymethylcellulose/bentonite composite gels: Water sorption behavior and controlled release of herbicide
- Li MM, Yao SJ*// *Zhejiang Univ, Dept Chem & Biochem Engrn, CN-310027 Hangzhou, Peoples Rep China
J Appl Polym Sci 2009 **112** (1) 402
 Preparation of polyelectrolyte complex membranes based on sodium cellulose sulfate and poly(dimethylallylammonium chloride) and its permeability properties
- Liu SL, Zhang LN*// *Wuhan Univ, Dept Chem, CN-430072 Wuhan, Peoples Rep China
Cellulose 2009 **16** (2) 189
 Effects of polymer concentration and coagulation temperature on the properties of regenerated cellulose films prepared from LiOH/urea solution
- Mangalam AP, Simonsen J*, Benight AS// *Oregon State Univ, Dept Wood Sci & Engrn, Corvallis, Or 97331, USA
Biomacromolecules 2009 **10** (3) 497
 Cellulose/DNA hybrid nanomaterials
- Maria LCD, Santos ALC, Oliveira PC, Barud HS, Messaddeq Y, Ribeiro SJL// Univ Estado Rio de Janeiro, Inst Quim, Dept Quim Organ, Rua Sao Francisco Xavier 524, BR-20550-900 Rio De Janeiro, Brazil
Mater Lett 2009 **63** (9-10) 797
 Synthesis and characterization of silver nanoparticles impregnated into bacterial cellulose
- Mazza M, Catana DA, Vaca-Garcia C, Cecutti C// ENSIACET, INRA, UMR 1010, 118 Route Narbonne, FR-31077 Toulouse 4, France
Cellulose 2009 **16** (2) 207
 Influence of water on the dissolution of cellulose in selected ionic liquids
- Nordgren N, Eronen P, Osterberg M, Laine J, Rutland MW*// *Royal Inst Technol, Dept Chem, Drottning Kristinas Vag 51, SE-10044 Stockholm, Sweden
Biomacromolecules 2009 **10** (3) 645
 Mediation of the nanotribological properties of cellulose by chitosan adsorption
- Peydecastaing J, Vaca-Garcia C, Borredon E// ENSIACET, INRA, UMR 1010, 118 Route Narbonne, FR-31077 Toulouse, France
Cellulose 2009 **16** (2) 289
 Accurate determination of the degree of substitution of long chain cellulose esters
- Qi HS, Chang CY, Zhang L*// *Wuhan Univ, Dept Chem, CN-430072 Wuhan, Peoples Rep China
Green Chem 2009 **11** (2) 177
 Properties and applications of biodegradable transparent and photoluminescent cellulose films prepared via a green process
- Qian L, Guan Y, Ziaee Z, He B, Zheng A, Xiao H*// *South China Univ Technol, State Key Lab Pulp & Paper Engrn, CN-510640 Guangzhou, Peoples Rep China
Cellulose 2009 **16** (2) 309
 Rendering cellulose fibers antimicrobial using cationic β -cyclodextrin-based polymers included with antibiotics
- Ren JL, Peng F, Sun RC*, Zhang XL// *Sth China Univ Technol, State Key Lab Pulp & Paper Engrn, CN-510640 Changzhou, Peoples Rep China
E Polymers 2009 **3**
 Preparation and characterization of carbamoyl ethyl hemicelluloses
- Sailaja RRN, Seetharamu S// TERI Sthn Reg Ctr, IN-560071 Bangalore, India
J Appl Polym Sci 2009 **112** (2) 649
 Mechanical and thermal properties of LDPE-cellulose acetate phthalate blends-effect of maleic anhydride-grafted LDPE compatibilizer
- Sang YZ, Xiao HN*// *Univ New Brunswick, Dept Chem Engrn, 15 Dineen Dr, POB 4400, Fredericton, New Brunswick, Canada E3B 5A3
Colloid Surface A 2009 **335** (1-3) 121
 Preparation and application of cationic cellulose fibers modified by *in situ* grafting of cationic PVA
- Shishmakov AB, Mikushina YV, Seleznev AS, Koryakova OV, Valova MS, Petrov LA// Russian Acad Sci, Ural Branch, Inst Organ Synth, Ekaterinburg, Russia
Russ J Appl Chem Eng Tr 2008 **81** (12) 2180
 A carbon-silica composite material based on powdered cellulose: Synthesis and properties

Sothornvit R// Kasetsart Univ, Fac Engrg Kamphaengsaen, Dept Food Engrg, Kamphaengsaen Campus, TH-73140 Nakhon Pathom, Thailand
Food Res Int 2009 **42** (2) 307

Effect of hydroxypropyl methylcellulose and lipid on mechanical properties and water vapor permeability of coated paper

Viriden A, Wittgren B, Andersson T, Abrahmsen-Alami S, Larsson A// Chalmers Univ Technol, Dept Biol & Chem Engrg, SE-41296 Gothenburg, Sweden
Biomacromolecules 2009 **10** (3) 522

Influence of substitution pattern on solution behavior of hydroxypropyl methylcellulose

Viriden A, Wittgren B, Larsson A*// *Chalmers Univ Technol, Dept Chem & Biol Engrg, SE-41296 Gothenburg, Sweden
Eur J Pharm Sci 2009 **36** (2-3) 297

Investigation of critical polymer properties for polymer release and swelling of HPMC matrix tablets

Wada M, Hori R// Univ Tokyo, Grad Sch Agric & Life Sci, Dept Biomaterials Sci, Yayoi 1-1-1, Bunkyo ku, Tokyo 113 8657, Japan
J Polym Sci B Polym Phys 2009 **47** (5) 517

X-ray diffraction study of the thermal expansion behavior of cellulose triacetate I

Wang Y, Deng YL*// *Georgia Inst Technol, Sch Chem & Biomol Engrg, 500 Loth St NW, Atlanta, Ga 30332, USA
Biotechnol Bioeng 2009 **102** (5) 1398

The kinetics of cellulose dissolution in sodium hydroxide solution at low temperatures

Wu RL, Wang XL, Li F, Li HZ, Wang YZ*// *Sichuan Univ, Coll Chem, Ctr Degradable & Flame Retardant Polymer Materials, CN-610064 Chengdu, Peoples Rep China
Bioresour Technol 2009 **100** (9) 2569

Green composite films prepared from cellulose, starch and lignin in room-temperature ionic liquid

Yamaguchi D, Kitano M, Suganuma S, Nakajima K, Kato H, Hara M*// *Kanagawa Acad Sci & Technol, Sakado 3-2-1, Takatsu ku, Kawasaki, Kanagawa 213 001, Japan
J Phys Chem C 2009 **113** (8) 3181

Hydrolysis of cellulose by a solid acid catalyst under optimal reaction conditions

Yui T, Hayashi S// Miyazaki Univ, Fac Engrg, Dept Appl Chem, 1-1 Nishi, Miyazaki 889 2192, Japan
Cellulose 2009 **16** (2) 151

Structural stability of the solvated cellulose III_{II} crystal models: A molecular dynamics study

Zabivalova NM, Bocek AM, Vlasova EN, Volchek BZ// Russian Acad Sci, Inst Macromol Cpd, RU-199004 St Petersburg, Russia
Russ J Appl Chem Eng Tr 2008 **81** (9) 1622

Preparation of mixed ethers by reaction of carboxymethyl cellulose with urea and their physicochemical properties

Zautsen RRM, Maugeri F*, Vaz-Rossell CE, Straathof AJJ, Van der Wielen LAM, De Bont JAM// *Univ Estadual Campinas UNICAMP, FEA, Dept Food Engrg, R Monteiro Lobato 80, Cidade Univ, BR-13081-970 Campinas, SP, Brazil
Biotechnol Bioeng 2009 **102** (5) 1354

Liquid-liquid extraction of fermentation inhibiting compounds in lignocellulose hydrolysate

Zavrel M, Bross D, Funke M, Buchs J, Spiess AC*// *Univ Aachen, Rhein Westfal TH Aachen, Worringeweg 1, DE-52074 Aachen, Germany
Bioresour Technol 2009 **100** (9) 2580

High-throughput screening for ionic liquids dissolving (ligno-)cellulose

Zeng HJ, Lajos R, Metlushko V, Elzy E, An SY, Sautner J// Univ Illinois, Dept Elect & Comput Engrg, 851 Sth Morgan St, Chicago, IL 60607, USA
Lab Chip 2009 **9** (5) 699

