

AGRAWAL, G. P. **Fiber-Optic Communication Systems**. 2.ed. United States of America: John Wiley&Sons, Inc., 1997. 554p.

AKEDO, K.; FUJIKAWA, H.; SUZUKI, M.; TAGA, Y. Highly Insulated SrTiO₃ Thin Films. **IEEE**, p. 970-973. 1999.

ANG, C.; YU, Z.; CROSS, L; GUO, R.; BHALLA A. S. Dielectric relaxation and conduction in SrTiO₃ thin films under dc bias. **Applied Physics Letters**, v. 79, p. 818-820, agosto. 2001.

BANIECKI, J. D.; LAIBOWITZ, R. B.; SHAW, T. M.; DUNCOMBE, P. R.; NEUMAYER, D. A.; KOTECHI, D. E.; SHEN H.; MIA, Q.Y. Dielectric relaxation of Ba_{0.7}Sr_{0.3}TiO₃ thin films for 1mHz to 20 GHz. **Applied Physics Letters**, v. 72, p. 498-500, janeiro. 1998.

BRAY, J. R.; ROY L. Microwave Characterization of a Microstrip Line Using a Two-Port Ring Resonator With an Improved Lumped-Element Model. **IEEE Transactions on Microwave Theory and Techniques**, v. 51, p. 1540-1547, maio. 2003.

BUESSEM, W.R.; CROSS, L.E.; GOSWAMI, A.K. **J. Am. Ceram. Soc.** 49 (33) 1966.

CARROLL, K R.; POND, J. M.; CHRISEY, D. B.; HORWITZ, J. S.; LEUCHTNER, R. E.; GRABOWSKI, K. S. Microwave measurement of the

dielectric constant of $\text{Sr}_{0.5}\text{Ba}_{0.5}\text{TiO}_3$ ferroelectric thin films. **Applied Physics Letters**, v. 62, p. 1845-1847, abril. 1993.

CARTELEDGE, J. C.; BURLEY, G. S. The Effect of Laser Chirping on Lightwave System Performance, **Journal of Lightwave Technology**, v. 7, n. 3, p. 568-573, março. 1989.

CARVALHO, M. C. R.; MARGULIS, W. Transmission Line Transformer. **Electronics Letters**, v. 27, p. 138-139, janeiro. 1991.

CARVALHO, M. C. R.; MARGULIS, W. Laser Diode Pumping with a Transmission Line Transformer. **IEEE Microwave and Guided Wave Letters**, v. 1, p. 368-370, dezembro. 1991.

CARVALHO, M. C. R. **Estudo sobre lasers semicondutores em regime de picossegundo**. 1991. 256p. Tese de doutorado - PUC-Rio.

CARVALHO, M. C. R.; MARGULIS, W.; SOUZA, J. R. A New, Small-Sized Transmission Line Impedance Transformer, with Applications in High-Speed Optoelectronics. **IEEE Microwave and Guided Wave Letters**, v. 2, p. 428-430, novembro. 1992.

CARVALHO, M. C. R.; MARGULIS, W.; SOUZA, J. R. Microstrip-Slot and Coplanar Waveguide-Slot Lines with very High Dielectric Constant Substrates for Application in High-Speed Optoelectronics. **Microwave and Optical Technology Letters**, v. 7, p. 849-852, dezembro. 1994.

CARVALHO, M. C. R.; CONRADO, L. F. M. Ultra-short pulse propagation in arbitrarily terminated tapered planar lines for optoelectronics applications. **Microwave and Optical Technology Letters**, v. 22, p. 85-86, julho. 1999.

CARVALHO, M. C. R.; CONRADO, L. F. M.; DEMENICIS, L. S.; SEIXAS, D. L. A. Propagation characteristics of transmission line transformers with different

impedance variation patterns on substrates with very high dielectric constant. **Microwave and Optical Technology Letters**, maio. 2003.

CHANG, W. et al. The effect of annealing on the microwave properties of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{TiO}_3$ thin films. **Applied Physics Letters**, v. 74, p. 1033-1035, fevereiro. 1999.

CHEN, R.; CUI A.; WANG X.; LI, L. Barium Titanate coated with magnesium titanate via fused salt method and its dielectric property. **Materials Science and Engineering B**, abril. 2003.

COLLIN, R. E. **Foundations for microwave engineering**. 2 ed. - Singapore, McGraw-Hill International Editions 1992. 924p.

CONRADO, Luiz Fernando Martins. **MARTINS - Versão 4.11 - Guia do Usuário**. Centro de Estudos em Telecomunicações da Pontifícia Universidade Católica. Rio de Janeiro. 1996.

DALBERTH, M J.; STAUBER, R. E.; PRICE, J. C.; ROGERS, C. T.; GALT, D. Improved low frequency and microwave dielectric response in strontium titanate thin film grown by pulsed laser ablation. **Applied Physics Letters**, v. 72, p. 507-509, janeiro. 1998.

