

## Referências bibliográficas

- [1] ANDRÄ, W.; NOWAK, H. **Magnetism in Medicine: A Handbook**. Weinheim: WILEY-VCH Verlag GmbH & Co, 2007.
- [2] COSTA MONTEIRO, E.; BRUNO, A.C.; LOURO, S.R.; COSTA RIBEIRO, P.; FONSECA COSTA, A. Magnetic localisation of a current dipole implanted in dogs. **Phys Med Biol**, v. 32, n. 1, p. 65-70, 1987.
- [3] CLARKE, J.; BRAGINSKI, A.I. **The SQUID Handbook: Vol 2 Applications of SQUIDs and SQUID Systems**. 2006.
- [4] BRADSHAW, L.; KIM, J.; SOMARAJAN, S.; RICHARDS, W.; CHENG, L. Characterization of electrophysiological propagation by multichannel sensors. **IEEE Trans Biomed Eng**, v. 9294, n. c, p. 1751-1759, 2015.
- [5] LI, H.; ZHANG, S.; ZHANG, C.; XIE, X. SQUID based MCG measurement using a full tensor compensation technique in urban hospital environment. **IEEE Transactions on Applied Superconductivity**, p. 1-1, 2016.
- [6] KIVIRANTA, M.; BRANDEL, O.; GRONBERG, L.; KUNERT, J.; LINZEN, S.; BEEV, N.; MAY, T.; PRUNNILA, M. Multilayer Fabrication Process for Josephson Junction Circuits Cross-compatible over Two Foundries. **IEEE Transactions on Applied Superconductivity**, p. 1-1, 2016.
- [7] ASFOUR, A., YONNET, J.-P., ZIDI, M., NABIAS, J., TRAORE, P.S. Current source dedicated for direct digital synthesizers: Application to the giant magneto-impedance (GMI) sensors. In: **2015 IEEE SENSORS**. IEEE, 2015, p. 1-4.
- [8] DOHUN KIM, D.; HYUNGKYUNG KIM, H.; SUNHEE PARK, S.; WOORYOUNG LEE, W.; WON YOUNG JEUNG, W.Y. Operating Field Optimization of Giant Magneto Impedance (GMI) Devices in Micro Scale for Magnetic Bead Detection. **IEEE Transactions on Magnetics**, v. 44, n. 11, p. 3985-3988, 2008.
- [9] ZHANG, L., PAN, Z. A novel design of GMI magnetic sensor and its hybrid analysis. In: **2012 IEEE International Conference on Computer Science**

- and Automation Engineering (CSAE)**. IEEE, v.1.2012, p. 444-447.
- [10] DING, L.; SAEZ, Sé.; DOLABDJIAN, C.; MELO, L.G.C.; YELON, A.; MENARD, D. Equivalent Magnetic Noise Limit of Low-Cost GMI Magnetometer. **IEEE Sensors Journal**, v. 9, n. 2, p. 159-168, 2009.
- [11] OIDA, T.; TSUCHIDA, M.; TAKATA, H.; KOBAYASHI, T. Actively Shielded Bias Field Tuning Coil for Optically Pumped Atomic Magnetometer Toward Ultralow Field MRI. **IEEE Sensors Journal**, v. 15, n. 3, p. 1732-1737, 2015.
- [12] CARNEIRO, A.A.O.; FERREIRA, A.; MORAES, E.R.; ARAUJO, D.B.; SOSA, M.; BAFFA, O. Biomagnetismo: Aspectos Instrumentais e Aplicações. **Revista Brasileira de Ensino de Física**, v. 22, n. 3, p. 324-338, 2000.
- [13] LI, J., FARAJIDAVAR, A. A portable magnetocardiography system: Using a magneto-impedance sensor. In: **2015 IEEE Biomedical Circuits and Systems Conference (BioCAS)**. IEEE, 2015, p. 1-4.
- [14] YIN BAIQIANG, Y., HE YIGANG, H. A fast matrix inverse s-transform algorithm for MCG denoise. In: **2015 12th IEEE International Conference on Electronic Measurement & Instruments (ICEMI)**. IEEE, v.1.2015, p. 315-319.