Nanofabrication in cellulose acetate

Zhang HR, Liu XY, Li DS, Li RX// Tsinghua Univ, Coll Material Sci & Engrg, CN-100084 Beijing, Peoples Rep China
Polym Eng Sci 2009 **49** (3) 554

Effect of cellulose concentration in NMOH₂O solution on prediction of MW and MWD of cellulose using a rheology-based method

Zhang JM, Wu J, Cao Y, Sang SM, Zhang J*, He JS// *Chinese Acad Sci, Inst Chem, Joint Lab Polymer Sci & Materials, KLEP, BNLMS, CN-100190 Beijing, Peoples Rep China
Cellulose 2009 **16** (2) 299

Synthesis of cellulose benzoates under homogeneous conditions in an ionic liquid

Zhang LP, Chen GW, Tang HW, Cheng QZ, Wang SQ*// *Univ Tennessee, Forrest Product Ctr, 2506 Jacob Dr, Knoxville, TN 37996, USA
J Appl Polym Sci 2009 **112** (1) 550

Preparation and characterization of composite membranes of polysulfone and microcrystalline cellulose

Zhao Q, Yam R, Zhang BQ, Yang YK, Cheng XJ, Li R*// *City Univ Hong Kong, Dept Phys & Materials Sci, Tat Chee Ave, Kowloon, Hong Kong, Peoples Rep China
Cellulose 2009 **16** (2) 217

Novel all-cellulose ecomposites prepared in ionic liquids

3. Cellulose-degrading enzymes

Enebro J, Momcilovic D*, Siika-aho M, Karlsson S// *Royal Inst Technol - KTH, Sch Chem Sci & Engrg, Stockholm, Sweden
Cellulose 2009 **16** (2) 271

Investigation of endoglucanase selectivity on carboxymethyl cellulose by mass spectrometric techniques

Fan ZM, Wagschal K, Chen W, Montross MD, Lee CC, Yuan L*// *Univ Kentucky, Dept Plant & Soil Sci, Kentucky Tobacco Res & Dev Ctr, Cooper & University Drives, Lexington, Ky 40546, USA
Appl Environ Microbiol 2009 **75** (6) 1754

Multimeric hemicellulases facilitate biomass conversion

Hu G, Heitmann JA*, Rojas OJ// *Carolina State Univ, Dept Forest Biomaterials Sci & Engrg, Campus Box 8005, Raleigh, NC 27695, USA
Anal Chem 2009 **81** (5) 1872

Quantification of cellulase activity using the quartz crystal microbalance technique

Kim ES, Lee HJ, Bang WG, Choi IG, Kim KH*// *Korea Univ, Sch Life Sci & Biotechnol, Seoul 136 713, South Korea
Biotechnol Bioeng 2009 **102** (5) 1342

Functional characterization of a bacterial expansin from *Bacillus subtilis* for enhanced enzymatic hydrolysis of cellulose

Lee SH, Doherty TV, Linhardt RJ, Dordick JS*// *Rensselaer Polytech Inst, Dept Chem & Biol Engrg, Troy, NY 12180, USA
Biotechnol Bioeng 2009 **102** (5) 1368

Ionic liquid-mediated selective extraction of lignin from wood leading to enhanced enzymatic cellulose hydrolysis

Peralta-Yahya P, Carter BT, Lin HN, Tao HY, Comish VW*// *Columbia Univ, Dept Chem, New York, NY 10027, USA
J Am Chem Soc 2008 **130** (51) 17446

High-throughput selection for cellulase catalysts using chemical complementation

4. Chitin/Chitosan

Batista MKS, Gallelli M, Adeva A, Gomes CAR, Gomes P*// *Univ Porto, Dept Quim, CIQUP, Rua Campo Alegre 687, PT-4169-007 Oporto, Portugal
Syn Commun 2009 **39** (7) 1228

Facile regioselective synthesis of a novel chitosan-pexiganan conjugate with potential interest for the treatment of infected skin lesions

Campos MGN, Rawls HR, Innocentini-Mei LH, Satsangi N// State Univ Campinas UNICAMP, Sch Chem Engrg, Dept Polymer Technol, POB 6066, BR-13083-970 Campinas, SP, Brazil
J Mater Sci Mater Med 2009 **20** (2) 537

In vitro gentamicin sustained and controlled release from chitosan cross-linked films

Carson L, Kelly-Brown C, Stewart M, Oki A*, Regisford G, Luo Z, Bakmutov VI// *Prairie View A&M Univ, Dept Chem, Prairie View, Tx 77446, USA
Mater Lett 2009 **63** (6-7) 617

Synthesis and characterization of chitosan-carbon nanotube composites

Chiang CJ, Wang JY, Chen PT, Chao YP*// *Feng Chia Univ, Dept Chem Engrg, 100 Wenhwa Rd, Taichung 40724, Taiwan
Appl Microbiol Biotechnol 2009 **82** (3) 445

Enhanced levan production using chitin-binding domain fused levansucrase immobilized on chitin beads

Costa ED, Pereira MM, Mansur HS*// *Univ Fed Minas Gerais, Dept Metallurgical & Materials Engrg, Lab Biomaterials & Tissue Engrg, Rua Espisito Santo 35, BR-30160-030 Belo Horizonte, MG, Brazil
J Mater Sci Mater Med 2009 **20** (2) 553

Properties and biocompatibility of chitosan films modified by blending with PVA and chemically crosslinked

Couto DS, Alves NM, Mano JF*// *Univ Minho, Dept Polymer Engrg, 3Bs Res Grp, Campus Gualtar, PT-4710-057 Braga, Portugal
J Nanosci Nanotechnol 2009 **9** (3) 1741

Nanostructured multilayer coatings combining chitosan with bioactive glass nanoparticles

Duarte ARC, Mano JF, Reis RL// Univ Minho, 3Bs Res Grp Biomaterials Biodegradables & Biomimetics, PT-4806-909 Taipas, Guimaraes, Portugal
Eur Polym J 2009 **45** (1) 141

Preparation of chitosan scaffolds loaded with dexamethasone for tissue engineering applications using supercritical fluid technology

El-Sherbiny IM// Mansoura Univ, Fac Sci, Dept Chem, Polymer Lab, EG-35516 Mansoura, Egypt
Eur Polym J 2009 **45** (1) 199

Synthesis, characterization and metal uptake capacity of a new carboxymethyl chitosan derivative

Enescu D// Petru Poni Inst Macromol Chem, RO-700487 Iasi, Romania
J Macromol Sci Pure Appl Chem 2009 **46** (4) 438

Polydimethylsiloxane modified chitosan IV. Preparation and characterization of porous hybrid membranes

