

REFERÊNCIAS BIBLIOGRÁFICAS

- [1] GLEITER, H. Materials with ultrafine microstructures: Retrospective and Perspectives. **Nanostructured Materials**, vol. 1, n. 5, p. 01-19, 1992.
- [2] SUNDARARAMAN, D. Nanocrystalline state and solid state amorphization. **Materials Science and Engineering**, B 32, p. 307-313, 1995.
- [3] GLEITER, H. Nanostructured materials: State of the art and perspectives. **Nanostructured Materials**, vol. 6, p. 03-14, 1995.
- [4] BIRRINGER, R. Nanocrystalline materials. **Materials Science and Engineering**, A 117, p. 33-43, 1989.
- [5] CHEN, Y.; CHAN, H. L. W.; CHOY, C. L. J. Nanocrystalline lead titanate and lead titanate / vinylidene fluoride – trifluoroethylene 0-3 nanocomposites. **Am. Ceram. Soc.**, vol. 81, n. 5, p. 1231-1236, 1998.
- [6] LU, K. Nanocrystalline metas crystallized from amorphous solids: nanocrystallization, structure, and properties. **Materials Science and Engineering**, R 16, p. 161-221, 1996.
- [7] INOUE, A.; SAIDA, J.; MASUMOTO, T. Formation of ultra-fine amorphous powders in Fe-M-B (M = transition metal) systems by chemical reduction method and their thermal and magnetic properties. **Metallurgical Transaction A**, vol. 19A, p. 2315-2318, 1988.

- [8] SAIDA, J.; INOCUE, A.; MASUMOTO, T. Preparation of ultrafine amorphous powders by the chemical reduction method and the properties of their sintered products. **Materials Science and Engineering**, A 133, p. 771-774, 1991.
- [9] KULIK, T.; HORUBALA, T.; MATYJA, A. Flash annealing nanocrystallization of Fe-Si-B-based glasses. **Materials Science and Engineering**, A 157, p. 107-112, 1992.
- [10] YOSHIZAWA, Y.; OGUMA, S.; YAMAUCHI, K. New Fe-based soft magnetic alloys composed of ultrafine grain structure. **Journal Applied Physical**, vol. 64, n. 10, p. 6044-6046, 1988.
- [11] SIEGEL, R. W.; EASTMAN, J. A. Multicomponent ultrafine microstructures. **Mat. Res. Soc. Symp. Proc.**, n. 132, p. 03-07, 1989.
- [12] AVERBACK, R. S. et al. Sintering and grain growth in nanocrystalline ceramics. **Nanostructured Materials**, vol. 1, n. 1, p. 173-178, 1992.
- [13] MELENDRES, C. A. et al. Raman spectroscopy of nanophase TiO₂. **Journal of Materials Research**, vol. 4, n. 5, p. 1246-1250, 1989.
- [14] ARTZ, E.; SCHULTZ, L. New materials by mechanical alloying techniques. **Deutsch Gesellschaft Metallkunde**, Information Gessellschaft Verlag, 1989.
- [15] CIFTCIOGLU, M.; MAYO, M. J. Superplastic deep drawing of tetragonal zirconia ceramics at 1160°C. **Mat. Res. Soc. Symp. Proc.**, n. 196, p. 77-82, 1990.
- [16] SURYANARAYANA, C. Nanocrystalline materials. **International Materials Reviews**, vol. 40, n. 2, p.41-64, 1995.
- [17] BAKKER, H.; ZHOU, G. F.; YANG, H. Mechanically driven desorder and phase transformations in alloys. **Progress in Materials Science**, vol. 39, p. 159-241, 1995.

