- Xue P, et al. Electrically conductive yarns based on PVA/carbon nanotubes. Composite Structures 2007; 78(2): 271-277
- Xue P, Tao X.M. Morphological and electromechanical studies of fibers coated with electrically conductive polymer. *Journal of Applied Polymer Science* 2005; 98(4): 1844-1854.
- Post ER, Orth M. Smart fabric, or 'wearable clothing'. in Digest of Papers, First International Symposium on Wearbale Computers. 1997. Cambridge, USA: IFFF
- Baxter LK. Capacitive sensors: Design and Applications. 1996, New York: Wiley-IEEE Press.
- Abdulghani A, Casson A, Rodriguez-Villegas E. Quantifying the Feasibility of Compressive Sensing in Portable Electroencephalography Systems, in Foundations of Augmented Cognition. Neuroergonomics and Operational Neuroscience. Schmorrow D, Estabrooke I, Grootjen M. Editors 2009, Springer Berlin Heidelberg, 319-328.
- Eves SMD, et al. Wearbale electronics.
 Philips Research Intellegent Fiber Gr. 2001; 10: 4-9.
- Monika S, Muthukumar P. Wearable Technology of Soft Switch Application and Colour Changing Materials in Textile Industry. SSRG International Journal of Polymer and Textile Engineering 2014; 1(1): 20-23.
- Havich M. This shirt could save your life, in Textile World. 1999; Textile World: Georgia, USA.
- Roberts S. Intelligent garments facts or fictions, in Just style. 2000; Aroq Ltd.: United Kingdom.
- Lennox-Kerr, Current state of electrically conductive materials. High performance textiles, 1990. 11: 6-7.

- Ko F, et al. Electrospinning of continuous carbon nanotube filled nanofiber yarns. Advanced Materials 2003; 15(14): 1161-1165
- Liu X, et al. Polyelectrolyte-bridged metal/cotton hierarchical structures for highly durable conductive yarns. ACS applied materials & interfaces 2010; 2(2): 529-535.
- Vaia R, et al. Hierarchical control of nanoparticle deposition: high-performance electrically conductive nanocomposite fibers via infiltration. *Chemistry of Materials* 1998; 10(8): 2030-2032.
- Coessens V, Pintauer T, Matyjaszewski K. Functional polymers by atom transfer radical polymerization. *Progress in Poly*mer Science 2001; 26(3): 337-377.
- Dhandayuthapani B, et al. Polymeric scaffolds in tissue engineering application: a review. *International Journal of Polymer Science*, 2011.
- Okuzaki H, Harashina Y, Yan H. Highly conductive PEDOT/PSS microfibers fabricated by wet-spinning and dip-treatment in ethylene glycol. European Polymer Journal 2009; 45(1): 256-261.
- Muthukumar N. Govindarajan GT. Surface Resistivity and EMI Shielding Effectiveness of Polyaniline Coated Polyester Fabric. Journal of Textile and Apparel, Technology and Management 2012; 7(4): 1-6.
- Lock JP, Im SG, Gleason KK. Oxidative chemical vapor deposition of electrically conducting poly (3, 4-ethylenedioxythiophene) films. *Macromolecules* 2006; 39(16): 5326-5329.
- Knittel D, Schollmeyer E. Electrically high-conductive textiles. Synthetic Metals 2009; 159(14): 1433-1437.
- 22. Yang X, et al. Vapor phase polymerization of 3, 4-ethylenedioxythiophene on flexible substrate and its application on

- heat generation. *Polymers for Advanced Technologies* 2011; 22(6): 1049-1055.
- Jang J, Chang M, Yoon H. Chemical Sensors Based on Highly Conductive Poly (3, 4-ethylenedioxythiophene) Nanorods. Advanced Materials 2005; 17(13): 1616-1620.
- 24. Shim BS, et al. Smart electronic yarns and wearable fabrics for human biomonitoring made by carbon nanotube coating with polyelectrolytes. *Nano letters* 2008; 8(12): 4151-4157.
- Glass R, et al. Block copolymer micelle nanolithography on non-conductive substrates. New Journal of Physics 2004; 6(1): 101.
- Radetić M. Functionalization of textile materials with silver nanoparticles. *Journal of Materials Science* 2013; 48(1): 95-107.
- Zhang L, et al. A review: carbon nanofibers from electrospun polyacrylonitrile and their applications. *Journal of Materi*als Science 2014; 49(2): 463-480.
- Alivisatos P, et al. From molecules to materials: Current trends and future directions. Advanced Materials 1998; 10(16): 1297-1336.
- Xue C-H, et al. Superhydrophobic conductive textiles with antibacterial property by coating fibers with silver nanoparticles. Applied Surface Science 2012; 258(7): 2468-2472.
- Chou YH, et al. Recovery of Cu(II) by chemical reduction using sodium dithionite. *Chemosphere* 2015; 141: 183-8.
- 31. Dhawan A, et al. Woven Fabric-Based Electrical Circuits: Part II: Yarn and Fabric Structures to Reduce Crosstalk Noise in Woven Fabric-Based Circuits. *Textile Research Journal* 2004; 74(11): 955-960.

Received 20.10.2016 Reviewed 15.03.2017