- [15] XIE, M.; SCHNEIDERMAN, J.F.; CHUKHARKIN, M.L.; KALABUKHOV, A.; WHITMARSH, S.; LUNDQVIST, D.; WINKLER, D. High- Tc SQUID vs. Low- Tc SQUID-Based Recordings on a Head Phantom: Benchmarking for Magnetoencephalography. **IEEE Transactions on Applied Superconductivity**, v. 25, n. 3, p. 1-5, 2015.
- [16] FALEY, M.I.; GERASIMOV, I.A.; FALEY, O.M.; CHOCHOLACS, H.; DAMMERS, J.; EICH, E. Integration Issues of Graphoepitaxial High- Tc SQUIDS Into Multichannel MEG Systems. **IEEE Transactions on Applied Superconductivity**, v. 25, n. 3, p. 1-5, 2015.
- [17] OYAMA, D., HIGUCHI, M., KAWAI, J., TSUYUGUCHI, N., MIYAMOTO, M., ADACHI, Y., UEHARA, G. Measurement of Magnetic Resonance Signal from a Rat Head in Ultra-Low Magnetic Field. In: **2015 15th International Superconductive Electronics Conference (ISEC)**. IEEE, 2015, p. 1-3.
- [18] SHIQIN, J.; JIONG, Y.; BO, C.; PANKE, Y.; GUIHENG, Z.; LEMIN, W.;

- MING, L. A new ECG obtained from MCG-recordings. p. 1945-1948, 2004.
- [19] MONTEIRO, E.C.; PENNA, S. Della; DONATO, L. Di; LUZIO, S. Di; PASQUARELLI, A.; ERNÉ, S.N.; ROMANI, G.L. The study of steady magnetic fields associated with primary and secondary ST shift in ischaemic rabbit hearts. **Physiological Measurement**, v. 18, n. 3, p. 191-200, 1997.
- [20] YAMADA, S.; YAMAGUCHI, I. Magnetocardiograms in clinical medicine: unique information on cardiac ischemia, arrhythmias, and fetal diagnosis. **Internal medicine (Tokyo, Japan)**, v. 44, n. 1, p. 1-19, 2005.
- [21] COSTA MONTEIRO, E.; HALL BARBOSA, C.; EISELT, M.; GIELER, F.; HAUEISEN, J. Magnetic imaging of electrical propagation at the apex of isolated rabbit heart. **Biomedizinische Technik: Biomedical Engineering**, v. 48, n. 2, p. 168-170, 2004.
- [22] COSTA MONTEIRO, E.; MAGALHÃES, J.A.P.; HALL BARBOSA, C.R.; LIMA, E.A.; COSTA RIBEIRO, P. Application of a Cellular Automata Model on the study of Magnetic Detection of Slow-Pathway in Cardiac Tissue.
- [23] COSTA MONTEIRO, E. Application of a Single-channel SQUID Magnetometer for Non-Invasive Study of Cardiac Tachyarrhythmias Mechanisms. **Physica C**, v. 354, p. 83, 2001.
- [24] M, B.G.; MCFEE, R. Detection of the magnetic Field of the heart. **Am Heart J**, v. 66, p. 95-96, 1963.
- [25] COSTA MONTEIRO, E.; SCHLEUSSNER, E.; KAUSCH, S.; GRIMM, B.; SCHNEIDER, A.; HALL BARBOSA, C.; HAUEISEN, J. Fetal cardiac activity analysis during twin pregnancy using a multi-channel SQUID system. **Physica C: Superconductivity**, v. 354, n. 1, p. 87-90, 2001.
- [26] CUFFIN, B.N.; COHEN, D. Magnetic fields of a dipole in special volume conductor shapes. **IEEE Trans. Biomed. Eng.**, v. 24, n. 4, p. 372-381, 1977.
- [27] PURCELL, C.J.; STROINK, G. Moving dipole inverse solutions using realistic torso models. **IEEE Trans. Biomed. Eng.**, v. 38, n. 1, p. 82-84, 1991.
- [28] CARNEIRO, A. A. O.; FERREIRA, A.; MORAES, E.R.; ARAUJO, D.B.; ROSA, M.; BAFFA, O. Biomagnetismo: Aspectos Instrumentais e Aplicações. **Revista Brasileira de Ensino de Física**, v. 22, n. 3, p. 324-338, 2000.

