

## Bibliography of carbohydrate polymers

(4 weeks journals. Search completed at 20th. Feb. 2008)

### 1. Reviews

*J Nutr* 2007 **137** (11)

Special supplement to issue II: Inulin and oligofructose: Health benefits and claims - A critical review (20 papers)

Jain A, Gupta Y, Jain SK\*// \*Dr Hari Singh Gour Vishwavidyalaya, Department Pharmaceutical Science, Pharmaceuticals Research Projects Lab, IN-470003 Sagar, India

*J Pharm Pharm Sci* 2007 **10** (1) 86

Perspectives of biodegradable natural polysaccharides for site-specific drug delivery to the colon

Li ZF, Wang M, Wang F, Gu ZB, Du GC, Wu J, Chen J\*// \*Jiangnan Univ, State Key Lab Food Sci & Technol, 1800 Lihu Ave, CN-214122 Wuxi, Peoples Rep China

*Appl Microbiol Biotechnol* 2007 **77** (2) 245

γ-Cyclodextrin: A review on enzymatic production and applications

Loftsson T, Vogensen SB, Brewster ME, Konradsdottir F// Univ Iceland, Fac Pharm, Hofsvallagata 53, IS-107 Reykjavik, Iceland

*J Pharm Sci* 2007 **96** (10) 2532

Effects of cyclodextrins on drug delivery through biological membranes

Srinivas T// Cent Tuber Crops Res Inst, Sect Social Sci, IN-695017 Thiruvananthapuram, Kerala, India

*Starch* 2007 **59** (10) 477

Industrial demand for cassava starch in India

Stern R, Kogan G\*, Jedrzejewski MJ, Soltes L// \*European Commission, Directorate Gen Res, BE-1050 Brussels, Belgium

*Biotechnol Adv* 2007 **25** (6) 537

The many ways to cleave hyaluronan

Wistrand I, Lingstrom R, Wagberg L// STFI Packforsk AB, Box 5604, SE-11486 Stockholm, Sweden

*Eur Polym J* 2007 **43** (10) 4075

Preparation of electrically conducting cellulose fibres utilizing polyelectrolyte multilayers of poly (3,4-ethylenedioxythiophene):poly(styrene sulphonate) and poly(allyl amine)

### 2. Cellulose

Abe K, Iwamoto S, Yano H// Kyoto Univ, Res Inst Sustainable Humanosphere, Uji, Japan

*Biomacromolecules* 2007 **8** (10) 3276

Obtaining cellulose nanofibers with a uniform width of 15 nm from wood

Baltazar-y-Jimenez A, Bismarck A// Imperial Coll London, Dept Chem Engr, Polymer & Composite Engr PaCE Grp, London SW7 2AZ, England

*Green Chem* 2007 **9** (10) 1057

Surface modification of lignocellulosic fibres in atmospheric air pressure plasma

Barsbay M, Guven G\*, Stenzel MH, Davis TP, Barner-Kowollik C, Barner L// \*Univ New Sth Wales, Sch Chem Sci & Engr, Ctr Adv Macromol Design, Sydney, NSW 2052, Australia

*Macromolecules* 2007 **40** (20) 7140

Verification of controlled grafting of styrene from cellulose *via* radiation-induced RAFT polymerization

Brown EE, Laborie MPG\*// \*Washington State Univ, Wood Materials & Engr Lab, POB 641806, Pullman, Wa 99164, USA

*Biomacromolecules* 2007 **8** (10) 3074

Bioengineering bacterial cellulose/poly(ethylene oxide) nanocomposites

Calafell M, Diaz C, Hadzhiyska H, Gibert JM, Daga JM, Tzanov T\*// \*Univ Politecn Cataluna, Dept Engr Quim, ES-08222 Terrassa, Spain

*Biocatal Biotransform* 2007 **25** (2-4) 336

Bio-catalyzed coloration of cellulose fibers

Charoenthai N, Kleinebudde P, Puttipatkhachorn S\*// \*Mahidol Univ, Fac Pharm, Dept Mfg Pharm, Sri Ayudhya Rd, TH-10400 Bangkok, Thailand