- Ge YQ, Zhang Y, He SY, Nie F, Teng GJ, Gu N*// *Southeast Univ, Dept Biol Sci & Med Engn, State Key Lab Bioelect, Jiangsu Lab Biomaterials & Devices, CN-210096 Nanjing, Peoples Rep China
Nanoscale Res Lett 2009 **4** (4) 287
- Fluorescence modified chitosan-coated magnetic nanoparticles for high-efficient cellular imaging
- Ge YQ, Zhang S, He SY, Zhang Y, Gu N*// *Southeast Univ, Dept Biol Sci & Med Engn, State Key Lab Bioelect, Jiangsu Lab Biomaterials & Devices, CN-210096 Nanjing, Peoples Rep China
J Nanosci Nanotechnol 2009 **9** (2) 1287
- Fabrication and characterization of chitosan-poly(acrylic acid) magnetic nanoparticles
- Ghosh B, Urban MW*// *Univ Sthn Mississippi, Sch Polym & High Performance Materials, SF Thames Polym Sci Res Ctr, Hattiesburg, Ms 39406, USA
Science 2009 **323** (5920) 1458
- Self-repairing oxetane-substituted chitosan polyurethane networks
- Haider S, Park SY*// *Kyungpook Natl Univ, Dept Polymer Sci, 1370 Sankyuk dong, Buk gu, Taegu 702 701, South Korea
J Membr Sci 2009 **328** (1-2) 90
- Preparation of the electrospon chitosan nanofibers and their applications to the adsorption of Cu(II) and Pb(II) ions from an aqueous solution
- Indest T, Laine J, Johansson LS, Stana-Kleinschek K, Strnad S, Dworczak R, Ribitsch V// Univ Maribor, Fac Mech Engn, Lab Characterization & Process Polymers, Smetanova 17, SI-2000 Maribor, Slovenia
Biomacromolecules 2009 **10** (3) 630
- Adsorption of fucoidan and chitosan sulfate on chitosan modified PET films monitored by QCM-D
- Ishizuka T, Ishihara M, Aiko S, Nogami Y, Nakamura S, Kanatani Y, Kishimoto S, Hattori H, Horio T, Tanaka Y, Maehara T*// *Natl Defense Med Coll, Dept Surg, 3-2 Namiki, Tokorozawa, Saitama 359 8513, Japan
Endoscopy 2009 **41** (1) 25
- Experimental evaluation of photocrosslinkable chitosan hydrogel as injection solution for endoscopic resection
- Jaworska MM, Bryjak J, Liesiene J// Warsaw Univ Technol, Fac Chem & Process Engn, ul Warynskiego 1, PL-00645 Warsaw, Poland
Cellulose 2009 **16** (2) 261
- A search of an optimal carrier for immobilization of chitin deacetylase
- Jayakumar R, Rajkumar M, Freitas H, Selvamurugan N, Nair SV, Furuie T, Tamura H// Amrita Inst Med Sci & Res Ctr, Ctr Nanosci, Kochi, India
Int J Biol Macromol 2009 **44** (1) 107
- Preparation, characterization, bioactive and metal uptake studies of alginate/phosphorylated chitin blend films
- Kao PM, Chen CI, Huang SC, Lin KM, Chang YC, Liu YC*// *Natl Chung Hsing Univ, Dept Chem Engn, 250 Kuo Kuang Rd, Taichung 40227, Taiwan
Process Biochem 2009 **44** (3) 343
- Preparation of fermentation-processed chitin and its application in chitinase affinity adsorption
- Kaur K, Kim K*// *St Johns Univ, Coll Pharm & Allied Hlth Professions, Drug Delivery System Res Lab, 8000 Utopia Pkwy, Queens, NY 11429, USA
Int J Pharm 2009 **366** (1-2) 140
- Studies of chitosan/organic acid/Eudragit® RS/RL-coated system for colonic delivery
- Kuroiwa T, Izuta H, Nabetani H, Nakajima M, Sato S, Mukataka S, Ichikawa S*// *Univ Tsukuba, Grad Sch Life & Environm Sci, 1-1-1 Tennodai, Tsukuba, Ibaraki 305 8572, Japan
Process Biochem 2009 **44** (3) 283
- Selective and stable production of physiologically active chitosan oligosaccharides using an enzymatic membrane bioreactor
- Lertwattanaseri T, Ichikawa N, Mizoguchi T, Tanaka Y, Chirachanchai S*// *Chulalongkorn Univ, Petroleum & Petrochem Coll, Soi Chula 12, Phya Thai Rd, TH-10330 Bangkok, Thailand
Carbohydr Res 2009 **344** (3) 331
- Microwave technique for efficient deacetylation of chitin nanowhiskers to a chitosan nanoscaffold
- Lipatova IM, Makarova LI// RAS, Inst Solution Chem, Ivanovo, Russia
Russ J Appl Chem Eng Tr 2008 **81** (2) 1112
- Effect of hydroacoustic treatment on chitosan dissolution in aqueous acetic acid solutions
- Liu KH, Liu TY, Liu DM, Chen SY*// *Natl Chiao Tung Univ, Dept Materials Sci & Engn, Hsinchu 300, Taiwan
J Nanosci Nanotechnol 2009 **9** (2) 1198
- Electrical-sensitive nanoparticle composed of chitosan and tetraethyl orthosilicate for controlled drug release
- Madhumathi K, Binulal NS, Nagahama H, Tamura H, Shalumon KT, Selvamurugan N, Nair SV, Jayakumar R*// *Amrita Viswa Vidyapeetham Univ, Amrita Ctr Nanosci, Amrita Inst Med Sci & Res Ctr, IN-682026 Kochi, India
Int J Biol Macromol 2009 **44** (1) 1
- Preparation and characterization of novel β -chitin-hydroxyapatite composite membranes for tissue engineering applications
- Martinez-Ruvalcaba A, Sanchez-Diaz JC, Becerra F, Cruz-Barba LE, Gonzalez-Alvarez A*// *Univ Guadalajara, Dept Chem Engn, MX-44430 Guadalajara, Jalisco, Mexico
Express Polym Lett 2009 **3** (1) 25
- Swelling characterization and drug delivery kinetics of polyacrylamide-co-itaconic acid/chitosan hydrogels
- Murata Y, Kodama Y, Hirai D, Kofuji K, Kawashima S// Hokuriku Univ, Fac Pharmaceut Sci, Ho 3, Kanagawa machi, Kanazawa, Ishikawa 920 118, Japan
Molecules 2009 **14** (2) 755
- Properties of an oral preparation containing a chitosan salt
- Niu X, Feng Q, Wang M, Guo X, Zheng Q// Tsinghua Univ, Dept Materials Sci & Engn, State Key Lab New Ceramic & Fine Processing, CN-100084 Beijing, Peoples Rep China
Polym Degrad Stabil 2009 **94** (2) 176
- In vitro degradation and release behavior of porous poly(lactic acid) scaffolds containing chitosan microspheres as a carrier for BMP-2-derived synthetic peptide
- Rabea EI, Badawy MEI*, Steurbaut W, Stevens CV// *Univ Alexandria, Fac Agric, Dept Pesticide Chem, Aflaton St, EG-21545 Alexandria, Egypt
Eur Polym J 2009 **45** (1) 237
- In vitro assessment of N-(benzyl)chitosan derivatives against some plant pathogenic bacteria and fungi
- Shah PP, Mashru RC// Maharaja Sayajirao Univ Baroda, Dept Pharm, Ctr Relevance & Excellence NDDS, IN-390002 Vadodara, Gujarat, India
J Pharm Sci 2009 **98** (2) 690
- Influence of chitosan crosslinking on bitterness of mefloquine hydrochloride microparticles using central composite design
- Simoes ADN, Tudela JA, Allende A, Puschmann R, Gil MI*// *CEBAS - CSIC, Res Grp Qual Safety & Bioactive Plant Foods, POB 164, ES-30100 Murcia, Spain
Postharvest Biol Technol 2009 **51** (3) 364
- Edible coatings containing chitosan and moderate modified atmospheres maintain quality and enhance phytochemicals of carrot sticks
- Stephan AM, Kumar TP, Kulandainathan MA, Lakshmi NA// Cent Electrochem Res Inst, Electrochem Power System Div, IN-630006 Karaikkudi, India
J Phys Chem B 2009 **113** (7) 1963
- Chitin-incorporated poly(ethylene oxide)-based nanocomposites electrolytes for lithium batteries
- Sun Y, Chen ZL*, Yang XX, Huang P, Zhou XP, Du XX*// *Donghua Univ, Coll Chem & Biol, Dept Pharmaceut Sci & Technol, CN-201620 Shanghai, Peoples Rep China
Nanotechnology 2009 **20** (13) 135102
- Magnetic chitosan nanoparticles as a drug delivery system for targeting photodynamic therapy
- Wang JY, Chen L*, Zhao YP, Guo G, Zhang R// *Tianjin Polytech Univ, Sch Materials Sci & Chem Engn, Tianjin Key Lab Fiber Modification & Funct Fiber, CN-300160 Tianjin, Peoples Rep China
J Mater Sci Mater Med 2009 **20** (2) 583
- Cell adhesion and accelerated detachment on the surface of temperature-sensitive chitosan and poly(N-isopropylacrylamide) hydrogels
- Xing Y, Sun XM, Li BH*// *Wuhan Univ, Coll Chem & Mol Sci, CN-430072 Wuhan, Peoples Rep China
Environ Eng Sci 2009 **26** (3) 551
- Pyromellitic dianhydride-modified chitosan microspheres for enhancement of cationic dyes adsorption
- Xu J, Zhang JH, Gao WQ, Liang HW, Wang HY, Li JF*// *Jilin Univ, Coll Chem, CN-130012 Changchun, Peoples Rep China
Mater Lett 2009 **63** (8) 658
- Preparation of chitosan/PLA blend micro/nanofibers by electrospinning
- Yang BY, Ding Q, Montgomery R// Univ Iowa, Coll Med, Dept Biochem, Iowa City, Ia 52242, USA
Carbohydr Res 2009 **344** (3) 336
- Preparation and physical properties of chitin fatty acids esters
- Yang SJ, Shieh MJ*, Lin FH, Lou PJ, Peng CL, Wei MF, Yao CJ, Lai PS, Young TH// *Natl Taiwan Univ, Coll Med, Inst Biomed Engn, 1 Jen Ai Rd 1 Sec, Taipei 100, Taiwan
Cancer Lett 2009 **273** (2) 210
- Colorectal cancer cell detection by 5-aminolaevulinic acid-loaded chitosan nanoparticles
- Ye YQ, Chen FY, Wu QA, Hu FQ, Du YZ, Yuan H, Yu HY*// *Zhejiang Univ Sch Med, Women Hosp, 2 Xueshi Rd, CN-310006 Hangzhou, Zhejiang, Peoples Rep China
J Pharm Sci 2009 **98** (2) 704
- Enhanced cytotoxicity of core modified chitosan based polymeric micelles for doxorubicin delivery
- Yu CY, Yin BC, Zhang W, Cheng SX*, Zhang XZ, Zhuo RX*// *Wuhan Univ, Dept Chem, MoE Key Lab Biomed Polymers, CN-430072 Wuhan, PR China
Colloid Surface B 2009 **68** (2) 245
- Composite microparticle drug delivery systems based on chitosan, alginate and pectin with improved pH-sensitive drug release property