- [29] RIENZO, L. DI; HAUEIS, J. Theoretical Lower Error Bound for Comparative Evaluation of Sensor Arrays in Magnetostatic Linear Inverse Problems. **IEEE Transactions on Magnetics**, v. 42, n. 11, p. 3669-3673, 2006.
- [30] BOURRIER, A.; DAVIES, M.E.; PELEG, T.; PEREZ, P.; GRIBONVAL, R. Fundamental Performance Limits for Ideal Decoders in High-Dimensional Linear Inverse Problems. **IEEE Transactions on Information Theory**, v. 60, n. 12, p. 7928-7946, 2014.
- [31] SOHRABPOUR, A., YUNFENG LU, Y., HE, B. BIN Estimating underlying neuronal activity from EEG using an iterative sparse technique. In: **2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)**. IEEE, 2015, p. 634-637.
- [32] LEISTRITZ, L.; SCHIECKE, K.; ASTOLFI, L.; WITTE, H. Time-Variant Modeling of Brain Processes. **Proceedings of the IEEE**, v. 104, n. 2, p. 262-281, 2016.
- [33] OKHMATOVSKI, V.; ARONSSON, J.; SHAFAI, L. A Well-Conditioned Non-Iterative Approach to Solution of the Inverse Problem. **IEEE Transactions on Antennas and Propagation**, v. 60, n. 5, p. 2418-2430, 2012.
- [34] COSTA RIBEIRO, P.; BRUNO, A.C.; SABOIA E SILVA, P.L.; HALL BARBOSA, C.R.; PARENTE RIBEIRO, E.; COSTA MONTEIRO, E.; FONSECA COSTA, A. Detection of Reentry Currents in Atrial Flutter by Magnetocardiografia. **IEE Transactions on Biomedical Engineering**, v. 39, n. 8, 1992.
- [35] COSTA MONTEIRO, E.; EISELT, M.; GIESSLE, F.; HAUEISEN, J.; HALL BARBOSA, C.; ANDRADE LIMA, E. Animal Experimentation Study of Atrial Activity Propagation Using a Multi-channel SQUID System. **Biomedizinische Technik/Biomedical Engineering**, v. 46, n. s2, p. 70-72, 2001.
- [36] SCHMIDT, R. Multiple emitter location and signal parameter estimation. **IEEE Transactions on Antennas and Propagation**, v. 34, n. 3, p. 276-280, 1986.
- [37] SARVAS, J. Basic mathematical and electromagnetic concepts of the biomagnetic inverse problem. **Physics in Medicine and Biology**, v. 32, n. 1,

- p. 11-22, 1987.
- [38] HÄMÄLÄINEN, M.S.; ILMONIEMI, R.J. Interpreting magnetic fields of the brain: minimum norm estimates. **Medical & Biological Engineering & Computing**, v. 32, n. 1, p. 35-42, 1994.
- [39] PASCUAL-MARQUI, R.D.; MICHEL, C.M.; LEHMANN, D. Low resolution electromagnetic tomography: a new method for localizing electrical activity in the brain. **International journal of psychophysiology : official journal of the International Organization of Psychophysiology**, v. 18, n. 1, p. 49-65, 1994.
- [40] DRONGELEN, W. VAN; YUCHTMAN, M.; VEEN, B.D. VAN; HUFFELEN, A.C. VAN A spatial filtering technique to detect and localize multiple sources in the brain. **Brain Topography**, v. 9, n. 1, p. 39-49, 1996.
- [41] AMBLARD, C.; LAPALME, E.; LINA, J.-M. Biomagnetic Source Detection by Maximum Entropy and Graphical Models. **IEEE Transactions on Biomedical Engineering**, v. 51, n. 3, p. 427-442, 2004.
- [42] LIN, Y.; JIANG, S. Modeling of cardiac electrical activity for characterizing vortex components. **ITME 2011 - Proceedings: 2011 IEEE International Symposium on IT in Medicine and Education**, v. 2, p. 683-687, 2011.
- [43] ABDALLH, A.A.; DUPRÉ, L. A Unified Electromagnetic Inverse Problem Algorithm for the Analysis : A Review and Application. v. 51, n. 1, 2015.
