Referências Bibliográficas

[1] Y.W. Lee and B. Lee. High resolution cryogenic optical fiber sensor system using erbium-doped fiber. *Sensors and Actuators A: Physical*, 96(1):25–27, 2002. 1.2

[2] A. Wang, S. He, X. Fang, X. Jin, and J. Lin. Optical fiber pressure sensor based on photoelasticity and its application. *Lightwave Technology, Journal of*, 10(10):1466–1472, 1992. 1.2

[3] A. Wang, M.S. Miller, A.J. Plante, M.F. Gunther, K.A. Murphy, and R.O. Claus. Split-spectrum intensity-based optical fiber sensors for measurement of microdisplacement, strain, and pressure. *Applied optics*, 35(15):2595–2601, 1996. 1.2

[4] V.T. Chitnis, S. Kumar, and D. Sen. Optical fiber sensor for vibration amplitude measurement. *Lightwave Technology, Journal of*, 7(4):687–691, 1989. 1.2

[5] W.W. Morey, G. Meltz, W.H. Glenn, et al. Fiber optic bragg grating sensors. In *Proc. SPIE*, volume 1169, pages 98–107, 1989. 1.2, 2.2.3

[6] D.L. Meadows and J.S. Schultz. Design, manufacture and characterization of an optical fiber glucose affinity sensor based on an homogeneous fluorescence energy transfer assay system. *Analytica chimica acta*, 280(1):21–30, 1993. 1.2

[7] J. Villatoro, M.P. Kreuzer, R. Jha, V.P. Minkovich, V. Finazzi, G. Badenes, and V. Pruneri. Photonic crystal fiber interferometer for chemical vapor detection with high sensitivity. *Optics Express*, 17(3):1447–1453, 2009. 1.2

[8] Ó. Esteban, M. Cruz-Navarrete, A. González-Cano, and E. Bernabeu. Measurement of the degree of salinity of water with a fiber-optic sensor. *Applied optics*, 38(25):5267–5271, 1999. 1.2

[9] JN Fields, CK Asawa, OG Ramer, and MK Barnoski. Fiber optic pressure sensor. *The Journal of the Acoustical Society of America*, 67:816, 1980. 1.2

[10] T. Yoshino, K. Kurosawa, K. Itoh, and T. Ose. Fiber-optic fabry-perot interferometer and its sensor applications. *Microwave Theory and Techniques, IEEE Transactions on*, 30(10):1612–1621, 1982. 1.2

[11] B. Lee. Review of the present status of optical fiber sensors. *Optical Fiber Technology*, 9(2):57–79, 2003. 1.2, 2.2

[12] JC Knight, TA Birks, P.S.J. Russell, and DM Atkin. All-silica single-mode optical fiber with photonic crystal cladding. *Optics letters*, 21(19):1547–1549, 1996. 1.2

[13] RF Cregan, BJ Mangan, JC Knight, TA Birks, P.S.J. Russell, PJ Roberts, and DC Allan. Single-mode photonic band gap guidance of light in air. *Science*, 285(5433):1537, 1999. 1.2

[14] C.L. Zhao, X. Yang, C. Lu, W. Jin, and MS Demokan. Temperature-insensitive interferometer using a highly birefringent photonic crystal fiber loop mirror. *Photonics Technology Letters, IEEE*, 16(11):2535–2537, 2004. 1.2, 2.2

[15] A. Michie, J. Canning, K. Lyytikäinen, J. Digweed, et al. Temperature independent highly birefringent photonic crystal fibre. *Optics express*, 12(21):5160–5165, 2004. 2.1.1, 2.1.2

[16] F. Zhang and J. W. Y. Lit. Temperature and strain sensitivity measurements of high-birefringent polarization-maintaining fibers. *Applied optics*, 32(13):2213–2218, 1993. 2.1.2

[17] M. Kawachi, BS Kawasaki, KO Hill, and T. Edahiro. Fabrication of single-polarisation single-mode-fibre couplers. *Electronics Letters*, 18(22):962–964, 1982. 2.1.2

[18] MP Varnham, DN Payne, RD Birch, and EJ Tarbox. Single-polarisation operation of highly birefringent bow-tie optical fibres. *Electronics Letters*, 19(7):246–247, 1983. 2.1.2

