

## 6. Bibliografia

[1] M. Addington, Daniel L.Schodek, *Smart Materials and Technologies in Architecture*, pag 1-25, (2005).

[2] Ralph C. Smith, *Smart Material Systems: Model Development*, pag 1-20, (2005).

[3] T. OKANO and A. KIKUCHI, '*Intelligent biointerface: remote control for hydrophilic-hydrophobic property of the material surfaces by temperature*', Proceedings of the Third International Conference on Intelligent Materials, Third European Conference (1996).

[4]J. L. Hu, X. Ding, X. Tao, and J. Yu, *Treatment of textiles* ,Textile Asia, vol 32 n°12,pag 42, (2001).

[5]Y. Wan, and G. K Stylos, *The concepts of Aesthetic Intelligence of Textile Fabrics and their application for interior and apparel*, report from the School of Textiles, Heriot-Watt University, Scotland, (2006).

[6] V. topolkaraev, *Surface modification of microporous polyurethane membrane with poly(ethylene glycol) to develop a novel membrane*, Medical Textiles, n° 6, pag 307-315.(2004)

[7] J. V. Humbeeck, *On the adaptivity of shape memory polymers for use in adaptive materials*, Proceedings of the Third International Conference on Intelligent Materials, Lyon, pag 442–451,(1996).

[8] L. Janke, C. Czaderski 1, M. Motavalli 1 and J. Ruth, *Applications of shape memory alloys in civil engineering structures - Overview, limits and new ideas*, Materials and Structures, vol 38, pag 578-592, (2005).

[9] Y. Li, S. Chung, Li. Chan, and J. Hu, *SMP in textile*, Textile Asia, vol 35, n°6, pag 32-34, (2004).

[10] Y. SHUGO, *Advanced in textile*, Mater. Sci. Forum, n°631, pag 56, (1990).

- [11] M.R.Aguilar, C. Elvira, A. Gallardo, B. Vázquez, and J.S. Román, *Smart Polymers and Their Applications as Biomaterials*, Topics in Tissue Engineering, vol. 3, pag 1-27, (2007).
- [12] P. Lipscomb and L. D. M. Nokes, *The Application of Shape Memory polymers in Medicine*, Suffolk, pag 230-247, MEP (1996).
- [13] Campbell D., *Elastic Memory Composite Material: An Enabling Technology for Future Furable Space Structures*. In 46th, Structural Dynamics, and Materials Conference, Austin, pag 120-132, (2005).
- [14] H. Tobushi, H. Hara, E. Yamada, and S. Hayashi, *Proceedings of 3<sup>o</sup> Conference on Intelligent Materials*, Lyon, France, pag 418–423, (1996).
- [15] Inderjit Chopra, *Review of State of Art of Smart Structures and Integrated Systems*, aiaa journal, vol. 40, n° 11, pag 829-847, (2002).
- [16] Lendein A., Steffen K. , *Shape memory polymer* , Angew. Chem. Int. Ed. , vol 41, n°7, pag 2034-2057, (2002).
- [17] C. Liu, H. Qinb, P. T. Mather-J, *Review of progress in shape-memory polymers*, *J. Mater. Chem.*, n°17, pag 1543-1558, (2007).
- [18] D.Ratna, J.K. Kocsis, *Recent advances in shape memory polymers and composites a review*, *Mater. Sci.*, n°43, pag 254–269, (2008).
- [19] S.Miyazaki K.Otsuka, *Development of Shape Memory Alloys*, ISIJ International, vol.29, n°5, pag 353-377, (1989).
- [20] K.Otsuka, X.Ren, *Recent developments in the research of shape memory alloys*, *Intermetallics*, n°7, pag 511-528, (1999).
- [21] Z.Wei, R Sandstrom, S Miyazaki, *Shape-memory materials and hybrid composites for smart systems*, *Journal of Materials Science*, vol.33, n° 15, pag 3763-3783, (1999).
- [22] M.V.Swain, *Shape memory behaviour in partially stabilized zirconia ceramic*, *Nature*, n°322, pag 234-236, (1986).