- [44] KISHIMOTO, M.; SAKASAI, K.; ARA, K. Solution of Electromagnetic Inverse Problem Using Combinational Method of Hopfield Neural Network and Genetic Algorithm. **Journal of Applied Physics**, v. 79, n. 1, p. 1-7, 1996.
- [45] HUANG, Y.; YUAN, P. A Magnetic Inverse Problem Using Neuronal Networks. p. 961-965, 2004.
- [46] CREVECOEUR, G.; SERGEANT, P.; DUPRE, L.; WALLE, R. VAN DE A two-level genetic algorithm for electromagnetic optimization. **IEEE Transactions on Magnetics**, v. 46, n. 7, p. 2585-2595, 2010.
- [47] LABIEDH, W.; SHALL, H.; SLAMA, J.B.H.; RIAH, Z.; KADI, M. COMPARATIVE STUDY OF TWO INVERSE METHODS BASED ON NEAR-FIELD TECHNIQUE. **IEEE Transactions on Magnetics**, 2014.
- [48] BRIKI, I.; PICHON, L.; BEN, J.; SLAMA, H.; PARIS, E.; PARIS-SUD, U.; PARIS-SACLAY, U. Shielding Effectiveness of Perforated Screens Through an Inverse Problem-Based Resolution. v. 52, n. 3, p. 3-6, 2016.

- [49] NAGANO, T.; OHNO, Y.; UESUGI, N.; IKEDA, H.; ISHIYAMA, A.; KASAI, N. Multi-source localization by genetic algorithm using MEG. **IEEE Transactions on Magnetics**, v. 34, n. 5, p. 2976-2979, 1998.
- [50] TIANZI JIANG, XIAODONG LI, KRUGGEL, F. Global optimization approaches to MEG source localization. In: **Proceedings IEEE International Symposium on Bio-Informatics and Biomedical Engineering**. IEEE COMPUT. SOC, p. 223-230.
- [51] DEMACHI, K.; RYBALKO, S.; FUJITA, M. Inverse Analysis of the Current Dipoles Distribution in a Human Brain Applied With the Shifting-Aperture Method. **IEEE Transactions on Magnetics**, v. 44, n. 6, p. 1426-1429, 2008.
- [52] AURÉLIO, M.; PACHECO, C. Algoritmos Genéticos: Princípios E Aplicações. 1999.
- [53] MALMIVUO, J. Biomagnetism. p. 27-1-27-16, 2006.
- [54] WILLIAMSON, S.J.; KAUFMAN, L. BIOMAGNETISM. **Journal of Magnetism and Magnetic Materials**, v. 22, p. 129-201, 1981.
- [55] COSTA MONTEIRO, E.; BRUNO, A.C.; LOURO, S.R.W.; FONSECA COSTA, A.; COSTA RIBEIRO, P. Magnetic Localization of a Current Dipole Implanted in Dogs. **Phys. in Med. and Biol.**, v. 32, n. 1, p. 77-86, 1987.
- [56] RONZHINA, M., MARSANOVA, L., SMISEK, R., OLEJNICKOVA, V., JANOUSEK, O., VESELY, P., KOLAROVA, J., NOVAKOVA, M., PROVAZNIK, I. Classification of ventricular premature and ischemic beats in animal electrograms. In: **2015 Computing in Cardiology Conference (CinC)**. IEEE, 2015, p. 1137-1140.
- [57] COHEN, D. Boston and the History of Biomagnetism. **Neurology and Clinical Neurophysiology**, v. 86, 2004.
- [58] ZIMMERMAN, J.E.; THIENE, P.; HARDING, J.T. Design and Operation of Stable rf-Biased Superconducting Point-Contact Quantum Devices, and a Note on the Properties of Perfectly Clean Metal Contacts. **Journal of Applied Physics**, v. 41, n. 4, p. 1572, 1970.
- [59] COHEN, D. Magnetoencephalography: detection of the brain's electrical activity with a superconducting magnetometer. **Science (New York, N.Y.)**, v. 175, n. 4022, p. 664-6, 1972.

- [60] KARINIEMI, V.; AHOPELTO, J.; KARP, P.J.; KATILA, T.E. The fetal magnetocardiogram. **Journal of perinatal medicine**, v. 2, n. 3, p. 214-6, 1974.