*J Pharm Sci* 2007 **96** (9) 2469

Use of chitosan-alginate as alternative pelletization aid to microcrystal line cellulose in extrusion/spheronization

Chen CZ, Wang L\*, Huang Y// \*Chinese Acad Sci, Guangzhou Inst Chem, Key Lab Cellulose & Lignocellulose, CN-510650 Guangzhou, Peoples Rep China

*Polymer* 2007 **48** (18) 5202

Electrospinning of thermo-regulating ultrafine fibers based on polyethylene glycol/cellulose acetate composite

Cunha AG, Freire CSR\*, Silvestre AJD, Neto CP, Gandini A, Orblin E, Fardim P// \*Univ Aveiro, Dept Chem, CICECO, Campus Santiago, PT-3810-193 Aveiro, Portugal

*Langmuir* 2007 **23** (21) 10801

Bi-phobic cellulose fibers derivatives *via* surface trifluoropropanoylation

Davaran S, Rashidi MR, Khani A// Tabriz Univ Med Sci, Res Ctr Pharmaceut Nanotechnol, Tabriz, Iran

*Drug Develop Ind Pharm* 2007 **33** (8) 881

Synthesis of chemically cross-linked hydroxypropyl methyl cellulose hydrogels and their application in controlled release of 5-amino salicylic acid

Dou H, Jiang M// Shanghai Jiao Tong Univ, Sch Materials Sci & Engr, 1954 Huashan Rd, CN-200030 Shanghai, Peoples Rep China

*Polym Int* 2007 **56** (10) 1206

Fabrication, characterization and drug loading of pH-dependent multi-morphological nanoparticles based on cellulose

Ebrahim SM, Kashyout AB, Soliman MM// Univ Alexandria, Inst Grad Studies, Dept Materials Sci, 163 Horrya Ave, El-Shatby, Alexandria, Egypt

*J Polym Res* 2007 **14** (5) 423

Electrical and structural properties of polyaniline/cellulose triacetate blend films

Enebro J, Momcilovic D, Siika-Aho M, Karlsson S\*// \*Royal Inst Technol, Sch Chem Sci & Engr, Stockholm, Sweden

*Biomacromolecules* 2007 **8** (10) 3253

A new approach for studying correlations between the chemical structure and the rheological properties in carboxymethyl cellulose

Karakawa M, Chikamatsu M, Vakamoto C, Maeda Y, Kubota S, Yase K// Natl Inst Adv Ind Sci & Technol, Photon Res Inst, Tsukuba Central 5, 1-1-1 Higashi, Tsukuba, Ibaraki 305 8565, Japan

*Macromol Chem Phys* 2007 **208** (18) 2000

Organic light-emitting diode application of fluorescent cellulose as a natural polymer

Marcelo G, Saiz E, Tarazona MP\*// \*Univ Alcala de Henares, Dept Quim Fis, ES-28871 Alcala de Henares, Spain

*J Chromatogr A* 2007 **1165** (1-2) 45

Determination of molecular parameters of hydroxyethyl and hydroxypropyl celluloses by chromatography with dual detection

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.

Milichovsky M, Sopuch T, Richter J// University Pardubice, Faculty Chem Technol, Dept Wood Pulp & Paper, Studentska 95, CZ-53009 Pardubice, Czech Republic

*J Appl Polym Sci* 2007 **106** (6) 3641

Depolymerization during nitroxide-mediated oxidation of native cellulose

Musial W// Wroclaw Med Univ, Drug Form Technol Unit, Szewska Str 38, PL-50139 Wroclaw, Poland

*Chem Pharm Bull Tokyo* 2007 **55** (8) 1141

The effect of methylcellulose on metronidazole release from polyacrylic acid hydrogels

Nada AMA, El-Sherief S, Nasr A, Kamel M// Natl Res Ctr, Cellulose & Paper Dept, Cairo, Egypt

*J Mol Struct* 2007 **841** (1-3) 1

Infrared spectroscopic and thermal analysis of prepared cation exchangers from cellulosic materials

Padokhin VA, Ganiev RF, Kochkina NE// Russian Acad Sci, Inst Solution Chem, ul Akademicheskaya 1, RU-153045 Ivanovo, Russia