Zhang L, Shen YH*, Xie AJ, Li SK, Li YM// *Anhui Univ, Sch Chem & Chem Engrn, CN-230039 Hefei, Peoples Rep China
J Mater Chem 2009 **19** (13) 1884
 Layer-by-layer assembly of chitosan/tungstosilicate acid-Ag nanocomplex with electrocatalytic properties
 Zheng ZH, Wei YJ, Wang G, Wang AJ, Ao Q, Gong YD, Zhang XF*// *Tsinghua Univ, Dept Biol Sci & Biotechnol, State Key Lab Biomembrane & Membrane Biotechnol, CN-100084 Beijing, Peoples Rep China
J Bioact Compat Polym 2009 **24** (1) 63
 Surface properties of chitosan films modified with polycations and their effects on the behavior of PC12 cells
 Zhou ZY, Huang HT, Xu PH, Fan LH, Yu JH*, Huang J// *East China Normal Univ, Coll New Drug Innovation Res & Dev, CN-200062 Shanghai, Peoples Rep China
J Appl Polym Sci 2009 **112** (2) 692
 Simultaneous enhancement of the strength and elongation of polycaprolactone: The role of chitosan-graft-polycaprolactone
 Zia KM, Zuber M*, Bhatti IA, Barikani M, Sheikh MA// *Natl Textile Univ, Dept Textile Chem, Sheikhupura Rd, PK-37610 Faisalabad, Pakistan
Int J Biol Macromol 2009 **44** (1) 18
 Evaluation of biocompatibility and mechanical behavior of polyurethane elastomers based on chitin/1,4-butane diol blends
 Zia KM, Zuber M*, Bhatti IA, Barikani M, Sheikh MA// *Address as above
Int J Biol Macromol 2009 **44** (1) 23
 Evaluation of biocompatibility and mechanical behavior of chitin-based polyurethane elastomers. Part-II: Effect of diisocyanate structure

5. Cyclodextrins

Ansari MT, Iqbal I, Sunderland VB// Bahaiddin Zakariya Univ, Dept Pharm, Multan, Pakistan
Arch Pharm Res 2009 **32** (1) 155
 Dihydroartemisinin-cyclodextrin complexation: Solubility and stability
 Buedenbender S, Schulz GE*// *Univ Freiburg, Inst Organ Chem & Biochem, Albertstr 21, DE-79104 Freiburg, Germany
J Mol Biol 2009 **385** (2) 606
 Structural base for enzymatic cyclodextrin hydrolysis
 Daoud-Mahammed S, Couvreur P, Bouchemal K, Cheron M, Lebas G, Amiel C, Gref R*// *Univ Paris Sud, CNRS UMR 8612, Chatenay Malabry, France
Biomacromolecules 2009 **10** (3) 547
 Cyclodextrin and polysaccharide-based nanogels: Entrapment of two hydrophobic molecules benzophenone and tamoxifen
 De Araujo MVG, Macedo OFL, Nascimento CD, Conegero LS, Barreto LS, Almeida LE, Da Costa NB, Gimenez IF*// *Univ Fed Sergipe, Dept Quim, Av Marechal Rondon s/n, Campus Univ Prof Jose Alos, BR-49100-000 Sao Cristovao, SE, Brazil
Spectrochim Acta A Mol Biol Spectrosc 2009 **72** (1) 165
 Characterization, phase solubility and molecular modeling of α -cyclodextrin/pyrimethamine inclusion complex
 Fenger TH, Marinescu LG, Bols M*// *Univ Aarhus, Dept Chem, DK-8000 Aarhus, Denmark
Org Biomol Chem 2009 **7** (5) 933
 Cyclodextrin ketones as oxidation catalysts: Investigation of bridged derivatives
 Fiedorowicz M, Khachatryan G, Konieuna-Molenda A, Tomasik P// Univ Agric, Dept Chem, PL-30149 Krakow, Poland
Biotechnol Prog 2009 **25** (1) 147
 Formation of cyclodextrins with cyclodextrin glucosyltransferase stimulated with polarized light
 Gubica T, Winnicka E, Temeriusz A*, Kanska M// *Univ Warsaw, Dept Chem, Pasteura 1, PL-02093 Warsaw, Poland
Carbohydr Res 2009 **344** (3) 304
 The influence of selected O-alkyl derivatives of cyclodextrins on the enzymatic decomposition of L-tryptophan by L-tryptophan indole-lyase
 Haller J, Kaatz U*// *Univ Gottingen, Drittes Phys Inst, Friedrich Hund Pl 1, DE-37077 Gottingen, Germany
J Phys Chem B 2009 **113** (7) 1940
 Octylglucopyranoside and cyclodextrin in water. Self-aggregation and complex formation
 Jones LC, Lackowski WM, Vasilyeva Y, Wilson K, Chechik V*// *Univ York, Dept Chem, York YO10 5DD, England
Chem Commun 2009 (11) 1377
 Self-assembly of cross-linked β -cyclodextrin nanocapsules
 Klein S, Wempe MF, Zoeller T, Buchanan NL, Lambert JL, Ramsey MG, Edgar KJ, Buchanan CM// Univ Frankfurt, Inst Pharmaceut Technol, 9 Max von Laue St, DE-60438 Frankfurt, Germany
J Pharm Pharmacol 2009 **61** (1) 23
 Improving glyburide solubility and dissolution by complexation with hydroxybutenyl- β -cyclodextrin

Kollisch HS, Barner-Kowollik C*, Ritter H// *Univ Karlsruhe TH, Karlsruhe Inst Technol, Inst Tech Chem & Polymerchem, Engesser Str 18, DE-76128 Karlsruhe, Germany
Chem Commun 2009 (9) 1097
 Amphiphilic block copolymers based on cyclodextrin host-guest complexes via RAFT-polymerization in aqueous solution
 Lanza V, Vecchio G*// *Univ Catania, Dipt Sci Chim, Viale A Doria 8, IT-95125 Catania, Italy
J Inorg Biochem 2009 **103** (3) 381
 New conjugates of superoxide dismutase/catalase mimetics with cyclodextrins
 Li DX, Chen GL, Liu BL, Liu YS// Shanghai Univ Sci & Technol, CN-201800 Shanghai, Peoples Rep China
Mol Simul 2009 **35** (3) 199
 Molecular simulation of β -cyclodextrin inclusion complex with 2-phenylethyl alcohol
 Liao DS, Dai S, Tam KC*// *Univ Waterloo, Dept Chem Engrn, 200 University Ave West, Waterloo, Ontario, Canada N2L 3G1
J Rheol 2009 **53** (2) 293
 Influence of anionic surfactant on the rheological properties of hydrophobically modified polyethylene-oxide/cyclodextrin inclusion complexes
 Liu Y, Zhao DY, Ma RJ, Xiong DA, An YL, Shi LQ*// *Nankai Univ, Inst Polymer Chem, MoE Key Lab Funct Polymer Materials, CN-300071 Tianjin, Peoples Rep China
Polymer 2009 **50** (3) 855
 Chaperone-like α -cyclodextrins assisted self-assembly of double hydrophilic block copolymers in aqueous medium
 Ma SL, Shen S, Haddad N, Tang WJ, Wang J, Lee HW, Yee N, Senanayake C, Grinberg N*// *Boehringer Ingelheim Pharmaceutical Incorporated, Chemical Development Department, 900 Ridgebury Road, Ridgefield, Connecticut 06877, USA
J Chromatogr A 2009 **1216** (8) 1232
 Chromatographic and spectroscopic studies on the chiral recognition of sulfated β -cyclodextrin as chiral mobile phase additive: Enantiomeric separation of a chiral amine
 Menuel S, Corvis Y, Rogalska E*, Marsura A// *Nancy Univ, Fac Sci, CNRS, Lab Struct & React System Mol Complexes, BP 239, FE-54506 Vandoeuvre les Nancy, France
New J Chem 2009 **33** (3) 554
 Upper-rim alternately tethered α -cyclodextrin molecular receptors: synthesis, metal complexation and interfacial behavior
 Park C, Lee K, Kim C*// *Inha Univ, Dept Polymer Sci & Engrn, Incheon 402 751, South Korea
Angew Chem Int Ed 2009 **48** (7) 1275
 Photoresponsive cyclodextrin-covered nanocontainers and their sol-gel transition induced by molecular recognition
 Uyar T, Havelund R, Hacıoglu J, Zhou XF, Besenbacher F, Kingshott P// Aarhus Univ, iNANO, Aarhus C, Denmark
Nanotechnology 2009 **20** (12) 25605
 The formation and characterization of cyclodextrin functionalized polystyrene nanofibers produced by electrospinning
 Zhang XW, Wu DN, Lai J, Lu Y, Yin ZN, Wu W*// *Fudan Univ, Sch Pharm, CN-200433 Shanghai, Peoples Rep China
J Pharm Sci 2009 **98** (2) 665
 Piroxicam/2-hydroxypropyl- β -cyclodextrin inclusion complex prepared by a new fluid-bed coating technique

