REFERÊNCIAS

ABURTO, A. **FLOPS C Program (Double Precision) V2.0 18 Dec 1992**. Disponível em: `ftp://ftp.nosc.mil/pub/aburto/flops`. Acesso em: Jan. 2005.

AGUIAR, A. P.; ATASSI, A. N.; PASCOAL, A. M. Regulation of a Nonholonomic Dynamic Wheeled Mobile Robot with Parametric Uncertainty using Lyapunov Functions. In: IEEE CONFERENCE ON DECISION AND CONTROL, 39., 2000, Sydney, Australia. **Proceedings...** Piscataway: IEEE, 2000.

ALLGÖWER, F. et al. Nonlinear Predictive Control and Moving Horizon Estimation: an introductory overview. In: FRANK, P. M. (Ed.). **Advances in Control**: highlights of ECC'99. New York: Springer-Verlag, 1999. p.391–449.

ASENSIO, J. R.; MONTANO, L. A Kinematic and Dynamic Model-based Motion Controller for Mobile Robots. In: IFAC TRIENNIAL WORLD CONGRESS, 15., 2002, Barcelona, Spain. **Proceedings...** Barcelona: IFAC, 2002.

ASTOLFI, A. On The Stabilization of Nonholonomic Systems. In: IEEE CONFERENCE ON DECISION AND CONTROL, 33., 1994, Lake Buena Vista, FL. **Proceedings...** Piscataway: IEEE, 1994. p.3481–3486.

ASTOLFI, A. Discontinuous Control of Nonholonomic Systems. **Systems & Control Letters**, [S.l.], v.27, p.37–45, 1996.

BELLOMO, N.; BREZZI, F. (Ed.). **Local Stabilization of Nonlinear Control Systems**. [S.l.]: World Scientific, 1992. (Advances in Mathematics for Applied Sciences, v.8).

BARRAQUAND, J.; LATOMBE, J. C. On Nonholonomic Mobile Robots and Optimal Maneuvering. In: IEEE INTERNATIONAL SYMPOSIUM ON INTELLIGENT CONTROL, 1989, Albany, NY. **Proceedings...** Piscataway: IEEE, 1989. p.340–347.

BARRAQUAND, J.; LATOMBE, J.-C. On Nonholonomic Mobile Robots and Optimal Maneuvering. In: IEEE INTERNATIONAL SYMPOSIUM ON INTELLIGENT CONTROL, 4., 1989, Albany, NY. **Proceedings...** Piscataway: IEEE, 1989. p.340–347.

BEMPORAD, A. et al. The Explicit Linear Quadratic Regulator for Constrained Systems. **Automatica**, New York, v.38, n.1, p.3–20, Jan. 2002.

BITMEAD, R. R.; GEVERS, M.; WERTZ, V. **Adaptive Nonlinear Control**: the thinking man's gpc. Englewood Cliffs, NJ: Prentice Hall, 1990.

BLOCH, A. M.; MCCLAMROCH, N. H. Control of Mechanical Systems with Classical Nonholonomic Constraints. In: IEEE CONFERENCE ON DECISION AND CONTROL, 28., 1989, Tampa, FL. **Proceedings...** Piscataway: IEEE, 1989. p.201–205.

BLOCH, A. M.; REYHANOGLU, M.; MCCLAMROCH, N. H. Control and Stabilization of Nonholonomic Dynamic Systems. **IEEE Transactions on Automatic Control**, New York, v.37, n.11, p.1746–1757, Nov. 1992.

BROCKETT, R. W. **New Directions in Applied Mathematics**. New York: Springer-Verlag, 1982.

BROYDEN, C. G. The Convergence Of a Class of Double-Rank Minimization Algorithms. **Journal of the Institute of Mathematics and Its Applications**, London, Oxford University Press, v.6, p.76–90, 1970.

BULLO, F.; LEONARD, N. E.; LEWIS, A. D. Controllability and Motion Algorithms for Underactuated Lagrangian Systems on Lie Groups. **IEEE Transactions on Automatic Control**, New York, v.45, n.8, p.1437–1454, Aug. 2000.

CAMACHO, E. F.; BORDONS, C. **Model Predictive Control**. London: Springer-Verlag, 1999. (Advanced Textbooks in Control and Signal Processing).