*Dokl Chem* 2007 **416** (1) 227

Effect of mechanical activation on the viscoelastic properties of solutions of starch-sodium carboxymethyl cellulose mixtures

Reddy N, Yang YQ\*// \*Univ Nebraska Lincoln, Dept Textiles Clothing & Design, Lincoln, Ne 68583, USA

*J Agric Food Chem* 2007 **55** (21) 8570

Preparation and characterization of long natural cellulose fibers from wheat straw

Reynolds MA, Aichelmann-Reidy ME, Kassolis JD, Prasad HS, Rohrer MD// University Maryland School Dentistry, Dept Periodont, Baltimore, Md 21201, USA

*J Biomed Mater Res B* 2007 **83B** (2) 451

Calcium sulfate-carboxymethylcellulose bone graft binder: Histologic and morphometric evaluation in a critical size defect

Sannino A, Pappada S, Giotta L, Valli L, Maffezzoli A// Univ Lecce, Dept Innovation Engr, Via Monteroni, IT-73100 Lecce, Italy

*J Appl Polym Sci* 2007 **106** (5) 3040

Spin coating cellulose derivatives on quartz crystal microbalance plates to obtain hydrogel-based fast sensors and actuators

Sarotti AM, Spanevello RA, Suarez AG\*// \*Univ Nacl Rosario, Fac Ciencias Bioquim & Farmaceut, Inst Quim Organ Sintesis, CONICET, AR-2000 Rosario, Argentina

*Green Chem* 2007 **9** (10) 1137

An efficient microwave-assisted green transformation of cellulose into levoglucosenone. Advantages of the use of an experimental design approach

Sheldrake GN, Schleck D// Queens Univ Belfast, Sch Chem & Chem Engr, David Keir Bldg, Belfast BT7 1NN, Northern Ireland

*Green Chem* 2007 **9** (10) 1044

Dicationic molten salts (ionic liquids) as re-useable media for the controlled pyrolysis of cellulose to anhydrosugars

Takano T, Ishikawa J, Kamitakahara H, Nakatsubo F// Kyoto University, Graduate School Agric, Div Forest & Biomater Sci, Sakyo ku, Kyoto 606 8502, Japan

*Carbohydr Res* 2007 **342** (16) 2456

The application of microwave heating to the synthesis of 6-amino-6-deoxy-cellulose

Tanaka K, Morina T, Tanabe Y, Akiyama R// Kyoto Inst Technol, Grad Sch Sci, Dept Macromol Sci & Engr, Kyoto 606 8585, Japan

*Liq Cryst* 2007 **34** (9) 1019

Concentration dependences of dielectric properties at  $10^5$  Hz and  $10^6$  Hz for aqueous solutions of hydroxypropyl cellulose

Togawa E, Kondo T\*// \*Kyushu Univ, Bioarchitecture Ctr, Fukuoka 812 8581, Japan

*J Polym Sci B Polym Phys* 2007 **45** (20) 2850

Unique structural characteristics of nematic ordered cellulose-stability in water and its facile transformation

Wei YP, Cheng F// Tianjin Univ, Sch Sci, Dept Chem, CN-300072 Tianjin, Peoples Rep China

*J Appl Polym Sci* 2007 **106** (6) 3624

Effect of solvent exchange on the structure and rheological properties of cellulose in LiCl/DMAc

Wong TW, Deepak KG, Taib MN, Anuar NK// Univ Teknol Mara, Fac Pharm, Particle Design Res Grp, MY-40450 Shah Alam, Malaysia

*Int J Pharm* 2007 **343** (1-2) 122

Microwave non-destructive testing technique for characterization of HPMC-PEG 3000 films

Yan LF, Chen J, Bangal PR// University Science & Technology China, Hefei National Laboratory Phys Sci Micrometerscale, CN-230026 Anhua, Peoples Rep China

*Macromol Biosci* 2007 **7** (9-10) 1139

Dissolving cellulose in a NaOH/thiourea aqueous solution: A topochemical investigation