- [61] MAHDI, A.E.; PANINA, L.; MAPPS, D. Some new horizons in magnetic sensing: High-Tc SQUIDS, GMR and GMI materials. **Sensors and Actuators, A: Physical**, v. 105, n. 3, p. 271-285, 2003.
- [62] LENZ, J.; EDELSTEIN, S. Magnetic sensors and their applications. **IEEE Sensors Journal**, v. 6, n. 3, p. 631-649, 2006.
- [63] LENZ, J.E. A Review of Magnetic Sensors. **Proceedings of the IEEE**, v. 78, n. 6, p. 973-989, 1990.
- [64] SOSA, M.; ALVARADO, J.J.B.; GONZ, J.L. Técnicas biomagnéticas y su comparación con los métodos bioeléctricos. **REVISTA MEXICANA DE FISICA**, v. 48, n. 5, p. 490-500, 2002.
- [65] COSTA DA SILVA, E. desenvolvimento de transdutor baseado na fase da magnetoimpedância gigante para medição de campos biomagnéticos, Pontifícia Universidade Católica do Rio de Janeiro. 2010
- [66] CLARKE, J. Advances in SQUID Magnetometers. **IEEE Transactions on electron devices**, v. 27, n. 10, p. 73-79, 1980.
- [67] RIPKA, P.; JANOSEK, M. Advances in Magnetic Field Sensors. **IEEE Sensors Journal**, v. 10, n. 6, p. 1108-1116, 2010.
- [68] JOSEPHSON, B.D. Possible new effects in superconductive tunnelling. **Physics Letters**, v. 1, n. 7, p. 251-253, 1962.
- [69] WU, M.K.; ASHBURN, J.R.; TORNG, C.J.; HOR, P.H.; MENG, R.L.; GAO, L.; HUANG, Z.J.; WANG, Y.Q.; CHU, C.W. Superconductivity at 93 K in a new mixed-phase Yb-Ba-Cu-O compound system at ambient pressure. **Physical Review Letters**, v. 58, n. 9, p. 908-910, 1987.
- [70] MAHDI, A.E.; MAPPS, D.J. High-Tc SQUIDS: The ultra sensitive sensors for non-destructive testing and biomagnetism. **Sensors and Actuators, A: Physical**, v. 81, n. 1, p. 367-370, 2000.
- [71] CAVALCANTI, F.M.P. desenvolvimento e caracterização de um transdutor magnético baseado no fenômeno da magnetoimpedância gigante, Pontifícia Universidade Católica do Rio de Janeiro. 2005
- [72] GARCÍA-MARTÍN, J.; GÓMEZ-GIL, J.; VÁZQUEZ-SÁNCHEZ, E. Non-destructive techniques based on eddy current testing. **Sensors (Basel,**

- Switzerland**), v. 11, n. 3, p. 2525-65, 2011.
- [73] RABINOVICI, R.I.; KAPLAN, B.Z. Effective magnetization and forces due to eddy currents. **IEEE Transactions on Magnetics**, v. 28, n. 3, p. 1863-1869, 1992.
- [74] JANOUSEK, L. Impact of selected parameters on eddy current attenuation in conductive materials. In: **2012 ELEKTRO**. IEEE, 2012, p. 419-422.
- [75] BORK, J.; HAHLEBOHM, H.D.; KLEIN, R.; SCHNABEL, A. The 8-layered magnetically shielded room of the PTB: Design and construction. **Biomag2000, Proc. 12th Int. Conf. on Biomagnetism**, p. 970-973, 2001.
- [76] BRAKE, H. Ter New results in active noise compensation for magnetically shielded rooms. **Measurement Science and Technology**, v. 1370, 1993.
- [77] BAUM, E.; BORK, J. Systematic design of magnetic shields. **Journal of Magnetism and Magnetic Materials**, v. 101, n. 1-3, p. 69-74, 1991.
- [78] HARAKAWA, K.I.; KAJIWARA, G.; KAZAMI, K.; OGATA, H.; KADO, H. Evaluation of a high-performance magnetically shielded room for biomagnetic measurement. **IEEE Transactions on Magnetics**, v. 32, n. 6, p. 5256-5260, 1996.