6. Lignin

Li JB, Gellerstedt G, Toven K// Royal Institute Technology - KTH, Department Fibre & Polymer Technology, Teknikringen 56-58, SE-10044 Stockholm, Sweden
Bioresour Technol 2009 **100** (9) 2556
 Steam explosion lignins; their extraction, structure and potential as feedstock for biodiesel and chemicals

7. Lipopolysaccharides

Grandjean C, Boutonnier A, Dassy B, Fournier JM, Mulard LA// Univ Picardie Jules Verne, Lab Glucides, CNRS UMR 6219, 33 rue St Leu, FR-80039 Amiens, France
Glycoconj J 2009 **26** (1) 41
 Investigation towards bivalent chemically defined glycoconjugate immunogens prepared from acid-detoxified lipopolysaccharide of *Vibrio cholerae* O1, serotype Inaba
 Kondakova AN, Bystrova OV, Shaikhutdinova RZ, Ivanov SA, Dentovskaya SV, Shashkov AS, Knirel YA, Anisimov AP// Russian Acad Sci, ND Zelinsky Inst Organ Chem, Moscow, Russia
Carbohydr Res 2009 **344** (3) 405
 Structure of the O-polysaccharide of *Yersinia pseudotuberculosis* O:2b

8. Pectin

- Bigucci F, Luppi B, Monaco L, Cerchiara T, Zecchi V// Univ Bologna, Dept Pharmaceut Sci, Via S Donato 19/2, IT-40127 Bologna, Italy
J Pharm Pharmacol 2009 **61** (1) 41
- Pectin-based microspheres for colon-specific delivery of vancomycin
- Diaz EL, Giannuzzi L, Giner SA*// *UNLP, CONICET, CIDCA, Calle 47 & 116, AR-1900 La Plata, Buenos Aires, Argentina
Food Bioprocess Technol 2009 **2** (2) 194
- Apple pectic gel produced by dehydration
- Guimaraes GC, Coelho MC, Rojas EEG*// *Univ Fed Fluminense, Department Agribusiness Engn, 420 Av Trabalhadores, BR-27255-250 Volta Redonda, RJ, Brazil
J Chem Eng Data 2009 **54** (2) 662
- Density and kinematic viscosity of pectin aqueous solution
- Reis AV, Guilherme MR*, Paulino AT, Muniz EC, Mattoso LHC, Tarnbourgi EB// *Univ Estadual Campinas, Fac Engn Quim, Dept Sistemas Quim & Informatica, BR-13081-970 Campinas, SP, Brazil
Langmuir 2009 **25** (4) 2473
- Synthesis of hollow-structured nano- and microspheres from pectin in a nano-droplet emulsion
- Yapo BM// Univ Abobo Adjame, Unit Training & Res Food Sci & Technol, 02 BP 801, Abidjan 02, Cote d'Ivoire
J Agric Food Chem 2009 **57** (4) 1572
- Biochemical characteristics and gelling capacity of pectin from yellow passion fruit rind as affected by acid extractant nature

