

References

1. Li Q, Dunn ET, Grandmison EW, et al. Applications and Properties of Chitosan. *J Bioact Compat Polym* 1992; 7: 370–397.
2. Struszczyk MH. Chitin and Chitosan: Part I. Properties and production. *Polimery* 2002; 47: 316–325.
3. Minke R, Blackwell J. The Structure of α -Chitin. *J Mol Biol* 1978; 120: 167–181.
4. Wawro D, Stęplewski W, Komisarczyk A, Krucińska I. Formation and Properties of Highly Porous Dibutyrylchitin Fibres Containing Nanoparticles. *FIBRES & TEXTILES in Eastern Europe* 2013; 21, 4(100): 31-37.
5. Chilarski A, Szosland L, Krucińska I, et al. Non-Wovens made from Dibutyrylchitin as Novel Dressing Materials Accelerating Wound Healing. In: H. Struszczyk, A. Domard, M. G. Peter HP (ed) *Proceedings of 6th International Conference of the European Chitin Society, EUCHIS'04*. 2004.
6. Błasińska A, Krucińska I, Chrzanowski M. Dibutyrylchitin Nonwoven Biomaterials Manufactured Using Electrospinning Method. *FIBRES & TEXTILES in Eastern Europe* 2004, 12, 4(48): 51–55.
7. Błasińska A, Mikołajczyk T. Wet Spinning of Dibutyrylchitin Fibres from Ethanol Solution. *FIBRES & TEXTILES in Eastern Europe* 2005, 13, 6(54): 36-40.
8. Błasińska A, Trębska I, Krucińska I. Preliminary Assessment of Sorption Capabilities of Nonwoven Dressing Materials. *Prog Chem Appl Chit Deriv* 2003; IX: 169.
9. Chilarski A, Krucinska I, Kiekens P, et al. Novel Dressing Materials Accelerating Wound Healing Made from Dibutyrylchitin. *FIBRES & TEXTILES in Eastern Europe* 2007 15, 4(63): 77–81.
10. Struszczyk MH. Chitin And Chitosan: Part III. Some Aspects of Biodegradation and Bioactivity. *Polimery* 2002; 47: 619–629.
11. Shahidi F, Abuzaytoun R. Chitin, Chitosan, and Co-Products: Chemistry, Production, Applications, and Health Effects. *Adv Food Nutr Res* 2005; 49: 93–135.
12. Swatloski RP, Spear SK, Holbrey JD, et al. Dissolution of Cellulose with Ionic Liquids. *J Am Chem Soc* 2002; 124: 4974–4975.
13. Wu Y, Sasaki T, Irie S, et al. A Novel Biomass-Ionic Liquid Platform for the Utilization of Native Chitin. *Polymer (Guildf)* 2008; 49: 2321–2327.
14. Qin Y, Lu X, Sun N, et al. Dissolution or Extraction of Crustacean Shells Using Ionic Liquids to Obtain High Molecular Weight Purified Chitin and Direct Production of Chitin Films and Fibers. *Green Chem* 2010; 12: 968–971.
15. Wasserscheid P, Welton T. *Ionic Liquids In Synthesis*. John Wiley & Sons, 2008.
16. Aparicio S, Atilhan M, Karadas F. Thermophysical Properties of Pure Ionic Liquids: Review of Present Situation. *Ind Eng Chem Res* 2010; 49: 9580–9595.
17. Hallett JP, Welton T. Room-Temperature Ionic Liquids: Solvents for Synthesis and Catalysis. 2. *Chem Rev* 2011; 111: 3508–3576.
18. Freemantle M. Designer Solvents. *Chem Eng News Arch* 1998; 76: 32–37.