[19] Y. Namihira, Y. Ejiri, and K. Mochizuki. Birefringence in elliptical-cladding single-polarisation fibres. *Electronics Letters*, 18(2):89–91, 1982. 2.1.2

[20] J. Simpson, R. Stolen, F. Sears, W. Pleibel, J. MacChesney, and R. Howard. A single-polarization fiber. *Lightwave Technology, Journal of*, 1(2):370–374, 1983. 2.1.2

[21] N. Imoto, N. Yoshizawa, J. Sakai, and H. Tsuchiya. Birefringence in single-mode optical fiber due to elliptical core deformation and stress anisotropy. *Quantum Electronics, IEEE Journal of*, 16(11):1267–1271, 1980. 2.1.2

[22] G. Statkiewicz, T. Martynkien, and W. Urbanczyk. Measurements of modal birefringence and polarimetric sensitivity of the birefringent holey fiber to hydrostatic pressure and strain. *Optics communications*, 241(4-6):339–348, 2004. 2.1.2, 2.2.1

[23] A. Ortigosa-Blanch, JC Knight, WJ Wadsworth, J. Arriaga, BJ Mangan, TA Birks, and P.S.J. Russell. Highly birefringent photonic crystal fibers. *Optics letters*, 25(18):1325–1327, 2000. 2.1.2

[24] MJ Steel, RM Osgood Jr, et al. Elliptical-hole photonic crystal fibers. *Optics Letters*, 26(4):229–231, 2001. 2.1.2

[25] C.M. Jewart, S.M. Quintero, A. Braga, and K.P. Chen. Design of a highly-birefringent microstructured photonic crystal fiber for pressure monitoring. *Optics Express*, 18(25):25657–25664, 2010. 2.1.2

[26] CI Merzbacher, AD Kersey, and EJ Friebele. Fiber optic sensors in concrete structures: a review. *Smart materials and structures*, 5:196, 1996. 2.2

[27] J.W. Berthold. Historical review of microbend fiber-optic sensors. *Lightwave Technology, Journal of*, 13(7):1193–1199, 1995. 2.2

[28] MG Xu, L. Reekie, YT Chow, and J.P. Dakin. Optical in-fibre grating high pressure sensor. *Electronics letters*, 29(4):398–399, 1993. 2.2, 3.3.1

[29] D.H. Kim and J.U. Kang. Sagnac loop interferometer based on polarization maintaining photonic crystal fiber with reduced temperature sensitivity. *Opt. Express*, 12(19):4490–4495, 2004. 2.2

[30] HY Fu, HY Tam, L.Y. Shao, X. Dong, PKA Wai, C. Lu, and S.K. Khijwania. Pressure sensor realized with polarization-maintaining photonic crystal fiber-based sagnac interferometer. *Applied optics*, 47(15):2835–2839, 2008. 2.2, 2.3, 2.3.2, 2.3.2

[31] HY Fu, C. Wu, MLV Tse, L. Zhang, K.C.D. Cheng, HY Tam, B.O. Guan, and C. Lu. High pressure sensor based on photonic crystal fiber for downhole application. *Applied optics*, 49(14):2639–2643, 2010. 2.2

[32] X. Dong, HY Tam, and P. Shum. Temperature-insensitive strain sensor with polarization-maintaining photonic crystal fiber based sagnac interferometer. *Applied physics letters*, 90:151113, 2007. 2.2, 2.2.1

[33] O. Frazao, JM Baptista, and JL Santos. Temperature-independent strain sensor based on a hi-bi photonic crystal fiber loop mirror. *Sensors Journal, IEEE*, 7(10):1453–1455, 2007. 2.2, 2.2.3, 2.3.2

[34] Y.G. Han. Temperature-insensitive strain measurement using a birefringent interferometer based on a polarization-maintaining photonic crystal fiber. *Applied Physics B: Lasers and Optics*, 95(2):383–387, 2009. 2.2

[35] O. Frazao, C. Jesus, J.M. Baptista, J.L. Santos, and P. Roy. Fiber-optic interferometric torsion sensor based on a two-lp-mode operation in birefringent fiber. *Photonics Technology Letters, IEEE*, 21(17):1277–1279, 2009. 2.2