9. Starch

- Chaunier L, Lourdin D*// *INRA, Unite Rech Biopolymeres Interact & Assemblages, rue La Geraudiere, BP 71627, FR-44316 Nantes 3, France
Starch 2009 **61** (2) 116
- The shape memory of starch
- Chen ZG, Zhu L, Song TH, Huang JH, Han YL// Shantou Univ, Dept Chem, CN-515063 Shantou, Peoples Rep China
Anal Chim Acta 2009 **635** (2) 202
- Determination of dextrin based on its self-aggregation by resonance light scattering technique
- Dona AC, Pages G, Gilbert RG, Gaborieau M, Kuchel PW*// *Univ Sydney, Sch Mol & Microbial Biosci, Sydney, NSW 2006, Australia
Biomacromolecules 2009 **10** (3) 638
- Kinetics of *in vitro* digestion of starches monitored by time-resolved ¹H nuclear magnetic resonance
- Eutamene M, Benbakhti A, Khodja M, Jada A*// *Inst Chim Surfaces & Interfaces, CNRS UPR 9069, 15 rue Jean Starcky, FR-68057 Mulhouse, France
Starch 2009 **61** (2) 81
- Preparation and aqueous properties of starch-grafted polyacrylamide copolymers
- Greenhill AR, Shipton WA, Blaney BJ, Brock IJ, Kupz A, Warner JM// Papua New Guinea Inst Med Res Infect & Immunity, POB 60, Goroka, Eastern Highlands, Papua New Guinea
Food Microbiol 2009 **26** (2) 136
- Spontaneous fermentation of traditional sago starch in Papua New Guinea
- Junistia L, Sugih AK, Manurung R, Picchioni F, Janssen LPBM, Heeres HJ*// *Rijksuniversiteit Groningen, Dept Chem Engn, Nijenborgh 4, NL-9747 AG Groningen, The Netherlands
Starch 2009 **61** (2) 69
- Experimental and modeling studies on the synthesis and properties of higher fatty esters of corn starch
- Kurzun AV, Evdokimov AN, Pavlova OS, Antipina VB// St Petersburg State Technol Univ Vegetable Polym, St Petersburg, Russia
Russ J Appl Chem Eng Tr 2008 **81** (12) 2178
- Esters of amylose, cellulose and tall oil fatty acids
- Liu HS, Yu L*, Simon G, Zhang XQ, Dean K, Chen L// *SCUT, ERCPS, Centre Polymers Renewable Resources, Guangzhou, Guangdong, Peoples Rep China
Carbohydr Res 2009 **344** (3) 350
- Effect of annealing and pressure on microstructure of cornstarches with different amylose/amylopectin ratios
- Lotfy S// Natl Ctr Radiat Res & Technol, Dept Polymer Chem, POB 29, Cairo, Egypt
Int J Biol Macromol 2009 **44** (1) 57
- Controlling degradation of low-molecular-weight natural polymer "dextrin" using γ irradiation
- Mazikova V, Sroková I, Ebringerová A// Trenčín Univ Alexander Dubček, Fac Ind Technol, SK-02001 Púchov, Slovakia
Chem Pap 2009 **63** (1) 71
- Solvent-free synthesis and properties of carboxymethyl starch fatty acid ester derivatives
- Nakorn KN, Tongdang T, Sirivongpaisal P*// *Prince Songkla Univ, Fac Agroind, Dept Food Technol, TH-90112 Hat Yai, Songkhla, Thailand
Starch 2009 **61** (2) 101
- Crystallinity and rheological properties of pregelatinized rice starches differing in amylose content
- Popov D, Buleon A, Burghammer M, Chanzy H, Montesanti N, Pataut JL, Potocki-Veronese G, Riekkel C// European Synchrotron Radiat Facility, BP 220, FR-38043 Grenoble, France
Macromolecules 2009 **42** (4) 1167
- Crystal structure of A-amylose: A revisit from synchrotron microdiffraction analysis of single crystals
- Sangseethong K, Lertphanich S, Sriroth K// Kasetsart Univ, Cassava & Starch Technol Res Unit, Natl Ctr Genet Engn & Biotechnol, Jatujak, TH-10900 Bangkok, Thailand
Starch 2009 **61** (2) 92
- Physicochemical properties of oxidized cassava starch prepared under various alkalinity levels
- Schnupf U, Willett JL, Bosma W, Momany FA*// *USDA/ARS, Natl Ctr Agric Utilization Res, 1815 Nth University St, Peoria, IL 61604, USA
Carbohydr Res 2009 **344** (3) 362
- DFT conformation and energies of amylose fragments at atomic resolution. Part 1: Syn forms of α -maltotetraose
- Schnupf U, Willett JL, Momany FA*// *Address as above
Carbohydr Res 2009 **344** (3) 374
- DFT conformation and energies of amylose fragments at atomic resolution. Part 2: 'Band-flip' and 'kink' forms of α -maltotetraose
- Wei WL, Guo BY, Lin JM*// *Tsinghua Univ, Dept Chem, CN-100084 Beijing, Peoples Rep China
J Chromatogr A 2009 **1216** (9) 1484
- Ultra-high concentration of amylose for chiral separations in capillary electrophoresis
- Wickramasinghe HAM, Yamamoto K, Yamauchi H, Noda T*// *Natl Agric Res Ctr Hokkaido Reg, Memuro Upland Farming Res Stn, Memuro, Hokkaido 082 008, Japan
Food Sci Biotechnol 2009 **18** (1) 118
- Effect of low level of starch acetylation on physicochemical properties of potato starch
- Witteck T, Tanimoto T// Shonan Inst Technol, Tsujido Nishikaigan 1-1-25, Kanagawa 251 8511, Japan
Express Polym Lett 2008 **2** (11) 810
- Mechanical properties and fire retardancy of bidirectional reinforced composite based on biodegradable starch resin and basalt fibres
- Wu Y, Chen ZX*, Li XX, Li M// *Jiangnan Univ, State Key Lab Food Sci & Technol, CN-214122 Wuxi, Jiangsu, Peoples Rep China
Food Res Int 2009 **42** (2) 221
- Effect of tea polyphenols on the retrogradation of rice starch
- Wuttisela K, Triampo W, Triampo D*// *Mahidol University, Fac Sci, Dept Chem, Capability Bldg Res Unit Alternative, TH-73170 Nakhon Pathom, Thailand
Int J Biol Macromol 2009 **44** (1) 86
- Chemical force mapping of phosphate and carbon on acid-modified tapioca starch surface
- Yoo SH, Perera C, Shen JF, Ye LY, Suh DS, Jane JL*// *Iowa State Univ, Dept Food Sci & Human Nutr, Ames, IA 50010, USA
J Agric Food Chem 2009 **57** (4) 1556
- Molecular structure of selected tuber and root starches and effect of amylopectin structure on their physical properties
- Zakrajsek N, Golob J// Pulp & Paper Inst Ljubljana, Bogisiceva 8, SL-1000 Ljubljana, Slovenia
Starch 2009 **61** (2) 109
- The influence of modified starch on the process water quality in papermaking and the paper properties
- Zamudio-Flores PB, Bautista-Banos S, Salgado-Delgado R, Bello-Perez LA*// *Inst Politecn Nacl, Ctr Desarrollo Prod Biot, km 8.5 Carretera Yautepec-Jojutla, Col San Isidro, MX-62731 Yautepec, Morelos, Mexico
J Appl Polym Sci 2009 **112** (2) 822
- Effect of oxidation level on the dual modification of banana starch: The mechanical and barrier properties of its films
- Zhang J, Wang ZW*, Shi XM// *Shanghai Jiao Tong Univ, Sch Agric & Biol, Dept Food Sci & Technol, CN-200240 Shanghai, Peoples Rep China
J Sci Food Agric 2009 **89** (4) 653
- Effect of microwave heat/moisture treatment on physicochemical properties of *Canna edulis* Ker starch
- Zhou J, Ma YH, Zhang J, Tong J// Jilin University, College Biol & Agric Engn, Key Lab Terrain Machine Bionic Engn, CN-130022 Changchun, Peoples Rep China
J Appl Polym Sci 2009 **112** (1) 99
- Influence of surface photocrosslinking on properties of thermoplastic starch sheets

10. Starch-degrading enzymes

- Araujo MA, Cunha AM, Mota M*// *Univ Minho, IBB Inst Biotechnol & Bioengn, Ctr Biol Engr, Campus Gualtar, PT-4710-057 Braga, Portugal
J Mater Sci-Mater Med 2009 **20** (2) 607
 Enzymatic degradation of starch thermoplastic blends using samples of different thickness
- El-Ghaffar MAA, Hashem MS// Natl Res Ctr, Dept Polymers & Pigments, Dokki, Egypt
J Appl Polym Sci 2009 **112** (2) 805
 Immobilization of α -amylase onto chitosan and its amino acid condensation adducts
- Martins AM, Pham QP, Malafaya PB, Sousa RA, Gomes ME, Raphael RM, Kasper FK, Reis RL, Mikos AG*// *Rice Univ, Dept Bioengn, MS-142, POB 1892, Houston, Tx 77251, USA
Tissue Eng Part A 2009 **15** (2) 295
 The role of lipase and α -amylase in the degradation of starch/poly(ϵ -caprolactone) fiber meshes and the osteogenic differentiation of cultured marrow stromal cells

11. Polysaccharides - Microbial

- Dong W, Ning L, Lu WD, Li CC, Chen RP, Jia XN, Wang L, Guo LZ*// *Qingdao Agric Univ, Shandong Prov Key Lab Agric Appl Mycol, Changcheng Rd 700, CN-266109 Qingdao, Peoples Rep China
World J Microbiol Biotechnol 2009 **25** (4) 633
 Tumor-inhibitory and liver-protective effects of *Phellinus igniarius* extracellular polysaccharides
- Hida TH, Ishibashi K, Miura NN, Adachi Y, Shirasu Y, Ohno N*// *Tokyo Univ Pharm & Life Sci, Sch Pharm, Lab Immunopharmacol Microbial Prod, 1432-1 Horinouchi, Tokyo 192 0392, Japan
Inflamm Res 2009 **58** (1) 9
 Cytokine induction by a linear 1,3-glucan, curdlan-oligo, in mouse leukocytes *in vitro*
- Huang GL// Chongqing Normal Univ, Coll Chem, CN-400047 Chongqing, Peoples Rep China
Z Naturforsch C 2008 **63** (11-12) 919
 Extraction of two polysaccharides from the yeast cell wall
- Kawakita H, Yoshimura Y, Hamamoto K, Seto H, Ohto K, Harada H, Inoue K// Saga Univ, Fac Sci & Engr, Dept Appl Chem, Saga 840 8502, Japan
J Chromatogr B 2009 **877** (3) 347
 Dynamic rejection of colloidal particles with generating dextran by enzymatic reaction
- Kiani H, Ebrahimzadeh-Mousavi MA*, Emam-Djomeh Z, Yarmand MS// *Univ Tehran, Fac Biosystem Engr, Dept Food Sci & Technol, Campus Agric & Nat Resources, Karaj, Iran
Aust J Dairy Technol 2008 **63** (3) 87
 Effect of gellan gum on the stability and physical properties of acidified milk protein solutions
- Marx JG, Carpenter SD, Deming JW*// *Univ Washington, Sch Oceanography, Seattle, Wa 98195, USA
Can J Microbiol 2009 **55** (1) 63
 Production of cryoprotectant extracellular polysaccharide substances (EPS) by the marine psychrophilic bacterium *Colwellia psychrerythraea* strain 34H under extreme conditions
- Mouaziz H, Braconnot S, Ginot F, Elaissari A*// *Univ Lyon, 43 Blvd 11 Novembre, FR-69622 Lyon, France
Colloid Polym Sci 2009 **287** (3) 287
 Elaboration of hydrophilic aminodextran containing submicron magnetic latex particles
- Sajeevan TP, Philip R*, Singh ISB// *Cochin Univ Sci & Technol, Dept Marine Biol Microbiol & Biochem, IN-682022 Cochin, Kerala, India
Aquaculture 2009 **287** (3-4) 248
 Dose/frequency: A critical factor in the administration of glucan as immunostimulant to Indian white shrimp *Fenneropenaeus indicus*
- Shi ZL, Neoh KG*, Kang ET, Poh C, Wang W// *Natl Univ Singapore, Dept Chem & Biomol Engr, 02-34 Blk E5, 4 Engr Dr 4, SG-117576 Singapore, Rep Singapore
Tissue Eng Part A 2009 **15** (2) 417
 Titanium with surface-grafted dextran and immobilized bone morphogenetic protein-2 for inhibition of bacterial adhesion and enhancement of osteoblast functions
- Shiose Y, Kuga H, Ohki H, Ikeda M, Yamashita F, Hashida M// Daiichi Sankyo Co Ltd, Biol Res Labs 4, Kasai R&D Ctr, Kita Kasai 1-16-13, Edogawa ku, Tokyo 134 8630, Japan
Bioconjug Chem 2009 **20** (1) 60
 Systematic research of peptide spacers controlling drug release from macromolecular prodrug system, carboxymethyl-dextran polyalcohol-peptide-drug conjugates