### 3. Cellulose-degrading enzymes

Tu MB, Chandra RP, Saddler JN\*// \*Univ British Columbia, Dept Wood Sci, Forest Prod Biotechnol Grp, Forest Sci Ctr, 2424 Main Mall, Vancouver, Brit Columbia, Canada V6T 1Z4

*Biotechnol Prog* 2007 **23** (5) 1130

Recycling cellulases during the hydrolysis of steam exploded and ethanol pretreated lodgepole pine

Xu J, Chen HZ\*// \*Chinese Acad Sci, Inst Process Engr, State Key Lab Biochem Engr, CN-100080 Beijing, Peoples Rep China

*Appl Biochem Biotech* 2007 **143** (1) 93

A novel stepwise recovery strategy of cellulase adsorbed to the residual substrate after hydrolysis of steam exploded wheat straw

### 4. Chitin/Chitosan

Asikainen AJ, Hagstrom J, Sorsa T, Noponen J, Kellomaki M, Juuti H, Lindqvist C, Hietanen J, Suuronen R// Univ Helsinki, Inst Dent, Dept Oral & Maxillofacial Surg, Helsinki, Finland

*J Biomed Mater Res A* 2007 **83A** (2) 530

Soft tissue reactions to bioactive glass 13-93 combined with chitosan

Babu VR, Sairam M, Hosamani KM\*, Aminabhavi TM// \*Karnatak Univ, Drug Delivery Div, Ctr Excellence Polymer Science, IN-580003 Dharwad, Karnataka, India

*J Appl Polym Sci* 2007 **106** (6) 3778

Preparation and characterization of novel-semi-interpenetrating 2-hydroxyethyl methacrylate-g-chitosan copolymeric microspheres for sustained release of indomethacin

Becerra-Bracamontes F, Sanchez-Diaz JC\*, Gonzalez-Alvarez AJ, Ortega-Gudino P, Michel-Valdivia E, Martinez-Ruvalcaba A// \*Univ Guadalajara, Dept Chem Engr, MX-44430 Guadalajara, Mexico

*J Appl Polym Sci* 2007 **106** (6) 3939

Design of a drug delivery system based on poly(acrylamide-co-acrylic acid)/chitosan nanostructured hydrogels

Boonyo W, Junginger HE, Waranuch N, Polnok A, Pitaksutepong T\*// \*Naresuan Univ, Fac Pharmaceut Sci, Dept Pharmaceut Technol, TH-65000 Phitsanulok, Thailand

*J Controlled Release* 2007 **121** (3) 168

Chitosan and trimethyl chitosan chloride (TMC) as adjuvants for inducing immune responses to ovalbumin in mice following nasal administration

Cafaggi S, Russo E, Stefani R, Leardi R, Caviglioli G, Parodi B, Bignardi G, De Toterio D, Aiello C, Viale M// Univ Genoa, Dept Chim & Tecnol Farmaceut Alimentari, Via Brigata Salerno 13, IT-16147 Genoa, Italy

*J Controlled Release* 2007 **121** (1-2) 110

Preparation and evaluation of nanoparticles made of chitosan or N-trimethyl chitosan and a cisplatin-alginate complex

Cai KY, Yao KD, Yang ZM, Qu YL, Li XQ// Chong Qing Univ, Coll Bioengn, CN-400044 Chong Qing, Peoples Rep China

*J Mater Sci Mater Med* 2007 **18** (10) 2017

Histological study of surface modified three dimensional poly(D,L-lactic acid) scaffolds with chitosan *in vivo*

Chen S, Liu M\*, Jin S, Chen Y// \*Lanzhou Univ, Dept Chem, CN-730000 Lanzhou, Peoples Rep China

*Polym Int* 2007 **56** (10) 1305

Structure and properties of the polyelectrolyte complex of chitosan with poly(methacrylic acid)

Choudhari SK, Kittur AA, Kulkarni SS, Kariduraganavar MY\*// \*Karnatak Univ, Ctr Excellence Polymer Sci, IN-580003 Dharwad, India

*J Membr Sci* 2007 **302** (1-2) 197

Development of novel blocked diisocyanate crosslinked chitosan membranes for pervaporation separation of water-isopropanol mixtures