[36] S.M.M. Quintero, C. Martelli, A. Braga, L.C.G. Valente, and C.C. Kato. Magnetic field measurements based on terfenol coated photonic crystal fibers. *Sensors*, 11(12):11103–11111, 2011. 2.2

[37] C. Martelli, A.L.C. Triques, A. Braga, J. Canning, K. Cook, R. Llerena, and V. Takahashi. Operation of optical fiber sensors in hydrogen-rich atmosphere. In *Proceedings of SPIE*, volume 7653, page 765326, 2010. 2.2

[38] A. Bertholds and R. Dandliker. Determination of the individual strain-optic coefficients in single-mode optical fibres. *Lightwave Technology, Journal of*, 6(1):17–20, 1988. 2.2.1

[39] L. Xiao, MS Demokan, W. Jin, Y. Wang, and C.L. Zhao. Fusion splicing photonic crystal fibers and conventional single-mode fibers: microhole collapse effect. *Journal of lightwave technology*, 25(11):3563–3574, 2007. 2.2.2

[40] W.J. Bock, J. Chen, T. Eftimov, and W. Urbanczyk. A photonic crystal fiber sensor for pressure measurements. *Instrumentation and Measurement, IEEE Transactions on*, 55(4):1119–1123, 2006. 2.3

[41] F.C. Fávero, S.M.M. Quintero, C. Martelli, A. Braga, V.V. Silva, I. Carvalho, R.W.A. Llerena, and L.C.G. Valente. Hydrostatic pressure sensing with high birefringence photonic crystal fibers. *Sensors*, 10(11):9698–9711, 2010. 2.3

[42] T. Yoshino, K. Kurosawa, K. Itoh, and T. Ose. Fiber-optic fabry-perot interferometer and its sensor applications. *Microwave Theory and Techniques, IEEE Transactions on*, 30(10):1612–1621, 1982. 3

[43] M. Quirion and G. Ballivy. Concrete strain monitoring with fabry-pérot fiber-optic sensor. *Journal of materials in civil engineering*, 12:254, 2000. 3

[44] T. Valis, D. Hogg, et al. Fiber optic fabry-perot strain gauge. *Photonics Technology Letters, IEEE*, 2(3):227–228, 1990. 3

[45] W.C. Du, X.M. Tao, and H.Y. Tam. Fiber bragg grating cavity sensor for simultaneous measurement of strain and temperature. *Photonics Technology Letters, IEEE*, 11(1):105–107, 1999. 3

[46] Z. Huang, Y. Zhu, X. Chen, and A. Wang. Intrinsic fabry-pe´ rot fiber sensor for temperature and strain measurements. *Photonics Technology Letters, IEEE*, 17(11):2403–2405, 2005. 3

[47] Y. Zhang, H. Shibru, K.L. Cooper, and A. Wang. Miniature fiber-optic multicavity fabry-perot interferometric biosensor. *Optics letters*, 30(9):1021–1023, 2005. 3

[48] T. Wei, Y. Han, Y. Li, H.L. Tsai, and H. Xiao. Temperature-insensitive miniaturized fiber inline fabry-perot interferometer for highly sensitive refractive index measurement. *Optics Express*, 16(8):5764–5769, 2008. 3

[49] N. Furstenau, M. Schmidt, H. Horack, W. Goetze, and W. Schmidt. Extrinsic fabry-perot interferometer vibration and acoustic sensor systems for airport ground traffic monitoring. In *Optoelectronics, IEE Proceedings*, volume 144, pages 134–144. IET, 1997. 3

[50] T.K. Gangopadhyay, S. Chakravorti, K. Bhattacharya, and S. Chatterjee. Wavelet analysis of optical signal extracted from a non-contact fibre-optic vibration sensor using an extrinsic fabry–perot interferometer. *Measurement Science and Technology*, 16:1075, 2005. 3

[51] T. Ke, T. Zhu, Y. Rao, and M. Deng. Accelerometer based on all-fiber fabry–pérot interferometer formed by hollow-core photonic crystal fiber. *Microwave and Optical Technology Letters*, 52(11):2531–2535, 2010. 3

[52] A. Laudati, F. Mennella, M. Giordano, G. D'Altrui, C.C. Tassini, and A. Cusano. A fiber-optic bragg grating seismic sensor. *Photonics Technology Letters, IEEE*, 19(24):1991–1993, 2007. 3