CAMPION, G.; BASTIN, G.; D'ANDRÉA-NOVEL, B. Modelling and Control of Nonholonomic Wheeled Mobile Robots. In: IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION, 1991, Sacramento, CA. **Proceedings...** Piscataway: IEEE, 1991. p.1130–1135.

CAMPION, G.; BASTIN, G.; D'ANDRÉA-NOVEL, B. Modelling and State Feedback Control of Nonholonomic Mechanical Systems. In: IEEE CONFERENCE ON DECISION AND CONTROL, 30., 1991, Brighton, England. **Proceedings...** Piscataway: IEEE, 1991. p.1184–1189.

CAMPION, G.; BASTIN, G.; D'ANDRÉA-NOVEL, B. Dynamic Feedback Linearization of Nonholonomic Wheeled Mobile Robots. In: IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION, 1992, Nice, France. **Proceedings...** Piscataway: IEEE, 1992. p.2527–2532.

CAMPION, G.; BASTIN, G.; D'ANDRÉA-NOVEL, B. Structural Properties and Classifications of Kinematic and Dynamic Models of Wheeled Mobile Robots. **IEEE Transactions on Robotics and Automation**, New York, v.12, n.1, p.47–62, Feb. 1996.

CANNON, M.; KOUVARITAKIS, B. Continuous-Time Predictive Control of Constrained Nonlinear Systems. In: ALLGÖWER, F.; ZENG, A. (Ed.). **Nonlinear Model Predictive Control**. Basel, Switzerland: Birkhäuser Verlag AG, 2000. p.205–215. (Progress in Systems and Control Theory, v.26).

CHACAL, J. A.; SIRA-RAMÍREZ, H. On the Sliding Mode Control of Wheeled Mobile Robots. In: IEEE INTERNATIONAL CONFERENCE ON SYSTEMS, MAN & CYBERNETICS – HUMANS, INFORMATION AND TECHNOLOGY, 1994, Texas. **Proceedings...** Piscataway: IEEE, 1994. p.1938–1943.

CHAVES, L. F. **Projeto, Construção, Modelagem e Controle de um Robô Móvel**. 2000. Dissertação (Mestrado em engenharia elétrica) — Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, RS, 2000.

CHEN, C. C.; ALLGÖWER, F. A Quasi-Infinite Horizon Nonlinear Nodel Predictive Control with Guaranteed Stability. **Automatica**, New York, v.34, n.10, p.1205–1217, Oct. 1998.

CHEN, C. C.; SHAW, L. On Receding Horizon Feedback Control. **Automatica**, New York, v.18, n.3, p.349–352, May 1982.

CHWA, D. Sliding-Mode Tracking Control of Nonholonomic Wheeled Mobile Robots in Polar Coordinates. **IEEE Transactions on Control Systems Technology**, Piscataway, NJ, v.12, n.4, p.637–644, July 2004.

CLARKE, D. W.; MOHTADI, C.; TUFFS, P. S. Generalised Predictive Control – Part I. the basic algoritm. **Automatica**, New York, v.23, n.2, p.137–148, Mar. 1987.

CUTLER, C. R.; RAMACKER, B. L. Dynamic Matrix Control: a computer control algorithm. In: JOINT AUTOMATIC CONTROL CONFERENCE, 1980, San Francisco, CA. **Proceedings...** Piscataway: IEEE, 1980. p.1119–1167.

DENG, Z.; BRADY, M. Dynamic Tracking of a Wheeled Mobile Robot. In: IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS, 1993, Yokohama, Japan. **Proceedings...** Piscataway: IEEE, 1993. p.1295–1298.

DIXON, W. E. et al. Global Exponential Setpoint Control of Mobile Robots. In: IEEE/ASME INTERNATIONAL CONFERENCE ON ADVANCED INTELLIGENT MECHATRONICS, 1999, Atlanta, GA. **Proceedings...** Piscataway: IEEE, 1999. p.683–688.

DIXON, W. E. et al. Adaptive Tracking and Regulation of a Wheeled Mobile Robot with Controller/Update Law Modularity. **IEEE Control Systems Technology**, New York, v.12, n.1, p.138–147, Jan. 2004.