El-Azzami LA, Grulke EA\*// \*Univ Kentucky, Dept Chem & Materials Engr, Lexington, Ky 40506, USA

*J Polym Sci B Polym Phys* 2007 **45** (18) 2620

Dual mode model for mixed gas permeation of CO<sub>2</sub>, H<sub>2</sub>, and N<sub>2</sub> through a dry chitosan membrane

Elizalde-Pena EA, Flores-Ramirez N\*, Luna-Barcenas G, Vasquez-Garcia SR, Arambula-Villa G, Garcia-Gaitan B, Rutiaga-Quinones JG, Gonzalez-Hernandez J// \*Unidad Queretaro, Libramiento Norponiente, Real Juriquilla, MX-76230 Queretaro, Qro, Mexico

*Eur Polym J* 2007 **43** (9) 3963

Synthesis and characterization of chitosan-g-glycidyl methacrylate with methyl methacrylate

Filion D, Lavertu M, Buschmann MD\*// \*Ecole Polytech, Inst Biomed Engr, Dept Chem Engr, PO Box 6079, Montreal, Quebec, Canada H3C 3A7

*Biomacromolecules* 2007 **8** (10) 3224

Ionization and solubility of chitosan solutions related to thermosensitive chitosan/glycerol-phosphate systems

- Han W, Liu C, Bai R\*// \*Nat'l Univ Singapore, Fac Engr, Div Environm Sci & Engr, SG-117576 Singapore, Rep Singapore  
*J Membr Sci* 2007 **302** (1–2) 150  
 A novel method to prepare high chitosan content blend hollow fiber membranes using a non-acidic dope solvent for highly enhanced adsorptive performance
- Huang XJ, Ge D, Xu ZK\*// \*Zhejiang Univ, Inst Polymer Sci, MoE Key Lab Macromol Synth & Functionalization, CN-310027 Hangzhou, Peoples Rep China  
*Eur Polym J* 2007 **43** (9) 3710  
 Preparation and characterization of stable chitosan nanofibrous membrane for lipase immobilization
- Ishikawa N, Suzuki Y\*, Ohta M, Cho H, Suzuki S, Dezawa M, Ide C// \*Kitano Hosp, Tazuke Kofukai Med Res Inst, Dept Plast & Reconstructive Surg, Osaka, Japan  
*J Biomed Mater Res A* 2007 **83A** (1) 33  
 Peripheral nerve regeneration through the space formed by a chitosan gel sponge
- Karakcili AG, Satriano C, Gumusderelioglu M\*, Marletta G// \*Haceteppe Univ, Dept Chem Engr, TR-06800 Ankara, Turkey  
*J Appl Polym Sci* 2007 **106** (6) 3884  
 Surface characteristics of ionically crosslinked chitosan membranes
- Kariya H, Kiyohara A, Masuda SG, Yoshihara Y, Ueno M, Hashimoto M\*, Suda Y// \*Kagoshima Univ, Venture Business Lab, Kagoshima 890, Japan  
*J Biomed Mater Res A* 2007 **83A** (1) 58  
 Biological roles of carboxymethyl-chitin associated for the growth factor production
- Li LL, Chen D, Zhang YQ, Deng ZT, Ren XL, Meng XW, Tang FQ, Ren J, Zhang L// Chinese Acad Sci, Tech Inst Phys & Chem, CN-100080 Beijing, Peoples Rep China  
*Nanotechnology* 2007 **18** (40) 5102  
 Magnetic and fluorescent multifunctional chitosan nanoparticles as a smart drug delivery system
- Li T, Shi XW, Du YM\*, Tang YF// \*Wuhan Univ, Renmin Hosp, Dept Neurol, CN-430060 Wuhan, Peoples Rep China  
*J Biomed Mater Res A* 2007 **83A** (2) 383  
 Quaternized chitosan/alginate nanoparticles for protein delivery
- Liu CH, Xiao CB, Huang YM// Univ SW Chongqing, Coll Chem & Chem Engr, CN-400715 Chongqing, Peoples Rep China  
*J Appl Polym Sci* 2007 **106** (5) 3070  
 Novel polyion complex films from chitosan and quaternized poly(4-vinyl-N-carboxymethylpyridine) containing zwitterion structure units
- Liu H, Chen B, Mao ZW, Gao CY\*// \*Zhejiang Univ, Dept Polymer Sci & Engr, MoE Key Lab Macromol Synth & Functionalization, CN-310027 Hangzhou, Peoples Rep China  