DEMENICIS, L. S., CONRADO, L. F., SEIXAS, D. L. A., MARGULIS, M. C. R., CARVALHO, M. C. R. Influence of transmission line transformer on the propagation characteristics of short electrical pulses. International Microwave and Optoelectronics Conference 2003 (IMOC2003), 20 a 23 de setembro, 2003. Foz do Iguaçu. **Proceedings of the 2003 SBMO/IEEE MTT-S INTERNATIONAL MICROWAVE AND OPTOELECTRONICS CONFERENCE – IMOC 2003**, p. 413-416.

DEMENICIS, L. S., CONRADO, L. F., SEIXAS, D. L. A., MARGULIS, M. C. R., CARVALHO, M. C. R. Influence of a transmission line transformer in the performance of optical systems. International Microwave and Optoelectronics

Conference 2003 (IMOC2003), 20 a 23 de setembro, 2003. Foz do Iguaçu. **Proceedings of the 2003 SBMO/IEEE MTT-S INTERNATIONAL MICROWAVE AND OPTOELECTRONICS CONFERENCE – IMOC 2003**, p. 417-420.

ERICSSON (Brasil). Maria Cristina Ribeiro Carvalho, Luciene da Silva Demenicis, Luiz Fernando Martins Conrado, Daniele Alves Seixas e Walter Margulis. **Improved impedance-matching coupler**. Suécia P17077, 2003.

EUROPEAN COMMUNITIES. *Microwave Electronics with Tuneable Dielectric Layers* - CORDIS RTD-Projects. Disponível em: <[http://dbis.cordis.lu/cordis-cgi/srchidadb?ACTION=D&SESSION=187452002-919&DOC=7&TBL=EN_RCN:60987&...](http://dbis.cordis.lu/cordis/cgi/srchidadb?ACTION=D&SESSION=187452002-919&DOC=7&TBL=EN_RCN:60987&...)>. Acesso em: 15 jan. 2003.

FINDIKOGLU, A. T.; JIA Q. X.; REAGOR, D. W.; WU, X. D. Comparative study of broadband electrodynamic properties of single-crystal and thin-film strontium titanate. **Applied Physics Letter**, v. 75, p. 4189- 4191, dezembro. 1999.

GALT, D., RIVKINA T., CROMER, M. W., Microwave tuning quality and power handling of voltage-tunable capacitors: Semiconductor varactors vs. $\text{Ba}_{1-x}\text{Sr}_x\text{TiO}_3$, **Proc. Mater. Res. Soc. Fall 1977**, p. 341-347. 1998.

GEVORGIAN, S. S. et al. HTS/Ferroelectric Devices for Microwave Applications. **IEEE Transactions on Applied Superconductivity**, v. 7, p. 2458-2461, junho. 1997.

GEVORGIAN, S. S.; KOLBERG, E. L. Do We Really Need Ferroelectrics in Paraelectric Phase Only in Electrically Controlled Microwave Devices? **IEEE Transactions on microwave theory and techniques**, v. 49, p. 2117-2124, novembro. 2001.

GHIASI, A.; GOPINATH, A. Novel Wide-Bandwidth Matching Technique for Laser Diodes. **IEEE Transactions on Microwave Theory and Techniques**, v. 38, p. 673-675, maio. 1990.

GIBBONS, B J.; FINDIKOGLU, A. T.; JIA, Q. X.; REAGOR, D. W. Electrically Tunable Microwave Devices Prepared by RF-Magnetron Sputtering. **IEEE**, p. 201-204. 2001.

GILLICK, Matthew. X-Band Monolithic Power Amplifier Using Low Characteristic Impedance Thin-Film Microstrip Transformers. **IEEE Microwave and Guided Wave Letters**, v. 2, p. 328-330, agosto. 1992.

GILLICK, M.; ROBERTSON, I. D. Ultra Low Impedance CPW Transmission Lines for Multilayer MMIC's. **IEEE MTT-S Digest F-3**, p. 145-148. 1993.

GUPTA, K. C., GARG, R., BAHL, I. J. **Microstrip lines and slotlines**. Artech. Washington. 1979.

GUPTA, K. C., GARG, R., BAHL, I. J. **Microstrip lines and slotlines**. Artech. Washington. 1996.

HP AGILENT TECHNOLOGIES, **Manual do usuário do aplicativo HFSS 5.6 (High-Frequency Structure Simulator)**. HP Part No. 85180-90155, 2000.

HOFFMAN, R. K. **Handbook of Microwave Integrated Circuits**. Ed. Artech House. 1987.

HSIEH, L-H.; CHANG, K. Equivalent Lumped Elements G, L, C, and Unloaded Q's of Closed- and Open-Loop Ring Resonators. **IEEE Transactions on microwave theory and techniques**, v. 50, p. 453-460, fevereiro. 2002.