- [18] WANG, J. et al. Mechanochemical synthesis of 0,9 Pb(Mg_{1/3}Nb_{2/3})O₃ – 0,1 PbTiO₃ from mixed oxides. **Adv. Mater.**, vol. 11, n. 3, p. 210-213, 1999.
- [19] SUBRT, J. et al. Preparation of nanosized hematite particles by mechanical activation of goethite samples. **J. Am. Ceram. Soc.**, vol. 83, n. 2, p. 294-298, 2000.
- [20] HUANG, J. Y.; YASUDA, H.; MORI, H. HRTEM and EELS studies on the amorphization of hexagonal boron nitride induced by ball milling. **J. Am. Ceram. Soc.**, vol. 83, n. 2, p. 403-409, 2000.
- [21] HUANG, B. L.; LAVERNIA, E. J. Materials synthesis by mechanical alloying. **Journal of Materials Synthesis and Processing**, vol. 3, n. 1, p. 01-10, 1995.
- [22] MAURRICE, D. R.; COURTNEY, T.H. The physics of mechanical alloying: A first report. **Metallurgical Transaction A**, vol. 21A (2), p. 289-303, 1990.
- [23] KOCH, C. C. The synthesis and structure of nanocrystalline materials produced by mechanical attrition: A review. **Nanostructured Materials**, vol. 2, p. 109-129, 1993.
- [24] BECKER, J. E. **Attrition mill fine grinding of advanced ceramic powders:** Technical Paper, EM 87-109. Dearbon, Michigan: SME, 1997. P. EM 87-109-2.
- [25] CHIANG, Y. M.; BIRNE III, D.; KINGERY, W. D. Principles for ceramic science and engineering: **Physical Ceramics**. New York, John Wiley & Sons, 1997. Cap. 01, p. 38-39: Structure of Ceramics.
- [26] JAFFE, B.; COOK Jr., W. R.; JAFFE, H. **Piezoelectric ceramics**. London, Academic Press Inc., 1971. 453p.
- [27] WRIGHT, J.S.; FRANCIS, L. F. J. Phase development in Si modified sol-gel-derived lead titanate. **Materials Res.**, vol. 8, n. 7, p. 1712-1716, 1993.

- [28] MEIDONG, L.; PEIYING, W.; GUOAN, W.; YUNHUA, R. The preparation of PbTiO₃ thin films by sol-gel processing. **Sensors and Actuators A**, n. 35, p. 259-263, 1993.
- [29] SHIRANE, G.; PEPINSKY, R. X-ray and neutron diffraction study of ferroelectric PbTiO₃. **Acta Cryst.**, n. 9, p. 131-135, 1956.
- [30] ROSSETTI Jr., G. A.; CLINE, J. P.; NAVROTSKY, A. Phase transition energetics and thermodynamic properties of ferroelectric PbTiO₃. **J. Mater. Res.**, vol. 13, n. 11, p. 3197-3200, 1998.
- [31] HIRAKATA, K.; RHINE, W. E.; CIMA, M. J. Surface chemistry of lead titanate and its impact on binder removal. **J. Am. Ceram. Soc.**, vol. 79, n. 4, p. 1002-1006, 1996.
- [32] GURKOVICH, S. R.; BLUM, J. B. **Ultrastructure processing of ceramics, glasses and composites**. New York, John Wiley & Sons, 1984. 252p.
- [33] CARPER, M. D.; PHULÉ, P. P. Preparation of oriented PbTiO₃ thin films using a spin-on sol-gel process. **Appl. Phys. Lett.**, n. 63, p. 153-155, 1993.
- [34] SAFARI, A. et al. O-3 piezoelectric composites prepared by coprecipitated PbTiO₃ powder. **Am. Ceram. Soc. Bull.**, vol. 66, n. 4, p. 668-671, 1987.
- [35] MILLAR, C. E.; PEDERSEN, L.; WOLNY, W. W. Hydrothermally processed piezoelectric and electrostrictive ceramics. **Ferroelectrics**, n. 133, p. 271-279, 1992.
- [36] MOON, J. et al. Low temperature synthesis of lead titanate by a hydrothermal method. **J. Mater. Res.**, vol. 12, n. 1, p. 189-195, 1997.
- [37] PECHINI, M. P. Method of preparing lead and alkaline earth titanates and niobates and coating method using the same to form a capacitor. U. S. Patent N.^o 3330697, 1967.