*J Appl Polym Sci* 2007 **106** (6) 4248  
 Chitosan nanoparticles for loading of toothpaste actives and adhesion on tooth analogs
- Lopez-Perez PM, Marques AP, Da Silva RMP, Pashkuleva I, Reis RL// Univ Minho, Dept Polymer Engr, 3Bs Res Grp, Campus de Gualtar, PT-4710 Braga, Portugal  
*J Mater Chem* 2007 **17** (38) 4064  
 Effect of chitosan membrane surface modification *via* plasma induced polymerization on the adhesion of osteoblast-like cells
- Lu GY, Kong LJ, Sheng BY, Wang G, Gong YD, Zhang XF\*// \*Tsing Hua Univ, Dept Biosci & Biotechnol, State Key Lab Biomembrane & Membrane Biotechnol, CN-100084 Beijing, Peoples Rep China  
*Eur Polym J* 2007 **43** (9) 3807  
 Degradation of covalently cross-linked carboxymethyl chitosan and its potential application for peripheral nerve regeneration
- Nosal WH, Thompson DW, Tiwald TE, Sarkar S, Subramanian A, Woollam JA\*// \*Univ Nebraska, Dept Elect Engr, Lincoln, Ne 68588, USA  
*Surf Interface Anal* 2007 **39** (9) 747  
 Vacuum ultraviolet optical analysis of spin-cast chitosan films modified by succinic anhydride and glycidyl phenyl ether
- Peng FB, Pan FS, Sun HL, Lu LY, Jiang ZY\*// \*Tianjin Univ, Sch Chem Engr & Technol, Key Lab Green Chem Technol, CN-300072 Tianjin, Peoples Rep China  
*J Membr Sci* 2007 **300** (1–2) 13  
 Novel nanocomposite pervaporation membranes composed of poly(vinyl alcohol) and chitosan-wrapped carbon nanotube
- Peng XH, Zhang LN\*// \*Wuhan Univ, Dept Chem, CN-430072 Wuhan, Peoples Rep China  
*Langmuir* 2007 **23** (21) 10493  
 Formation and morphologies of novel self-assembled micelles from chitosan derivatives
- Safronov AP, Suvorova AI, Tyukova IS, Smimova YA// Urals State Univ, Dept Chem, Ekaterinburg, Russia  
*J Polym Sci B Polym Phys* 2007 **45** (18) 2603  
 Opposite trends in thermodynamic compatibility between copolyamide and chitosan in their binary blend
- Sarasam AR, Samli AI, Hess L, Ihnat MA, Madhally SV\*// \*Oklahoma State Univ, Sch Chem Engr, Stillwater, Ok 74078, USA  
*Macromol Biosci* 2007 **7** (9–10) 1160  
 Blending chitosan with polycaprolactone: Porous scaffolds and toxicity
- Shi BL, Zhao W, Mang QR// NE Forestry Univ, Coll Sci, Dept Chem, CN-150040 Harbin, Peoples Rep China  
*J Macromol Sci Phys* 2007 **46** (5) 1033  
 Explanation for hydrogen bonds of chitin-alcohols from Lewis acid-base theories
- Sini TK, Santhosh S\*, Mathew PT// \*Cent Inst Fisheries Technol, Fish Proc Div, IN-682029 Cochin, India  
*Carbohydr Res* 2007 **342** (16) 2423  
 Study on the production of chitin and chitosan from shrimp shell by using *Bacillus subtilis* fermentation
- Siqueira JP, Dos Santos DS, Misoguti L, Oliveira ON, Mendonca CR\*// \*Univ Sao Paulo, Inst Fis Sao Carlos, BR-13560-970 Sao Carlos, Brazil  
*Polym Int* 2007 **56** (10) 1288  
 Influence of solvents on the photoinduced birefringence in chitosan films incorporating azo dyes
- Slavik GJ, Ragetly G, Ganesh N, Griffon DJ, Cunningham BT\*// \*Univ Illinois, Dept Materials Sci & Engr, 1304 West Green St, Urbana, IL 61801, USA  
*J Mater Chem* 2007 **17** (38) 4095  
 A replica molding technique for producing fibrous chitosan scaffolds for cartilage engineering