[53] T.K. Gangopadhyay. Prospects for fibre bragg gratings and fabry-perot interferometers in fibre-optic vibration sensing. *Sensors and Actuators A: Physical*, 113(1):20–38, 2004. 3

[54] M. Kamata, M. Obara, R.R. Gattass, L.R. Cerami, and E. Mazur. Optical vibration sensor fabricated by femtosecond laser micromachining. *Applied Physics Letters*, 87(5):051106–051106, 2005. 3

[55] T. Guo, A. Ivanov, C. Chen, and J. Albert. Temperature-independent tilted fiber grating vibration sensor based on cladding-core recoupling. *Optics letters*, 33(9):1004–1006, 2008. 3

[56] F.C. Favero, G. Bouwmans, V. Finazzi, J. Villatoro, and V. Pruneri. Fabry perot interferometers built by photonic crystal fiber pressurization during fusion splicing. *Optics Letters*, 36(21):4191–4193, 2011. 3

[57] J. Villatoro, V. Finazzi, G. Coviello, and V. Pruneri. Photonic-crystal-fiber-enabled micro-fabry–perot interferometer. *Optics letters*, 34(16):2441–2443, 2009. 3.1, 3.6.1

[58] AS Gerges, TP Newson, F. Farahi, JDC Jones, and DA Jackson. A hemispherical air cavity fibre fabry-perot sensor. *Optics communications*, 68(3):157–160, 1988. 3.1, 3.6.1, 3.6.1

[59] X. Chen, F. Shen, Z. Wang, Z. Huang, and A. Wang. Micro-air-gap based intrinsic fabry-perot interferometric fiber-optic sensor. *Applied optics*, 45(30):7760–7766, 2006. 3.1

[60] E. Li, G.D. Peng, and X. Ding. High spatial resolution fiber-optic fizeau interferometric strain sensor based on an in-fiber spherical microcavity. *Applied Physics Letters*, 92:101117, 2008. 3.1

[61] M. Deng, C. Tang, T. Zhu, and Y. Rao. Pcf-based fabry-perot interferometric sensor for strain measurement at high temperatures. *Photonics Technology Letters, IEEE*, 19(99):1–1, 2011. 3.1.1

[62] R. C. S. B.l Allil. *Sensores a Fibra Optica com Tecnologia FBG para Medida de Temperatura e Alta Tensao*. PhD thesis, COPPE/UFRJ. 3.2, 3.2

[63] FC Favero, L. Araujo, G. Bouwmans, V. Finazzi, J. Villatoro, and V. Pruneri. Spheroidal fabry-perot microcavities in optical fibers for high-sensitivity sensing. *Optics Express*, 20(7):7112–7118, 2012. 3.6

[64] Y. Zhang, Y. Li, T. Wei, X. Lan, Y. Huang, G. Chen, and H. Xiao. Fringe visibility enhanced extrinsic fabry–perot interferometer using a graded index fiber collimator. *Photonics Journal, IEEE*, 2(3):469–481, 2010. 3.6, 3.6.1, 4.1, 4.1

[65] N.V. Wheeler, M.D.W. Grogan, T.D. Bradley, F. Couny, T.A. Birks, and F. Benabid. Multipass hollow core-pcf microcell using a tapered micromirror. *Journal of Lightwave Technology*, 29(9):1314–1318, 2011. 3.6.1

[66] D. Hunger, T. Steinmetz, Y. Colombe, C. Deutsch, T.W. Hänsch, and J. Reichel. A fiber fabry–perot cavity with high finesse. *New Journal of Physics*, 12:065038, 2010. 3.6.1

[67] K.E. Zinoviev, A.B. González-Guerrero, C. Domínguez, and L.M. Lechuga. Integrated bimodal waveguide interferometric biosensor for label-free analysis. *Journal of Lightwave Technology*, 29(13):1926–1930, 2011. 4

[68] K. Schroeder, W. Ecke, R. Mueller, R. Willsch, and A. Andreev. A fibre bragg grating refractometer. *Measurement Science and Technology*, 12:757, 2001. 4