- [79] DÖSSEL, O.; DAVID, B.; FUCHS, M.; KRÜGER, J.; LÜDEKE, K.-M.; WISCHMANN, H.-A. A 31-channel squid system for biomagnetic imaging. **Applied Superconductivity**, v. 1, n. 10-12, p. 1813-1825, 1993.
- [80] HUONKER, R.; NOWAK, H.; RZANNY, R.; RIEKE, K. Combined 3D neuromagnetic source imaging and MRI-scans. **Electroencephalography and clinical neurophysiology. Supplement**, v. 47, p. 439-47, 1996.
- [81] NOWAK, H.; LEDER, U.; GÖRNIG, M.; HAUEISEN, J.; ERNÉ, S.; TREBESCHI, A. Multichannel-vectormagnetocardiography: a new biomedical engineering approach. **Biomedizinische Technik/Biomedical Engineering**, v. 48, n. s1, p. 368-369, 2003.
- [82] STATON, D.J.; FRIEDMAN, R.N.; WIKSWO JR., J.P. High-Resolution Magnetic Imaging of Action Currents in Anisotropic Cardiac Tissue. **Bulletin of the American Physical Society**, v. 37, n. 7, p. 29-, 1992.
- [83] BUCHANAN, D., CRUM, D., CROX, D., WIKSWO, J. Micro-SQUID: a close-space four channel magnetometer. In: **Advances in Biomagnetism**. New York: 1989, p. 677-679.
- [84] OKADA, Y.C.; KYUHO, S.; LAHTENMAKI, A.; XU, C. A high-



- resolution system for magnetophysiology and its applications. **Hoke, M. , Erne, S. N. , Okada, Y. C. , Romani, G. L. International Congress Series; Biomagnetism**, p. 375-383, 1992.
- [85] ONO, Y.; ISHIYAMA, A.; KASAI, N.; CHINONE, K. Development of biomagnetic measurement system for mice with high spatial resolution. **Applied Physics Letters**, v. 85, n. 2, p. 332, 2004.
- [86] KOBAYASHI, K.; UCHIKAWA, Y. Development of a high spatial resolution SQUID magnetometer for biomagnetic measurement. **IEEE Transactions on Magnetics**, v. 39, n. 5, p. 3378-3380, 2003.
- [87] WIKSWO, J.P., FRIEDMAN, R.N., KILROY, A.W., EGERAAT, J.M. VAN, BUCHANAN, D.S. Preliminary Measurements with MicroSQUID. In: **Advances in Biomagnetism**. Boston, MA: SPRINGER US, 1989, p. 681-684.
- [88] MONTEIRO, C. Application of a Single-channel SQUID Magnetometer for Non-Invasive Study of Cardiac Tachyarrhythmias Mechanisms. **Physica C**, v. 354, p. 83, 2001.
- [89] COSTA MONTEIRO, E.; ANDRADE LIMA, E.; HALL BARBOSA, C.; ORNELAS, P.H.; CAVALCANTE, E.G.; SANTOS, S.F.; PLOHR, B.; GUNDELACH, B.; MARCHESIN, A.; BRIO, M.; COSTA RIBEIRO, P. Magnetic localization of reentrant activation in isolated rabbit atrium. v. c, p. 1-5,
- [90] COSTA MONTEIRO, E.; EISELT, M.; GIESSLE, F.; HAUEISEN, J.; HALL BARBOSA, C.; ANDRADE LIMA, E. Animal Experimentation Study of Atrial Activity Propagation Using a Multi-channel SQUID System. **Biomedizinische Technik/Biomedical Engineering**, v. 46, n. s2, p. 70-72, 2001.
- [91] LIMA, E.A., IRIMIA, A., WIKSWO, J.P. The Magnetic Inverse Problem. In: **The SQUID Handbook**. Weinheim, Germany: WILEY-VCH VERLAG GMBH & CO. KGAA, p. 139-267.
- [92] MOSHAGE, W., ACHENBACH, S., WEIKL, A., GÖHL, K., ABRAHAM-FUCHS, K., SCHNEIDER, S., BACHMANN, K. Progress in Biomagnetic Imaging of Heart Arrhythmias. In: SPRINGER BERLIN HEIDELBERG, 1991, p. 1-19.
- [93] TENNER, U.; HAUEISEN, J.; NOWAK, H.; LEDER, U.; BRAUER, H.