DO, K. D.; JIANG, Z. P.; PAN, J. A Universal Saturation Controller Design for Mobile Robots. In: IEEE CONFERENCE ON DECISION AND CONTROL, 41., 2002, Las Vegas, NV. **Proceedings...** Piscataway: IEEE, 2002. p.2044–2049.

DONG, W.; XU, W. L. Adaptive Tracking Control of Uncertain Nonholonomic Dynamic System. **IEEE Transactions on Automatic Control**, New York, v.46, n.3, p.450–454, Mar. 2001.

DOZIO, L.; MANTEGAZZA, P. Linux Real Time Application Interface (RTAI) In Low Cost High Performance Motion Control. In: MOTION CONTROL CONFERENCE, 2003., 2003, Milano, Italy. **Proceedings...** [S.l.: s.n.], 2003.

DURAISKI, R. G. **Controle Preditivo Não Linear Utilizando Linearizações Sucessivas ao Longo da Trajetória**. 2001. Dissertação (Mestrado em engenharia química) — Departamento de Engenharia Química, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, 2001.

DYNAMIC Optimization Technology Products. Technical Description of NOVA Nonlinear Controller. **Hydrocarbon Processing, Issue on Advanced Control and Information Systems**, Houston, TX, 1996.

ENCARNAÇÃO, P.; PASCOAL, A. Combined Trajectory Tracking and Path Following Control for Dynamic Wheeled Mobile Robots. In: IFAC TRIENNIAL WORLD CONGRESS, 15., 2002, Barcelona, Spain. **Proceedings...** Barcelona: IFAC, 2002.

ESSEN, H. V.; NIJMEIJER, H. Non-Linear Model Predictive Control of Constrained Mobile Robots. In: EUROPEAN CONTROL CONFERENCE, 2001, Porto, Portugal. **Proceedings...** Porto: FEUP, 2001. p.1157–1162.

FIERRO, R.; LEWIS, F. L. Control of a Nonholonomic Mobile Robot Using Neural Networks. **IEEE Transactions on Neural Networks**, New York, v.9, n.4, p.589–600, May 1998.

FLETCHER, R. A New Approach to Variable Metric Algorithms. **Computer Journal**, [S.l.], v.13, p.317–322, 1970.

FLETCHER, R. **Practical Methods of Optimization**. [S.l.]: John Wiley, 1981.

FUKAO, T.; NAKAGAWA, H.; ADACHI, N. Adaptive Tracking Control of a Nonholonomic Mobile Robot. **IEEE Transactions on Automatic Control**, New York, v.16, n.5, p.609–615, Oct. 2000.

GARCÍA, C. E.; PRETT, D. M.; MORARI, M. Model Predictive Control: theory and practice – a survey. **Automatica**, New York, v.25, n.3, p.335–348, May 1989.

GARCIA, C. E.; MORSHEDI, A. M. Quadratic Programming Solution of Dynamic Matrix Control (QDMC). **Chemical Engineering Communications**, New York, p.73–87, 1986.

GIL, P. E.; MURRAY, W.; WRIGHT, M. H. Practical Optimization. **Mathematics of Computing**, [S.l.], v.24, p.23–26, 1970.

GÓMEZ-ORTEGA, J.; CAMACHO, E. F. Mobile Robot Navigation in a Partially Structured Static Environment Using Neural Predictive Control. **Control Engineering Practice**, Oxford, v.4, n.12, p.1669–1679, Dec. 1996.

GOLDFARB, D. A Family of Variable Metric Updates Derived by Variational Means. **Mathematics of Computing**, [S.l.], v.24, p.23–26, 1970.

GURVITS, L.; LI, Z. Smooth Time-Periodic Feedback Solutions for Nonholonomic Motion Planning. In: LI, Z.; CANNY, J. (Ed.). **Nonholonomic Motion Planning**. Boston, MA: Kluwer Academic Publishers, 1993. p.53–108. v.26 (Kluwer International Series in Engineering and Computer Science, 192).

HENRION, D.; LASSERRE, J.-B. Solving Nonconvex Optimization Problems. **IEEE Control Systems Magazine**, New York, v.24, n.3, p.72–83, June 2004.