- Son SH, Jegal J\*// \*Korea Res Inst Chem Technol, Div Appl Chem, Membrane & Separation Res Ctr, Taejeon 305 606, South Korea  
*J Appl Polym Sci* 2007 **106** (5) 2989  
 Synthesis and characterization of the chiral stationary phase based on chitosan
- Suzuki S, Ying B, Yamane H, Tachi H, Shimahashi K, Ogawa K, Kitamura S\*// \*Univ Osaka Prefecture, Grad Sch Life Sci & Environm Sci, 1-1 Gakuen-cho, Naka ku, Sakai, Osaka 599 8531, Japan  
*Carbohydr Res* 2007 **342** (16) 2490  
 Surface structure of chitosan and hybrid chitosan-amylose films - Restoration of the antibacterial properties of chitosan in the amylose film
- Tsvetkova IB, Bronstein LM\*, Sidorov SN, Lependina OL, Sulman MG, Valetsky PM, Stein B, Nikoshvili LZ, Matveeva VG, Sidorov AI, Tikhonov BB, Demidenko GN, Kiwi-Minsker L, Sulman EM// \*Indiana Univ, Dept Chem, Bloomington, In 47405, USA  
*J Mol Catal A-Chem* 2007 **276** (1–2) 116  
 Structure and behavior of nanoparticulate catalysts based on ultrathin chitosan layers
- Wang Y, Chen XG\*, Lv YH, Zhou HY, Zhang J// \*Ocean Univ Qingdao, Coll Marine Life Studies, CN-266003 Qingdao, Peoples Rep China  
*J Appl Polym Sci* 2007 **106** (5) 3136  
 Effects of molecular structural parameters of carboxymethyl chitosan on the growth of fibroblasts *in vitro*
- Wei DW, Qian WP\*, Shi Y, Ding SH, Xia Y// \*Southeast Univ, Sch Biol Sci & Med Engr, State Key Lab Bioelectron, CN-210096 Nanjing, Peoples Rep China  
*Carbohydr Res* 2007 **342** (16) 2494  
 Mass synthesis of single-crystal gold nanosheets based on chitosan
- Wongpanit P, Sanchavanakit N, Pavasant P, Bunaprasert T, Tabata Y, Rujiravanit R\*// \*Chulalongkorn Univ, Petr & Petrchem Coll, TH-10330 Bangkok, Thailand  
*Eur Polym J* 2007 **43** (10) 4123  
 Preparation and characterization of chitin whisker-reinforced silk fibronin nanocomposite sponges
- Xu WT, Huang KL, Guo F, Qu W, Yang JJ, Liang ZH, Luo YB\*// \*China Agric Univ, Lab Fruit Physiol & Mol Biol, CN-100083 Beijing, Peoples Rep China  
*Postharvest Biol Technol* 2007 **46** (1) 86  
 Postharvest grapefruit seed extract and chitosan treatments of table grapes to control *Botrytis cinerea*
- Ying GQ, Yang H\*, Yi Y, Xu F// \*Zhejiang Univ Technol, Coll Pharmaceut Sci, CN-310032 Hangzhou, Peoples Rep China  
*Polym Bull* 2007 **59** (4) 509  
 Relationships between the molecular structure and moisture-absorption and moisture-retention abilities of succinyl chitosan
- Yu HQ, Lu J, Xiao CB\*// \*Wuhan Univ, Coll Chem & Mol Sci, CN-430072 Wuhan, Peoples Rep China  
*Macromol Biosci* 2007 **7** (9–10) 1100  
 Preparation and properties of novel hydrogels from oxidized konjac glucomannan cross-linked chitosan for *in vitro* drug delivery
- Yu SJ, Du J, Zheng YB\*, Yan L// \*Dalian Univ Technol, Dept Polymer Sci, Dalian, Peoples Rep China  
*J Appl Polym Sci* 2007 **106** (6) 4098  
 Synthesis and characterization of carboxymethyl chitosan containing functional ultraviolet absorber substituent
- Zhong ZM, Chen R, Xing RG, Chen XL, Liu S, Guo ZY, Ji X, Wang L, Li PC\*// \*Chinese Acad Sci, Inst Oceanol, CN-266071 Qingdao, Peoples Rep China  
*Carbohydr Res* 2007 **342** (16) 2390  
 Synthesis and antifungal properties of sulfanilamide derivatives of chitosan