HSUE, Ching-Wen; HECHTMAN, C. D. Transient Responses of an Exponential Transmission Line and its Applications to High-Speed Backdriving in In-Circuit Test. **IEEE Transactions on Microwave Theory and Techniques**, v. 42, p. 458-461, março. 1994.

KAIN, A.Z. et al. Dielectric properties of SrTiO_3 thin films at low temperature. **IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY**, v. 3, p. 1421-1424, março. 1993.

KINOSHITA, K., YAMAJI, A., **J. Appl. Physics**, 47 (371), 1976.

KITTEL, B. Supplementary notes on FERROELECTRICITY. **Physics**, v. 112, p. 1-3. 1999.

KOBAYASHI, M.; NEMOTO, Y. Analysis of Pulse Dispersion Distortion Along Exponential and Tchebycheff Microstrip Tapers. **IEEE Transactions on Microwave Theory and Techniques**, v. 42, p. 834-839, maio. 1994.

LAHIRY, S.; GUPTA, V.; SREENIVAS, K.; MANSINGH, A. Dielectric Properties of Sol-Gel Derived Barium-Strontium-Titanate ($\text{Ba}_{0.4}\text{Sr}_{0.6}\text{TiO}_3$) Thin Films. **IEEE Transaction on Ultrasonics, Ferroelectrics, and Frequency Control**, v. 47, p. 854-859, julho. 2000.

LIMA, R. A. A.; CARVALHO, M. C. R.; CONRADO, L. F. M. On the Simulation of Digital Optical Links with EDFA's: Na Accurate Method for Estimating BER Through Gaussian Approximation. **IEEE Journal of Selected Topics in Quantum Eletronics**, v. 3, p. 1037-1044, agosto. 1997.

MAISSEL, Leon I., GLANG, Reinhard. **Handbook of thin film technology**, McGraw-Hill Book Company, 1970.

MUSIC, H.; ALPING, A.; JOHANSSON, U.; GEVORGIAN, S. Low-pass impedance matching filters for packaged low-cost laser diodes. **Microwave and optical technology letters**. v. 37, n. 3, maio. 2003.

NEWNHAM, R.E. et al. Electrostriction: Nonlinear Electromechanical Coupling in Solid Dielectrics. **J. Phys. Chem. B** 101, p. 10141-10150. 1997.

NISHITSUJI, M.; TAMURA, A.; KUNIHISA, T.; et al. Advanced GaAs-MMIC process technology using High-Dielectric Constant thin film capacitors by low-temperature RF sputtering method. **IEEE**, p. 329-332. 1993.

NISHITSUJI, M.; TAMURA, A.; YAHATA, K. New GaAs-MMIC process technology using low-temperature deposited SiTiO_3 thin film capacitors. **Electronics Letters** **23 rd**, v. 30, p. 1045-1046, junho. 1994.

PETERSON, R. L; DRAYTON, R. F. A CPW T-resonator technique for electrical characterization of microwave substrates. **Microwave and Wireless Components Letters, IEEE**, v. 12, p. 90-92, março. 2002.

PONTES, F.M.; LONGO, E.; LEITE E. R.; VARELA, J. A. Study of the dielectric and ferroelectric properties of chemically processed BaSrTiO_3 thin films. **Thin Solid Films**, v. 386, p. 91-98. 2001.

PONTES, F.M.; LEITE E. R.; LEE, E. J. H.; LONGO, E.; VARELA, J. A. Dielectric properties and microstructure of $\text{SrTiO}_3/\text{BaTiO}_3$ multilayer thin films prepared by a chemical route. **Thin Solid Films**, p. 260-265, dezembro. 2001.

POWELL, J R. et al. Laser Ablated Ferroelectric and Superconducting Thin Films for Microwave Applications. **IEE – London**. 1996.

RAO, Y.; YUE, J.; WONG, C. P. Material Characterization of High Dielectric Constant Polymer-Ceramic Composite for embedded capacitor to RF Application. **2001 International Symposium on Advanced Packaging Materials**, p. 280-285. 2001.

RUPPRECHT, G.; BELL, R. O. Microwave Losses in Strontium Titanate above the Phase Transition. **Physical Review**, v. 125, p. 1915-1920, março. 1962.

SAIFI, M A.; CROSS, L. E. Dielectric Properties of Strontium Titanate at Low Temperature. **Physical Review B**, v. 2, p. 677-684, agosto. 1970.

SEIXAS, D.L.A.; CONRADO, L. F. M.; CARVALHO, M. C. R. Theoretical investigations on the propagation characteristics of transmission lines on substrates with very high dielectric constant. **Microwave and Optical Technology Letters**, v. 32, p. 275-278, fevereiro. 2002.