19. Mallakpour S, Dinari M. Ionic Liquids as Green Solvents: Progress and Prospects BT - Green Solvents II: Properties and Applications of Ionic Liquids. In: Mohammad A, Inamuddin D (eds). Dordrecht: Springer Netherlands, pp. 1–32.
20. Welton T. Room-Temperature Ionic Liquids. Solvents for Synthesis and Catalysis. *Chem Rev* 1999; 99: 2071–2083.
21. Wasserscheid P, Keim W. Ionic Liquids - New 'Solutions' for Transition Metal Catalysis. *Angew Chemie Int Ed* 2000; 39: 3772–3789.
22. Wishart JF. Energy Applications of Ionic Liquids. *Energy Environ Sci* 2009; 2: 956–961.
23. Minami I. Ionic Liquids In Tribology. *Molecules (Basel, Switzerland)* 2009; 14: 2286–2305.
24. Anderson JL, Armstrong DW, Wei G. Ionic Liquids in Analytical Chemistry. *Anal Chem* 2006; 78: 2892.
25. Stolarska O, Pawlowska-Zygarowicz A, Soto A, et al. Mixtures of Ionic Liquids as More Efficient Media for Cellulose Dissolution. *Carbohydr Polym* 2017; 178: 277–285.
26. Chowdhury ZZ, Bee S, Hamid A, et al. Catalytic Role of Ionic Liquids for Dissolution and Degradation of Biomacromolecules. *BioresourcesCom* 2014; 9: 1787–1823.
27. Clough MT, Geyer K, Hunt PA, et al. Ionic Liquids: not always Innocent Solvents for Cellulose. *Green Chem* 2015; 17: 231–243.
28. Wang W-T, Zhu J, Wang X-L, et al. Dissolution Behavior of Chitin in Ionic Liquids. *J Macromol Sci Part B* 2010; 49: 528–541.
29. Kadokawa J, Takegawa A, Mine S, et al. Preparation of Chitin Nanowhiskers Using an Ionic Liquid and their Composite Materials with Poly(Vinyl Alcohol). *Carbohydr Polym* 2011; 84: 1408–1412.
30. Kadokawa J-I. Ionic Liquid as Useful Media for Dissolution, Derivatization, and Nanomaterial Processing of Chitin. *Green Sustain Chem* 2013; 03: 19–25.
31. Setoguchi T, Kato T, Yamamoto K, et al. Facile Production of Chitin from Crab Shells Using Ionic Liquid and Citric Acid. *Int J Biol Macromol* 2012; 50: 861–864.
32. Mundsinger K, Müller A, Beyer R, et al. Multifilament Cellulose/Chitin Blend Yarn Spun from Ionic Liquids. *Carbohydr Polym* 2015; 131: 34–40.
33. Chakravarty J, Rabbi MF, Bach N, et al. Fabrication of Porous Chitin Membrane Using Ionic Liquid and Subsequent Characterization and Modelling Studies. *Carbohydr Polym* 2018; 198: 443–451.
34. King C, Shamshina JL, Gurau G, et al. A Platform for More Sustainable Chitin Films from an Ionic Liquid Process. *Green Chem* 2017; 19: 117–126.
35. Jaworska MM, Górak A, Zdunek J. Modification of Chitin Particles with Ionic Liquids Containing Ethyl Substituent in a Cation. *Adv Mater Sci Eng*; 2017. Epub ahead of print 2017. DOI: 10.1155/2017/3961318.
36. Barber PS, Griggs CS, Bonner JR, et al. Electrospinning of Chitin Nanofibers Directly from an Ionic Liquid Extract of Shrimp Shells. *Green Chem* 2013; 15: 601–607.
37. Stawski D, Rabiej S, Herczyńska L, et al. Thermogravimetric Analysis of Chitins of Different Origin. *J Therm Anal Calorim* 2008; 93: 489–494.

38. Muzzarelli RAA. Biomedical Exploitation of Chitin and Chitosan via Mechano-Chemical Disassembly, Electrospinning, Dissolution in Imidazolium Ionic Liquids, and Supercritical Drying. *Mar Drugs* 2011; 9: 1510–1533.
39. Jaworska M, Górak A. Modification of Chitin Particles with Chloride Ionic Liquids. *Mater Lett* 2016; 164: 341–343.
40. Medeiros ES, Glenn GM, Klamczynski AP, et al. Solution Blow Spinning: A New Method to Produce Micro- and Nanofibers from Polymer Solutions. *J Appl Polym Sci* 2009; 113: 2322–2330.
41. Krucinska I, Komisarczyk A, Paluch D, et al. The Impact of the Dibutylchitin Molar Mass on the Bioactive Properties of Dressings Used to Treat Soft Tissue Wounds. *J Biomed Mater Res Part B Appl Biomater* 2012; 100B: 11–22.
42. Roberts GAF. *Chitin Chemistry*. London: Macmillan Education UK, 1992.
43. Ratajska M, Struszczyk MH, Boryniec S, et al. The Degree of Acetylation of Chitosan: Optimization of the IR Method. *Polimery/Polymers* 1997; 42: 572–575.
44. Kasaii MR. A Review of Several Reported Procedures to Determine the Degree of N-Acetylation for Chitin and Chitosan Using Infrared Spectroscopy. *Carbohydr Polym* 2008; 71: 497–508.
45. Rabiej M. A Hybrid Immune-Evolutionary Strategy Algorithm for the Analysis of the Wide-Angle X-Ray Diffraction Curves of Semicrystalline Polymers. *J Appl Crystallogr* 2014; 47: 1502–1511.
46. Hindeleh AM, Johnson DJ. Crystallinity and Crystallite Size Measurement in Polyamide and Polyester Fibers. *Polymer (Guildf)* 1978; 27–32.
47. Uto T, Idenoue S, Yamamoto K, et al. Understanding Dissolution Process of Chitin Crystal in Ionic Liquids: Theoretical study. *Phys Chem Chem Phys*. Epub ahead of print 2018. DOI: 10.1039/c8cp02749h.
48. Ma Q, Gao X, Bi X, et al. Dissolution and Deacetylation of Chitin in Ionic Liquid Tetrabutylammonium Hydroxide and its Cascade Reaction in Enzyme Treatment for Chitin Recycling. *Carbohydr Polym*. Epub ahead of print 2020. DOI: 10.1016/j.carbpol.2019.115605.
49. Paulino AT, Simionato JI, Garcia JC, et al. Characterization of Chitosan and Chitin Produced from Silkworm Crystals. *Carbohydr Polym* 2006; 64: 98–103.
50. Jaworska M, Tomasz K, Andrzej G. Review of the Application of Ionic Liquids as Solvents for Chitin. *Journal of Polymer Engineering* 2012; 32: 67.