- [23] Bertolini, L. Bolzoni, F. Cabrini, M. Pedefferri, P., *Tecnologia dei materiali. Ceramiche, polimeri e compositi*, pag 67-93, (2001).
- [24] M.T.Shaw, W.J.MacKnight, *Introduction to Polymer Viscoelasticity*, John Wiley & Son, pag 40-87, (1983).
- [25] Sergio Brückner, *Scienza e tecnologia dei materiali polimerici*, Pubblicato da Edises, pag 100-130, (2001).
- [26] A. Lendlein, A.M. Schmidt, M. Schroeter, R.Langer, *Shape-memory polymer networks from oligo(-ε-caprolactone)dimethacrylates*, *Journal of Applied Polymer Science*, vol. 43, n°7, pages 1369-1381, (2005).
- [27] Inderjit Chopra, *Review of State of Art of Smart Structures and Integrated Systems*, *aiaa journal*, vol. 40, n° 11, (2002).
- [28] J.Xu a, W. Shi a, W.Pang, *Synthesis and shape memory effects of Si–O–Si cross-linked hybrid polyurethanes*, *Polymer*, n°47, pag 457–465, (2005).
- [29] C. Liu, H. Qinb, P. T. Mather-J, *Review of progress in shape-memory polymers*, *Journal of Materials Chemistry*, n°17, pag 1543-1558, (2007).
- [30] M Shahinpoor, *Ionic polymer-metal composites (IPMCs) as biomimetic sensors, actuators and artificial muscles a review*, *Smart Materials Structure*, n°7, pag 15-30, (1998).
- [31] C. Min, W.Cui, J. Bei, S. Wang, *Effect of comonomer on thermal/mechanical and shape memory property of L-lactide-based shape-memory copolymers*, *Polymers for advanced technologies*, n°8, pag 860-865, (2006).
- [32] Marc Behl and Andreas Lendlein, *Shape memory polymers*, *Material Today*, vol. 10, n° 4, pag 675-684, (2007).
- [33] Sanjay K. Mazumdar, *Composites Manufacturing Materials*, *Product, and Process Engineering*, CRC Press, pag 207-260, (2002).
- [34] Y.Wing M.Z.Zhen, *Polymer nanocomposites*, *The Institute of Materials, Minerals & Mining*, CRC Press, pag 350-368, (2006).

- [35] K.Gall, M.L. Dunn, Y.Liu, *Internal stress storage in shape memory polymer nanocomposites*, Applied Physics Letters, vol.85, n° 2, pag 534-547, (2006).
- [36] K.Gall, Martin L. Dunn, Y. Liu, D.Finch, M.Lake, N.A.Munshi, *Shape memory polymer nanocomposites*, Acta Materialia, n°50, pag 5115–5126, (2002).
- [37] Sanjay K. Mazumdar, *Composites Manufacturing-Materials, Product and Process Engineering*, CRC Press LLC, pag 128-145, (2002).
- [38] Jae Whan Cho, Sun Hwa Lee, *Influence of silica on shape memory effect and mechanical properties of polyurethane–silica hybrids*, European Polymer Journal, vol 40, pag 1343–1348, (2004).
- [39] Yiu-Wing Mai and Zhong-Zhen Yu, *Polymer Nanocomposites*, CRC press LLC, (2006).
- [40] V. A. Beloshenko, Ya. E. Beigelzimer, A. P. Borzenko, and V. N. Varyukhin *Shape-memory effect in polymer composites with a compactible filler*, Mechanics of Composite Materials, vol. 39, n° 3, (2003).
- [41] *Polimeri nano compositi*, Business Communications Co. Inc, Du Pont, General Electric, General Motors,Honda, Bins & Associates, (2006).
- [42] Q.Ni, Chun-sheng Z., Y.Fu, G. Dai, T.Kimura, *Shape memory effect and mechanical properties of carbon nanotube/shape memory polymer nanocomposites*, Composite Structures, n°81, pag 176–184, (2007).
- [43] S. Mondal, J.L.Hu, *Shape Memory Studies of Functionalized MWNT-reinforced Polyurethane Copolymers*, Iranian Polymer Journal, vol 15, n°2, pag 135-142, (2006).
- [44] J.Leng,H. Lv, Y.Liu,S. Du,Electroactivate shape-memory polymer filled with nanocarbon particles and short carbon fibers, applied physics letters, n°91, pag 135-144, (2007).
- [45] X.Zheng, S. Zhou, X. Li, J.Weng,*Shape memory properties of poly(D,L-lactide)/hydroxyapatite composites*, Biomaterials, n°27, pag 4288–4295, (2006).