HENSON, M. A. Nonlinear Model Predictive Control: current status and future directions. **Computers and Chemical Engineering**, New York, v.23, n.2, p.187–202, Dec. 1998.

HOCK, W.; SCHITTKOWSKI, K. A Comparative Performance Evaluation of 27 Linear Programming Codes. **Computing**, [S.l.], v.30, p.335, 1983.

INDIVIERI, G. Kinematic Time-Invariant Control of a 2D Nonholonomic Vehicle. In: IEEE CONFERENCE ON DECISION AND CONTROL, 38., 1999, Phoenix, AZ. **Proceedings...** Piscataway: IEEE, 1999. p.2112–2117.

ISIDORI, A. **Nonlinear Control Systems**. 3.ed. New York: Springer Verlag, 1995.

JIANG, Z. P.; POMET, J. B. Global Stabilization of Parametric Chained-Form Systems by Time-Varying Dynamic Feedback. **International Journal of Adaptive Control and Signal Processing**, [S.l.], v.10, p.47–59, 1996.

KANAYAMA, Y.; MIYAZAKI, Y. K. F.; NOGUCHI, T. A Stable Tracking Control Method for an Autonomous Mobile Robot. In: IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION, 1990, Cincinnati, OH. **Proceedings...** Piscataway: IEEE, 1990.

KEERTHI, S. S.; GILBERT, E. G. Optimal, Infinite Horizon Feedback Laws for a General Class of Constrained Discrete Time Systems: stability and moving-horizon approximations. **Journal of Optimization Theory and Application**, New York, v.57, p.265–293, 1988.

KEYSER, R. M. C. D.; VAN CUAWENBERGHE, A. R. Extended Prediction Self-Adaptive Control. In: IFAC SYMPOSIUM ON IDENTIFICATION AND SYSTEMS PARAMETER ESTIMATION, 1985, York, UK. **Proceedings...** UK: IFAC, 1985.

KHALIL, H. K. **Nonlinear Systems**. 2.ed. Upper Saddle River, NJ: Prentice Hall, 1996.

KÜHNE, F. et al. Estimação e Controle da Posição de um Robô Móvel Utilizando Filtro de Kalman Descentralizado. In: CONGRESSO BRASILEIRO DE AUTOMÁTICA, 15., 2004, Gramado, RS. **Anais...** Porto Alegre: UFRGS, 2004.

KÜHNE, F.; LAGES, W. F.; GOMES DA SILVA JR., J. M. Model Predictive Control of a Mobile Robot Using Linearization. In: IEEE INTERNATIONAL CONFERENCE ON MECHATRONICS AND ROBOTICS, 4., 2004, Aachen, Germany. **Proceedings...** Piscataway: IEEE, 2004.

KIM, B.; NECSULESCU, D.; SASIADEK, J. Model Predictive Control of an Autonomous Vehicle. In: IEEE/ASME INTERNATIONAL CONFERENCE ON ADVANCED INTELLIGENT MECHATRONICS, 2001, Como, Italy. **Proceedings...** Piscataway: IEEE, 2001.

KOLMANOVSKY, I.; MCCLAMROCH, N. H. Developments in Nonholonomic Control Problems. **IEEE Control Systems Magazine**, New York, v.15, n.6, p.20–36, Dec. 1995.

KOTHARE, S. L. D. O.; MORARI, M. Contractive Model Predictive Control for Constrained Nonlinear Systems. **IEEE Transactions on Automatic Control**, New York, v.45, n.6, p.1053–1071, June 2000.

KWAKERNAAK, H.; SIVAN, R. **Linear Optimal Control Systems**. New York: Wiley Interscience, 1972.

LAGES, W. F. **Controle e Estimação de Posição e Orientação de Robôs Móveis**. 1998. Tese (Doutorado em engenharia eletrônica e computação) — Instituto Tecnológico de Aeronáutica, São José dos Campos, SP, 1998.

LAGES, W. F.; HEMERLY, E. F. Smooth Time-Invariant Control of Wheeled Mobile Robots. In: INTERNATIONAL CONGRESS ON SYSTEMS SCIENCE, 13., 1998, Wroclaw, Poland. **Proceedings...** [S.l.: s.n.], 1998.