- Sousa AS, Guimaraes AP, Goncalves CV, Silva JJ, Cavalcante CL, Azevedo DCS*// *Univ Fed Ceara, Dept Engr Quim, GPSA, Campus Pici, Bl 709, BR-60455-760 Fortaleza, Ceara, Brazil
Separ Sci Technol 2009 **44** (4) 906
 Purification and characterization of microbial hyaluronic acid by solvent precipitation and size-exclusion chromatography
- Sun YX, Liang HT, Cai GZ, Guan SW, Tong HB, Yang XD, Liu JC// Qiqihar Med Univ, Dept Pharmacol, CN-161042 Qiqihar, Peoples Rep China
Int J Biol Macromol 2009 **44** (1) 14
 Sulfated modification of the water-soluble polysaccharides from *Polyporus albicans* mycelia and its potential biological activities
- Tada R, Adachi Y, Ishibashi KI, Ohno N*// *Tokyo Univ Pharm & Life Sci, Sch Pharm, Lab Immunopharmacol Microbial Prod, 1432-1 Horinouchi, Tokyo 192 0392, Japan
Carbohydr Res 2009 **344** (3) 400
 An unambiguous structural elucidation of a 1,3- β -D-glucan obtained from liquid-cultured *Grifola frondosa* by solution NMR experiments
- Van Leeuwen SS, Kralj S, Eeuwema W, Gerwig GJ, Dijkhuizen L, Kamerling JP*// *Univ Utrecht, Dept Bioorgan Chem, Bijvoet Ctr, NL-3584 CH Utrecht, The Netherlands
Biomacromolecules 2009 **10** (3) 580
 Structural characterization of bioengineered α -D-glucans produced by mutant glucanase GTF180 enzymes of *Lactobacillus reuteri* strain 180
- Velasco SE, Areizaga J, Irastorza A*, Duenas MT, Santamaria A, Munoz ME// *Univ Pais Vasco, Fac Ciencias Quim, Dept Quim Aplicada, Box 1072, ES-20080 San Sebastian, Spain
J Agric Food Chem 2009 **57** (5) 1827
 Chemical and rheological properties of the β -glucan produced by *Pediococcus parvulus* 2.6
- Vijayendra SVN, Kashiwagi Y// Cent Food Technol Res Inst, Dept Food Microbiol, IN-570020 Mysore, India
Int J Biol Macromol 2009 **44** (1) 92
 Characterization of a new acid stable *exo*- β -1,3-glucanase of *Rhizoctonia solani* and its action on microbial polysaccharides
- Yuan WE, Geng Y, Wu F, Liu YJ, Guo MY, Zhao H, Jin T*// *Shanghai Jiao Tong Univ, Sch Pharm, 800 Dong Chuan Rd, CN-200240 Shanghai, Peoples Rep China
Int J Pharm 2009 **366** (1-2) 154
 Preparation of polysaccharide glassy microparticles with stabilization of proteins

12. Polysaccharides - Plant

- Callewaert M, Millot JM, Lesage J, Laurent-Macquin D, Edwards-Levy F*// *Univ Reims, Fac Pharm, Inst Chim Mol Reims, CNRS UMR 6229, 51 rue Cognacq Jay, FR-51100 Reims, France
Int J Pharm 2009 **366** (1-2) 103
 Serum albumin-alginate coated microspheres: Role of the inner gel in binding and release of the KRFF peptide
- Capek P, Machova E, Turjan J// Slovak Acad Sci, Inst Chem, Ctr Glycomics, SK-84538 Bratislava, Slovakia
Int J Biol Macromol 2009 **44** (1) 75
 Scavenging and antioxidant activities of immunomodulating polysaccharides isolated from *Salvia officinalis* L.
- Cerqueira MA, Lima AA, Souza BWS, Teixeira JA, Moreira RA, Vicente AA// University Minho, IBB, Ctr Biol Engr, Campus Gualtar, PT-4710-057 Braga, Portugal
J Agric Food Chem 2009 **57** (4) 1456
 Functional polysaccharides as edible coatings for cheese
- Chan AW, Whitney RA, Neufeld RJ*// *Queens Univ, Dept Chem Engr, Kingston, Ontario, Canada K7L 3N6
Biomacromolecules 2009 **10** (3) 609
 Semisynthesis of a controlled stimuli-responsive alginate hydrogel
- Chen JH, Lim JD, Sohn JD, Choi YS, Han ET*// *Kangwon Natl Univ, Coll Med, Dept Parasitol, Hyoja 2 dong, Chunchon 200 701, Gangwon do, South Korea
Parasitol Res 2009 **104** (2) 245
 Growth-inhibitory effect of a fucoidan from brown seaweed *Undaria pinnatifida* on *Plasmodium* parasites
- Devaki T, Sathivel A, Balaji Raghavendran HR*// *Sri Ramachandra Univ, IN-600116 Chennai, India
Chem Biol Interact 2009 **177** (2) 83
 Stabilization of mitochondrial and microsomal function by polysaccharide of *Ulva lactuca* on D-galactosamine induced hepatitis in rats
- Estevez JM, Fernandez PV, Kasulin L, Dupree P, Ciancia M*// *Univ Buenos Aires, Fac Agron, Dept Biol Aplicada & Alimentos, CIHIDECAR-CONICET, Buenos Aires, DF, Argentina
Glycobiology 2009 **19** (3) 212
 Chemical and *in situ* characterization of macromolecular components of the cell walls from the green seaweed *Codium fragile*