- [46] Guobao Wei, Peter X. Ma, *Structure and properties of nano-hydroxyapatite/polymer composite scaffolds for bone tissue engineering*, *Biomaterials*, vol 25, pag 4749–4757, (2004).
- [47] Subrata Mondal and Jin Lian Hu, *Shape Memory Studies of Functionalized MWNT-reinforced Polyurethane Copolymers*, *Iranian Polymer Journal*, vol 15, n°2, pag 135-142, (2006).
- [48] Qing-Qing Ni, Chun-sheng Zhang, Yaqin Fu, Guangze Dai, Teruo Kimura, *Shape memory effect and mechanical properties of carbon nanotube/shape memory polymer nano-composites*, *Composite Structures*, n° 81, pag 176–184, (2007).
- [49] C.S.Zhang, Q.Q.Ni, *Bending behavior of shape memory polymer based laminates*, *Composite Structures*, n°78, pag 153–161, (2007).
- [50] Y.Liu, K.Gall, M.L. Dunn, A.R. Greenberg, J. Diani, *Thermomechanics of shape memory polymers: Uniaxial experiments and constitutive modeling*, *International Journal of Plasticity*, n°22, pag 279–313, (2006).
- [51] S. Rezanejad, M.Kokabi, *Shape memory and mechanical properties of cross-linked polyethylene/clay nanocomposites*, *M.N.*, *European Polymer Journal*, n°43, pag 2856–2865, (2007).
- [52] Y.Liu, K. Gall, M.L. Dunn, P. McCluskey, *Thermomechanics of shape memory polymer nanocomposites*, *Mechanics of Materials*, n°36, pag 929–940, (2004).
- [53] T.Ohki, Qing-Qing Ni, N.Ohsako, M. Iwamoto, *Mechanical and shape memory behavior of composites with shape memory polymer*, *Composites: Part A* n°35, pag 1065–1073, (2004).
- [54] T. Hisaaki, O. Kayo, H. Shunichi, I. Norimitsu, *Thermomechanical constitutive model of shape memory polymer*, vol. 33, n°10, pag 545-554, (2001).
- [55] Morshedian, J., et al., *Macromolecular Theory Simulations.*, pag 217–224, (1998).
- [56] Elisa Zini and Mariastella Scandola, *Shape Memory Behavior of Novel (L-Lactide-Glycolide-Trimethylene Carbonate) Terpolymers*, *Biomacromolecules*, vol.8, n°11, pag 3661 -3667, (2007).

- [57] Piotr Dobrzynski\*, Malgorzata Pastusiak, Maciej Bero, *Less toxic acetylacetonates as initiators of trimethylene carbonate and 2,2-dimethyltrimethylene carbonate ring opening polymerization*, Journal of Polymer Science, vol.43, n° 9, pag 1913–1922, (2004).
- [58] Piotr Dobrzynski, Janusz Kasperczyk, *Synthesis of biodegradable copolymers with low-toxicity zirconium compounds. V. Multiblock and random copolymers of L-lactide with trimethylene carbonate obtained in copolymerizations initiated with zirconium(IV) acetylacetonate*, Journal of Polymer Science, vol.44, n° 10, pag 3184 – 3201, (2006).
- [59] Piotr Dobrzynski, *Mechanism of  $\epsilon$ -caprolactone polymerization and  $\epsilon$ -caprolactone/TMC copolymerization carried out with  $Zr(Acac)_4$* , Polymer xx, pag 1-17, (2007).
- [60] Piotr Dobrzynski, *Initiation Process of L-Lactide Polymerization carried out with Zirconium(IV) Acetylacetonate*, Journal of polymer science: Part A: polymer chemistry, vol 42, pag 1886-1900, (2004).
- [61] Angelika Basc, Roger Horn and Jürgen O. Besenhard, *Substrate induced coagulation (SIC) of nano-disperse carbon black in non-aqueous media: the dispersibility and stability of carbon black in N-methyl-2-pyrrolidinone*, Colloids and Surfaces A: Physicochemical and Engineering Aspects vol.253, n°1-3, pag 155-161, (2005).
- [62] C.Kormann, D. W. Bahnemann, M. R. Hoffmann, *Preparation and Characterization of Quantum-Size Titanium Dioxide*, Journal. Physics. Chemistry, n°92, pag 5196-5201, (1988).
- [63] Brian L. Cushing, V.L. Kolesnichenko, C.J. O'Connor, *Recent Advances in the Liquid-Phase Syntheses of Inorganic Nanoparticles*, Chem. Rev, n°104, pag 3893-3946, (2004).
- [64] K.Nitin, L.Shawna M., *Methods to disperse and exfoliate nanoparticles*, Patent WO 2007/0011394 PCT/US2005/037379, pag 1-27, (2007).
- [65] Thomas Hielsher, *Ultrasonic production of nano-size dispersion and emulsion*, pag 1-10, (2005).

[66] Pohl M., Shbert H., *Dispersion and deagglomeration of nanoparticles in aqueous solution*, Partec, pag 1830-1847, (2004).

[67] Angelika Basc, Roger Horn and Jürgen O. Besenhard, *Substrate induced coagulation (SIC) of nano-disperse carbon black in non-aqueous media: the dispersibility and stability of carbon black in N-methyl-2-pyrrolidinone*, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Vol.253, n°1-3, pag 155-161, (2005)