- Source localization in an inhomogeneous physical thorax phantom. **Physics in Medicine and Biology**, v. 44, n. 8, p. 1969-1981, 1999.
- [94] MOSHAGE, W.; ACHENBACH, S.; GÖHL, K.; WEIKL, A.; BACHMANN, K.; WEGENER, P.; SCHNEIDER, S.; HÄRER, W. Biomagnetic localization of ventricular arrhythmias. **Radiology**, v. 180, n. 3, p. 685-692, 1991.
- [95] FENICI, R.; BRISINDA, D. Magnetocardiography provides non-invasive three-dimensional electroanatomical imaging of cardiac electrophysiology. **The International Journal of Cardiovascular Imaging**, v. 22, n. 3-4, p. 595-597, 2006.
- [96] COSTA MONTEIRO, E.; HALL BARBOSA, C.; ANDRADE LIMA, E.; COSTA RIBEIRO, P.; BOECHAT, P. Locating steel needles in the human body using a SQUID magnetometer. **Physics in medicine and biology**, v. 45, n. 8, p. 2389-402, 2000.
- [97] MOSHAGE, W.; ACHENBACH, S.; GÖHL, K.; BACHMANN, K. Evaluation of the non-invasive localization accuracy of cardiac arrhythmias attainable by multichannel magnetocardiography (MCG). **The International Journal of Cardiac Imaging**, v. 12, n. 1, p. 47-59, 1996.
- [98] FENICI, R.; BRISINDA, D.; PHD, J.N.; MAKIJARVI, M.; FENICI, P. Study of ventricular repolarization in patients with myocardial ischemia, using unshielded multichannel magnetocardiography.
- [99] TAVAROZZI, I.; COMANI, S.; GRATTA, C. Del; ROMANI, G.L.; LUZIO, S. Di; BRISINDA, D.; GALLINA, S.; ZIMARINO, M.; FENICI, R.; CATERINA, R. De Magnetocardiography: Current status and perspectives. Part I: Physical principles and instrumentation. **Italian heart journal: official journal of the Italian Federation of Cardiology**, v. 3, n. 2, p. 75-85, 2002.
- [100] DURRER, D.; DAM, R.T. VAN; FREUD, G.E.; JANSE, M.J.; MEIJLER, F.L.; ARZBAECHER, R.C. Total Excitation of the Isolated Human Heart. **Circulation**, v. 41, n. 6, p. 899-912, 1970.
- [101] GOLDBERG, D.E. **Genetic algorithms in search, optimization and machine learning**. 1989.
- [102] GOLDBERG, D.E. (David E. **Genetic algorithms in search, optimization, and machine learning**. Addison-Wesley Longman Publishing

- Co., Inc., 1989.
- [103] MITCHELL, M. (Computer scientist) **An introduction to genetic algorithms**. MIT Press, 1996.
- [104] FOGEL, D.B. Evolutionary algorithms in theory and practice. **Complexity**, v. 2, n. 4, p. 26-27, 1997.
- [105] ZEBULUM, R.S.; PACHECO, M.A.; VELLASCO, M.M.B.R. **Evolutionary electronics : automatic design of electronic circuits and systems by genetic algorithms**. CRC Press, 2002.
- [106] MENDES SIMAO, L. otimização da programação da produção em refinarias de petróleo utilizando algoritmos genéticos e co-evolução cooperativa, Pontifícia Universidade Católica do Rio de Janeiro. 2004
- [107] MICHALEWICZ, Z. **Genetic algorithms + data structures = evolution programs**. Springer-Verlag, 1996.