- [38] PARIS, E. C. et al. Synthesis of PbTiO₃ by use of polymeric precursors. **Materials Letters**, n. 37, p. 01-05, 1998.
- [39] LEITE, E. R. et al. Influence of polymerization on the synthesis of SrTiO₃: Part 1. Characterization of the polymeric precursor and their thermal decomposition. **Ceram. Int.**, n. 21, p. 143-147, 1995.
- [40] PARIS, E. C. **Estudo de pós cerâmicos de PbTiO₃ utilizando-se o método dos precursores poliméricos**. São Carlos, 2000. 88 p. Dissertação (Mestrado) – Programa de Pós-Graduação em Química, Universidade Federal de São Carlos, São Paulo.
- [41] MIELENZ, K. D. **Measurement of photoluminescence**. New York, Academic Press Inc., 1982. Cap. 01, p. 02-04. Photoluminescence spectrometry.
- [42] GARLICK, G. F. J. **Luminescent materials**. London, Oxford: Oxford University Press, 1949. 254p.
- [43] GOLDBERG, P. **Luminescence of Inorganics Solids**. New York, Academic Press Inc., 1966. 765p.
- [44] LUMB, M. D. **Luminescence Spectroscopy**. London, Academic Press Inc., 1978. 375p.
- [45] BLASSE, G.; GRABMAIER, B. C. **Luminescent Materials**. Berlin, Springer – Verlag, 1994. 232p.
- [46] CULLITY, B. D. **Elements of X-ray Diffraction**. 2.ed., Reading, Massachussets, Addison Wesley Publishing Company, 1978. Cap. 09, p. 281-285: Structure of Polycrystalline Aggregates.
- [47] CANHAM, L. T. Silicon quantum wire array fabrication by electrochemical and chemical dissolution of wafers. **Appl. Phys. Lett.**, vol. 57, n. 10, p. 1046-1048, 1990.

- [48] PIZANI, P. S. et al. Photoluminescence of disordered ABO_3 perovskites. **Appl. Phys. Lett.**, vol. 77, n. 6, p. 824-826, 2000.
- [49] LEITE, E. R. et al. Amorphous lead titanate: A new wide-band gap semiconductor with photoluminescence at room temperature. **Adv. Mater. Opt. Electron**, n. 10, p. 235-240, 2000.
- [50] WOOD, D. L.; TAUC, J. Weak absorption tails in amorphous semiconductors. **Phys. Review B**, vol. 5, n. 8, p. 31443151, 1972.

APÊNDICE

A seguir são apresentadas as publicações feitas durante o desenvolvimento deste trabalho:

1 – Congressos nacionais

- Santos, L. P. S.; Leite, E. R.; Carreño, N. L. V.; Longo, E.; Paskocimas, C. A.; Varela, J.A.; Lanciotti Jr., F.; Campos, C. E. M.; Pizani, P. S. Estudo da amorfização do PbTiO₃ pelo processo de moagem mecânica de alta energia, 14º CBECIMat, São Pedro – SP, 2000.
- Santos, L. P. S.; Leite, E. R.; Carreño, N. L. V.; Longo, E.; Paskocimas, C. A.; Varela, J.A.; Lanciotti Jr., F.; Campos, Pizani, P. S. Efeito do tamanho das esferas sobre a eficiência do processo de moagem de alta energia, 45º Congresso Brasileiro de Cerâmica, Florianópolis – SC, 2001.

2 – Artigos

- Leite, E. R.; Santos, L. P. S.; Carreño, N. L. V.; Longo, E.; Paskocimas, C. A.; Varela, J.A.; Lanciotti Jr., F.; Campos, C. E. M.; Pizani, P. S. Photoluminescence of nanostructured PbTiO₃ processed by high-energy mechanical milling. *Appl. Phys. Lett.*, 78 (15), 2148-2150 (2001).
- Lanciotti Jr., F.; Campos, C. E. M.; Pizani, P. S.; Santos, L. P. S.; Leite, E. R.; Carreño, N. L. V.; Longo, E. Amorphization and grain size effect on milled PbTiO₃ studied by Raman scattering and visible photoluminescence emission. *Appl. Phys. A.* 74 (6), 787 – 789, 2002.