SHARMA, H. B.; MANSINGH, A. Sol-Gel Processed Ferroelectric Barium Titanate Thin Films and Ceramics. **IEEE**, p. 457-459. 1995.

SHAW, T. M.; SUO, Z.; HUANG, M.; LINIGER, E.; LAIBOWITZ, R. B.; BANIECKI, J. D. The effect of stress on the dielectric properties of barium strontium titanate thin films. **Applied Physics Letters**, v. 75, p. 2129-2131, outubro. 1999.

SOMBRA, A. S. B., ALMEIDA A. F. L., FECHINE P. B. A., DEMENICIS, L. S., PINHEIRO, A. G., OLIVEIRA R. S., GÓES, J. C., CARVALHO, M. C. R., VALENTE M. A. Electrical and optical properties of BaTiO₃(BTO)-CaCu₃Ti₄O₁₂(CCTO) composite screen-printed thick films for high dielectric constant devices. **A ser publicado**.

SORRENTINO, R. et al. Microwaves in Europe. **IEEE Transactions on Microwave Theory and Techniques**, vol. 50, nº 3, março. 2002.

STOJANOVIC, B. D.; FOSHINI, C. R.; PAVLOVIC, V. B.; PAVLOVIC, V. M.; PEJOVIC, V.; VARELA, J. A. Barium titanate screen-printed thick films. **Ceramics International**, p. 293-298, setembro. 2001.

SU, B.; BUTTON, T. W. Interactions between barium strontium titanate (BST) thick films and alumina substrates. **Journal of European Ceramic Society**, v. 21, p. 2777-2781. 2001.

SUBRAMANIAN, M.A., LI, D., DURAN, N., REISNER, B.A., SLEIGHT, A.W., **J. of Sol. State Chem.** 323 (151), 2000.

SUBRAMANIAN, M.A., SLEIGHT, A.W., **Solid State Sciences**, 4 (347), 2002.

TANABE, M.; NISHITSUJI, M.; ANDA, Y.; OTA Y. A Low-Impedance Coplanar Waveguide Using an SrTiO₃ Thin Film for GaAs Power MMIC's. **IEEE Transactions on Microwave Theory and Techniques**, v. 48, p. 872-874, maio. 2000.

TANG, Y. P.; LI, Z.; TANG, S. Y. Transient Analysis of Tapered Transmission Lines Used as Transformers for Short Pulses. **IEEE Transactions on Microwave Theory and Techniques**, v. 43, p. 2573-2578, novembro. 1995.

TAVERNIER, C. A.; HENDERSON, R.; PAPAPOLYMEROU J. A Reduced-Size Silicon Micromachined High-Q Resonator at 5.7 GHz, p. 1-8. 2000.

TUCKER, R. S.; POPE, D. J. Microwave Circuit Models of Semiconductor Injection Lasers. **IEEE Transactions on Microwave Theory and Techniques**, v. 31, p. 289-294, março. 1983.

TUCKER, R. S.; KAMINOW, I. P. High-frequency characteristics of directly modulated InGaAsP ridge waveguide and buried heterostructure lasers. **Journal of Lightwave Technology**, v. 2, p. 385-393, agosto. 1984.

VAN KEULS, F.W.; MUELLER, C. H.; MIRANDA, F. A. Room temperature thin film BaSrTiO₃ Ku-band coupled microstrip phase shifters: effects of film thickness, doping, annealing and substrate choice. **IEEE MTT-S Digest TUF2-4**, p. 737-740. 1999.

VENDIK, O. G.; CARLSSON, E. F.; PETROV, P. K.; CHAKALOV, R. A.; GEVORGIAN S. S.; IVANOV, Z. G. HTS/Ferroelectric CPW Structures for Voltage Tuneable Phase Shifters, p. 196-202.

VENDIK, O. G.; KOLBERG, E.; GEVORGIAN S. S.; KOZYREV, A. B.; SOLDATENKOV, O. I. 1GHz tunable resonator on *bulk* single crystal SrTiO₃ plated with YBa₂Cu₃O_{7-x} films. **Electronic Letters**, v. 31, p. 654-656, abril. 1995.

VENDIK, O G.; ZUBKO, S. P. Modeling of Size Effect on Dielectric Response of Thin Ferroelectric Films. **Mater. Phys. Mech.**, v. 1, p. 45-48. 2000.

WEIL, C.; WRANG, P.; DOWNAR, H.; WENGER, J.; JAKOBY, R. Thick film ferroelectric ceramics for microwave phase shifters. **Institut für Hochfrequenztechnik-TUD**. 2001.

WEIL, C.; WRANG, P.; DOWNAR, H.; WENGER, J.; JAKOBY, R. Tunable Coplanar Waveguide Phase Shifters Using Ferroelectric Thick Films. **Institut für Hochfrequenztechnik-TUD**, p. 83-88. 2001.