[69] J. Villatoro, D. Monzón-Hernández, and D. Luna-Moreno. In-line optical fiber sensors based on cladded multimode tapered fibers. *Applied optics*, 43(32):5933–5938, 2004. 4

[70] V. Bhatia and A.M. Vengsarkar. Optical fiber long-period grating sensors. *Optics Letters*, 21(9):692–694, 1996. 4

[71] C.L. Zhao, X. Yang, MS Demokan, and W. Jin. Simultaneous temperature and refractive index measurements using a 3 slanted multimode fiber bragg grating. *Journal of lightwave technology*, 24(2):879, 2006. 4

[72] Y. Jung, S. Kim, D. Lee, and K. Oh. Compact three segmented multimode fibre modal interferometer for high sensitivity refractive-index measurement. *Measurement Science and Technology*, 17:1129, 2006. 4

[73] Y. Zhu, Z. He, and H. Du. Detection of external refractive index change with high sensitivity using long-period gratings in photonic crystal fiber. *Sensors and Actuators B: Chemical*, 131(1):265–269, 2008. 4

[74] HP Uranus. Theoretical study on the multimodeness of a commercial endlessly single-mode pcf. *Optics Communications*, 283(23):4649–4654, 2010. 4.1

[75] J. Villatoro, V. Finazzi, V.P. Minkovich, V. Pruneri, and G. Badenes. Temperature-insensitive photonic crystal fiber interferometer for absolute strain sensing. *Applied Physics Letters*, 91(9):091109–091109, 2007. 4.1

[76] R. Jha, J. Villatoro, G. Badenes, and V. Pruneri. Refractometry based on a photonic crystal fiber interferometer. *Optics letters*, 34(5):617–619, 2009. 4.1.1

[77] E. Cibula and D. Donlagic. In-line short cavity fabry-perot strain sensor for quasi distributed measurement utilizing standard otdr. *Optics Express*, 15(14):8719–8730, 2007. 4.1.1

[78] P. Zu, C.C. Chan, Y. Jin, Y. Zhang, and X. Dong. Fabrication of a temperature-insensitive transverse mechanical load sensor by using a photonic crystal fiber-based sagnac loop. *Measurement Science and Technology*, 22:025204, 2011. 4.1.1

[79] P. Corbishley and E. Rodríguez-Villegas. Breathing detection: towards a miniaturized, wearable, battery-operated monitoring system. *Biomedical Engineering, IEEE Transactions on*, 55(1):196–204, 2008. 4.2

[80] F.J. Arregui, Y. Liu, I.R. Matias, and R.O. Claus. Optical fiber humidity sensor using a nano fabry-perot cavity formed by the ionic self-assembly method. *Sensors and Actuators B: Chemical*, 59(1):54–59, 1999. 4.2

[81] W.J. Yoo, K.W. Jang, J.K. Seo, J.Y. Heo, J.S. Moon, J.H. Jun, J.Y. Park, and B. Lee. Development of optical fiber-based respiration sensor for noninvasive respiratory monitoring. *Optical review*, 18(1):132–138, 2011. 4.2

[82] Y. Kang, H. Ruan, Y. Wang, FJ Arregui, IR Matias, and RO Claus. Nanostructured optical fibre sensors for breathing airflow monitoring. *Measurement Science and Technology*, 17:1207, 2006. 4.2

[83] G. Wehrle, P. Nohama, H.J. Kalinowski, P.I. Torres, and L.C.G. Valente. A fibre optic bragg grating strain sensor for monitoring ventilatory movements. *Measurement Science and Technology*, 12:805, 2001. 4.2

[84] J. Villatoro, V.P. Minkovich, V. Pruneri, and G. Badenes. Simple all-microstructured-optical-fiber interferometer built via fusion splicing. *Opt. Express*, 15(4):1491–1496, 2007. 4.3

[85] J. Villatoro, M.P. Kreuzer, R. Jha, V.P. Minkovich, V. Finazzi, G. Badenes, and V. Pruneri. Photonic crystal fiber interferometer for chemical vapor detection with high sensitivity. *Optics Express*, 17(3):1447–1453, 2009. 4.3

[86] J. Mathew, Y. Semenova, G. Rajan, and G. Farrell. Humidity sensor based on photonic crystal fibre interferometer. *Electronics letters*, 46(19):1341–1343, 2010. 4.3