- [108] VARGAS ABS DA CRUZ, A. otimização de planejamentos com restrição de precedência usando algoritmos genéticos e co-evolução cooperativa, Pontifícia Universidade Católica do Rio de Janeiro. 2003
- [109] CASTRO, R. otimização de estruturas com multi-objetivos via algoritmos genéticos, Universidade Federal do Rio de Janeiro. 2001
- [110] GERMAN MALDONADO TAVARA, E. algoritmo genético multiobjetivo na predição de estruturas proteicas no modelo hidrofóbico - polar, Pontifícia Universidade Católica do Rio de Janeiro. 2012
- [111] BARRICO, C.M.C.S. otimização evolucionária multi-objectivo em ambientes incertos : pesquisa de soluções robustas, Universidade de Coimbra. 2007
- [112] GONCALVES MENDES, B. otimização da localização de poços de petróleo com completação seca utilizando algoritmos genéticos, Pontifícia Universidade Católica do Rio de Janeiro. 2013
- [113] BAKER, J.E. adaptive selection methods for genetic algorithms. 1985
- [114] BAKER, J.E. reducing bias and inefficiency in the selection algorithm. 1989
- [115] EMERICK, A.A., SILVA, E., MESSER, B., ALMEIDA, L.F., SZWARCMAN, D., PACHECO, M.A.C., VELLASCO, M.M.B.R. Well Placement Optimization Using a Genetic Algorithm With Nonlinear Constraints. In: **SPE Reservoir Simulation Symposium**. SOCIETY OF

- PETROLEUM ENGINEERS, 2009,
- [116] LIEPINS, G.E.; VOSE, M.D. Characterizing crossover in genetic algorithms. **Annals of Mathematics and Artificial Intelligence**, v. 5, n. 1, p. 27-34, 1992.
- [117] CONN, A.R.; GOULD, N.I.M.; TOINT., P.L. A Globally Convergent Augmented Lagrangian Barrier Algorithm for Optimization with General Inequality Constraints and Simple Bounds. **Mathematics of Computation**, v. 66, n. 217, p. 261-288, 1997.
- [118] YANG, S. Adaptive Crossover in Genetic Algorithms Using Statistics Mechanism. **Artificial Life VIII**, p. 182-185, 2002.
- [119] RICARDO LINDEN **Algoritmos Genéticos**. 2012.
- [120] GORODNITSKY, I.F.; RAO, B.D.; GEORGE, J. Source localization in magnetoencephalography using an iterative\nweighted minimum norm algorithm. [1992] **Conference Record of the Twenty-Sixth Asilomar Conference on Signals, Systems & Computers**, p. 167-171, 1992.
- [121] COHEN, D.; HOSAKA, H. Magnetic field produced by a current dipole. **Journal of Electrocardiology**, v. 9, n. 4, p. 409-417, 1976.
- [122] SHIQIN, J.; MING, C.; LEI, Z.; MING, L.; LEMIN, W.; JIANG, S.; CHI, M.; ZHANG, L.; LUO, M.; WANG, L. Dipole Source Localization in Magnetocardiography. **2007 Joint Meeting of the 6th International Symposium on Noninvasive Functional Source Imaging of the Brain and Heart and the International Conference on Functional Biomedical Imaging**, p. 320-322, 2007.
- [123] NOWAK, H.; GIESSLE, F.; HUONKER, R.; HAUEISEN, J.; RÖTHER, J.; EISELT, M. A 16-channel SQUID-device for biomagnetic investigations of small objects. **Medical Engineering and Physics**, v. 21, n. 8, p. 563-568, 1999.
- [124] FLEMMING, L.; HAUEISEN, J.; TENNER, U.; GIESSLE, F.; EISELT, M. Source Localization accuracy in an animal model.
- [125] KUK-HYUN HAN, K.-H., KUI-HONG PARK, K.-H., CI-HO LEE, C.-H., JONG-HWAN KIM, J.-H. Parallel quantum-inspired genetic algorithm for combinatorial optimization problem. In: **Proceedings of the 2001 Congress on Evolutionary Computation (IEEE Cat. No.01TH8546)**. IEEE, v.2.2001, p. 1422-1429.

- [126] KUK-HYUN HAN, K.-H., JONG-HWAN KIM, J.-H. Genetic quantum algorithm and its application to combinatorial optimization problem. In: **Proceedings of the 2000 Congress on Evolutionary Computation. CEC00 (Cat. No.00TH8512)**. IEEE, v.2.2000, p. 1354-1360.
- [127] NARAYANAN, A., MOORE, M. Quantum-inspired genetic algorithms. In: **Proceedings of IEEE International Conference on Evolutionary Computation**. IEEE, 1996, p. 61-66.
- [128] SHENG, Z., WANLU, J. A novel quantum genetic algorithm and its application. In: **2012 8th International Conference on Natural Computation**. IEEE, 2012, p. 613-617.