- Geresh S, Arad S, Levy-Ontman O, Zhang W, Tekoah Y, Glaser R*// *Ben Gurion Univ Negev, Dept Chem, IL-84105 Beer Sheva, Israel
Carbohydr Res 2009 **344** (3) 343
Isolation and characterization of poly- and oligosaccharides from the red micro-alga *Porphyridium* sp
- Khalloufi S, Corredig M, Alexander M*// *Univ Guelph, Dept Food Sci, Guelph, Ontario, Canada N1G 2W1
Colloid Surface B 2009 **68** (2) 145
Interactions between flaxseed gums and WPI-stabilized emulsion droplets assessed *in situ* using diffusing wave spectroscopy
- Liu SH, Low NH, Nickerson MT*// *Univ Saskatchewan, Dept Food & Bioprod Sci, 51 Campus Dr, Saskatoon, Saskatchewan, Canada S7N 5A8
J Agric Food Chem 2009 **57** (4) 1521
Effect of pH, salt, and biopolymer ratio on the formation of pea protein isolate-gum arabic complexes
- Mahanty B, Pakshirajan K*, Dasu VV// *IIT Guwahati, Dept Biotechnol, Guwahati, India
Polycycl Aromat Compound 2009 **29** (1) 56
Pyrene encapsulated alginate bead type for sustained release in biodegradation: Preparation and characteristics
- Mao WJ, Li HY, Li Y, Zhang HJ, Qi XH, Sun HH, Chen Y, Guo SD// Ocean Univ China, Inst Marine Drug & Food, 5 Yusan Rd, Qingdao, PR China
Int J Biol Macromol 2009 **44** (1) 70
Chemical characteristic and anticoagulant activity of the sulfated polysaccharide isolated from *Monostroma latissimum* (Chlorophyta)
- Maureira A, Rivas BL*// *Univ Concepcion, Fac Chem, Polymer Dept, Casilla 160-C, Concepcion, Chile
Eur Polym J 2009 **45** (2) 573
Metal ions recovery with alginic acid coupled to ultrafiltration membrane
- Oleinnikov DN, Rokhin AV// Russian Acad Sci, Siberian Branch, Inst Gen & Expt Biol, ul Sakhyanovoi 6, RU-670047 Ulan Ude, Russia
Chem Nat Compd 2008 **44** (6) 685
Polysaccharides of Fabaceae. I. Galactomannan of *Astragalus sericeocanus* seeds
- Pollet A, Belien T, Fierens K, Delcour JA, Courtin CM*// *Katholieke Univ Leuven, Lab Food Chem & Biochem, Kasteelpark Arenberg 20, Bus 2463, BE-3001 Louvain, Belgium
Enzyme Microb Technol 2009 **44** (4) 189
Fusarium graminearum xylanases show different functional stabilities, substrate specificities and inhibition sensitivities
- Prakash S, Veeranagouda Y, Kyoung L, Sreeramulu K*// *Gulbarga Univ, Dept Biochem, IN-585106 Gulbarga, India
World J Microbiol Biotechnol 2009 **25** (2) 197
Xylanase production using inexpensive agricultural wastes and its partial characterization from a halophilic *Chromohalobacter* sp TPSV 101
- Saxena S, Bajpai SK*// *Govt Med Sci Coll, Dept Chem, Polymer Res Lab, IN-482001 Jabalpur, India
J Appl Polym Sci 2009 **112** (1) 416
Controlled delivery of diclofenac sodium from calcium alginate beads loaded with a drug-resin complex
- Singh B, Sharma N// Himachal Pradesh Univ, Dept Chem, Summer Hill, IN-171005 Shimla, India
J Macromol Sci Pure Appl Chem 2009 **46** (4) 381
Synthesis and characterization of *Sterculia* gum based pH responsive drug delivery system for use in colon cancer
- Singh T, Meena R, Kumar A*// *CSIR, Cent Salt & Marine Chem Res Inst, GB Marg, IN-364002 Bhavnagar, Gujarat, India
J Phys Chem B 2009 **113** (8) 2519
Effect of sodium sulfate on the gelling behavior of agarose and water structure inside the gel networks
- Singh V, Sethi R, Tiwari A// Univ Allahabad, Dept Chem, Allahabad, India
Int J Biol Macromol 2009 **44** (1) 9
Structure elucidation and properties of a non-ionic galactomannan derived from the *Cassia pleurocarpa* seeds
- Tirafferri A, Sethi R*// *Politecn Turin, DITAG, Corso Duca Abruzzi 24, IT-10129 Turin, Italy
J Nanopart Res 2009 **11** (3) 635
Enhanced transport of zerovalent iron nanoparticles in saturated porous media by guar gum
- Villanueva RD, Montano MNE*, Romero JB// *Univ Philippines, Coll Sci, Inst Marine Sci, PH-1101 Quezon City, Philippines
J Appl Phycol 2009 **21** (1) 27
t-Carrageenan from a newly farmed, rare variety of eucheumoid seaweed—"endong"
- Villanueva RD, Hilliou L, Sousa-Pinto I// Univ Porto, Fac Engr, Dept Engr Quim, ReQuimTe CEQU, Rua Dr Roberto Frias, PT-4200-465 Oporto, Portugal
Bioresour Technol 2009 **100** (9) 2633
Postharvest culture in the dark: An eco-friendly alternative to alkali treatment for enhancing the gel quality of κ /t-hybrid carrageenan from *Chondrus crispus* (Gigartinales, Rhodophyta)
- Wang L, Li Y, Li CZ// China Natl Acad Nanotechnol Engr, TEDA, 80 4th Ave, CN-300457 Tianjin, Peoples Rep China
J Nanopart Res 2009 **11** (3) 691
In situ processing and properties of nanostructured hydroxyapatite/alginate composite
- Wei SY, Zhang PX, Han N, Dang Y, Zhang HB, Zhang DY, Fu ZG, Jiang BG*// *Peking Univ, Peoples Hosp, Dept Orthopaedics & Trauma, South St 11, CN-100044 Beijing, Peoples Rep China
Am J Chin Med 2009 **37** (1) 57
Effects of *Hedysari* polysaccharides on regeneration and function recovery following peripheral nerve injury in rats
- Yu XJ, Guo N, Chi ZM, Gong F, Sheng J, Chi Z*// *Ocean Univ China, UNESCO Chinese Ctr Marine Biotechnol, Yushan Rd 5, Qingdao, PR China
Biochem Eng J 2009 **43** (3) 266
Inulinase overproduction by a mutant of the marine yeast *Pichia guilliermondii* using surface response methodology and inulin hydrolysis

13. Polysaccharides - Other

- Ali M, Byrne ME*// *Auburn Univ, Dept Chem Engr, Biomimetic & Biohybrid Materials, Auburn, AL 36849, USA
Pharm Res 2009 **26** (3) 714
Controlled release of high molecular weight hyaluronic acid from molecularly imprinted hydrogel contact lenses
- Bergman K, Hilborn J, Bowden T*// Uppsala Univ, Dept Materials Chem Polymer Chem, Box 538, SE-75121 Uppsala, Sweden
Express Polym Lett 2008 **2** (8) 553
Selective Michael-type addition of a D-glucuronic acid derivative in the synthesis of model substances for uronic acid containing polysaccharides
- Cho YH, Decker EA, McClements DJ*// *Univ Massachusetts, Dept Food Sci, Biopolymers & Colloids Lab, Amherst, MA 01003, USA
Langmuir 2009 **25** (5) 2654
Competitive adsorption of mixed anionic polysaccharides at the surfaces of protein-coated lipid droplets
- Chung C, Burdick JA*// *Univ Pennsylvania, Dept Bioengr, 240 Skirkanich Hall, 210 Sth 33rd St, Philadelphia, PA 19104, USA
Tissue Eng Part A 2009 **15** (2) 243
Influence of three-dimensional hyaluronic acid microenvironments on mesenchymal stem cell chondrogenesis
- Cle C, Gunning AP, Syson K, Bowater L, Field RA, Bornemann S*// *John Innes Inst, Dept Biol Chem, Norwich Res Pk, Norwich NR4 7UH, England
J Am Chem Soc 2008 **130** (46) 15234
Detection of transglucosidase-catalyzed polysaccharide synthesis on a surface in real time using surface plasmon resonance spectroscopy
- Kablík J, Monheit GD, Yu LP, Chang G, Gershkovich J// Genzyme Corp, 49 New York Ave, Framingham, MA 01701, USA
Dermatol Surg 2009 **35** (1) 302
Comparative physical properties of hyaluronic acid dermal fillers
- Lee H, Park TG*// *Korea Advanced Inst Sci & Technol, Dept Biol Sci, Taejeon 305 701, South Korea
J Biomed Mater Res A 2009 **88A** (3) 797
Photo-crosslinkable, biomimetic, and thermo-sensitive pluronic grafted hyaluronic acid copolymers for injectable delivery of chondrocytes
- Maes E, Bonachera F, Strecker G, Guerardel Y// Univ Sci & Tech Lille Flandres Artois, Struct & Fonction, UMR 8576 CNRS, Villeneuve d'Ascq, France
Carbohydr Res 2009 **344** (3) 322
SOACS index: An easy NMR-based query for glycan retrieval
- Reis AV, Guilherme MR*, Mattoso LHC, Rubira AF, Tambourgi EB, Muniz EC// *Univ Estadual Campinas, Fac Engr Quim, Dept Sistemas Quim & Informatica DESQ, BR-13081-970 Campinas, SP, Brazil
Pharm Res 2009 **26** (2) 438
Nanometer- and submicrometer-sized hollow spheres of chondroitin sulfate as a potential formulation strategy for anti-inflammatory encapsulation
- Serra Moreno J, Panero S, Materazzi S, Martinelli A, Sabbieti MG, Agas D, Materazzi G// Univ Roma La Sapienza, Dept Chem, Piazzale Aldo Moro 5, IT-00185 Rome, Italy
J Biomed Mater Res A 2009 **88A** (3) 832
Polypyrrole-polysaccharide thin films characteristics: Electrosynthesis and biological properties
- Toyoshima M, Miura Y*// *Japan Advanced Inst Sci & Technol, Sch Materials Sci, 1-1 Asahidai, Nomi, Ishikawa 923 129, Japan
J Polym Sci A Polym Chem 2009 **47** (5) 1412
Preparation of glycopolymer-substituted gold nanoparticles and their molecular recognition
- Yang Y, Hu SJ*, Li L, Chen GP// *First Affiliated Hosp, Zhejiang Univ, Inst Cardiol, Coll Med, CN-310003 Hangzhou, Zhejiang, Peoples Rep China
Acta Pharmacol Sin 2009 **30** (1) 54
Cardioprotection by polysaccharide sulfate against ischemia/reperfusion injury in isolated rat hearts