Zhou XF, Liu B, Yu XH, Zha X, Zhang XZ, Chen Y, Wang XY, Jin YH, Wu YG, Chen Y, Shan Y, Chen Y, Liu J, Kong W, Shen J\*// \*Jilin Univ, Coll Life Sci, CN-130012 Changchun, Peoples Rep China  
*J Control Release* 2007 **121** (3) 200  
 Controlled release of PEI/DNA complexes from mannose-bearing chitosan microspheres as a potent delivery system to enhance immune response to HBV DNA vaccine

## 5. Cyclodextrins

Belyakova LA, Varvarin AM, Lyashenko DY, Khora OV, Oranskaya EI// Natl Acad Sci Ukraine, Inst Surface Chem, ul Gen Naumova 17, UA-03164 Kiev 164, Ukraine  
*Colloid J-Engl Tr* 2007 **69** (5) 546  
 Complexation in a  $\beta$ -cyclodextrin-salicylic acid system  
 Bonacucina G, Spina M, Misici-Falzi M, Cespi M, Pucciarelli S, Angeletti M, Palmieri GF\*// \*Univ Camerino, Dept Chem Sci, Via S Agostino 1, IT-62032 Camerino, MC, Italy  
*Eur J Pharm Sci* 2007 **32** (2) 115  
 Effect of hydroxypropyl  $\beta$ -cyclodextrin on the self-assembling and thermogelation properties of Poloxamer 407  
 Chechik V, Ionita G// University York, Department Chemistry, York YO10 5DD, England  
*New J Chem* 2007 **31** (10) 1726  
 Bis spin-labelled cyclodextrins  
 Fan Z, Diao CH, Guo MJ, Du RJ, Song YF, Jing ZL, Yu M// Univ Sci & Technol, Coll Sci, CN-300222 Tianjin, Peoples Rep China  
*Carbohydr Res* 2007 **342** (16) 2500  
 An investigation of the inclusion complex of  $\beta$ -cyclodextrin with *p*-nitrobenzoic acid in the solid state  
 Fukudome M, Shimosaki K, Koga K, Yuan DQ\*, Fujita K// \*Nagasaki Univ, Grad Sch Biomed Sci, Dept Mol Med Sci, Bunkyo machi 1-14, Nagasaki 852 8521, Japan  
*Tetrahedron Lett* 2007 **48** (42) 7493  
 Selective synthesis and ester cleavage property of 3<sup>A</sup>,2<sup>B</sup>-anhydro-3<sup>B</sup>-deoxy-3<sup>B</sup>-thio- $\beta$ -cyclodextrin  
 Hipler UC, Schonfelder U, Hipler C, Elsner P// Univ Jena, Dept Dermatol, DE-07743 Jena, Germany  
*J Biomed Mater Res A* 2007 **83A** (1) 70  
 Influence of cyclodextrins on the proliferation of HaCaT keratinocytes *in vitro*  
 Jug M, Becirevid-Lacan M// Univ Zagreb, Fac Pharm & Biochem, Dept Pharmaceut, A Kovacica 1, HR-10000 Zagreb, Croatia  
*Comb Chem High Throughput Scr* 2007 **10** (5) 358  
 Screening of mucoadhesive microparticles containing hydroxypropyl- $\beta$ -cyclodextrin for the nasal delivery of risperidone  
 Kikuzawa A, Kida T, Akashi M// Osaka Univ, Grad Sch Engn, Dept Appl Chem, 2-1 Yamadaoka, Osaka 565 0871, Japan  
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