LEE, E. B.; MARKUS, L. **Foundations of Optimal Control Theory**. New York: John Wiley and Sons, 1967.

LEE, T. C.; LEE, C. H.; TENG, C. C. Adaptive Tracking Control of Nonholonomic Mobile Robots by Computed Torque. In: IEEE CONFERENCE ON DECISION AND CONTROL, 38., 1999, Phoenix, AZ. **Proceedings...** Piscataway: IEEE, 1999. p.1254–1259.

LUENBERGER, D. G. **Linear and Nonlinear Programming**. 2.ed. Reading, MA: Addison-Wesley, 1989.

MARTIN, G. Nonlinear Model Predictive Control with Integrated Steady-State Model-based Optimization. In: ALCHE NATIONAL MEETING, 1997, Houston, TX. **Proceedings...** USA: AlChe, 1997.

MATTHIES, L. et al. A Portable, Autonomous, Urban Reconnaissance Robot. In: INTERNATIONAL CONFERENCE ON INTELLIGENT AUTONOMOUS SYSTEMS, 6., 2000, Venice, Italy. **Proceedings...** Amsterdam: IOS Press, 2000. Disponível em: `http://robotics.jpl.nasa.gov/tasks/tmr/papers/UrbanRobotPaper0700.pdf`. Acesso em: Fev. 2005.

MAYNE, D. Q. et al. Constrained Model Predictive Control: stability and optimality. **Automatica**, New York, v.36, n.6, p.789–814, June 2000.

MAYNE, D. Q.; MICHALSKA, H. Receding Horizon Control of Nonlinear Systems. **IEEE Transactions on Automatic Control**, New York, v.35, n.7, p.789–814, July 1990.

MCCLOSKEY, R. T.; MURRAY, R. M. Exponential Stabilization of Driftless Control Systems Using Homogeneous Feedback. **IEEE Transactions on Automatic Control**, New York, v.42, n.5, p.614–628, May 1997.

MICHALSKA, H.; MAYNE, D. Q. Robust Receding Horizon Control of Constrained Nonlinear Systems. **IEEE Transactions on Automatic Control**, New York, v.38, n.11, p.1623–1632, Nov. 1993.

MORARI, M.; LEE, J. H. Model Predictive Control: past, present and future. In: INTERNATIONAL SYMSPOSIUM ON PROCESS SYSTEMS ENGINEERING AND 30TH EUROPEAN SYMPOSIUM ON COMPUTER AIDED PROCESS ENGINEERING, 6., 1997, Trondheim, Norway. **Proceedings...** Elsevier, 1997.

MURRAY, M.; SASTRY, S. S. Nonholonomic Motion Planning: steering using sinusoids. **IEEE Transactions on Automatic Control**, New York, v.38, n.5, p.700–717, May 1994.

MURRAY, R. M.; SASTRY, S. S. Steering Nonholonomic Systems Using Sinusoids. In: IEEE CONFERENCE ON DECISION AND CONTROL, 29., 1990, Phoenix, AZ. **Proceedings...** Piscataway: IEEE, 1990. p.2097–2101.

NEIMARK, J. I.; FUFAEV, F. A. Dynamics of Nonholonomic Systems. **American Mathematical Society Translations of Mathematical Monographs**, Providence, RI, USA, v.33, p.330–374, 1972.

NORMEY-RICO, J. E.; GÓMEZ-ORTEGA, J.; CAMACHO, E. F. A Smith-Predictor-Based Generalised Predictive Controller for Mobile Robot Path-Tracking. **Control Engineering Practice**, London, v.7, n.6, p.729–740, June 1999.

OLIVEIRA, G. H. C.; CARVALHO, J. R. H. A Non-Linear Predictive Controle Scheme for Nonholonomic Mobile Robots. In: INTERNATIONAL SYMPOSIUM ON ROBOT CONTROL, 7., 2003, Wroclaw, Poland. **Proceedings...** [S.l.: s.n.], 2003.

OLLERO, A.; AMIDI, O. Predictive Path Tracking of Mobile Robots: application to the CMU Navlab. In: IEEE INTERNATIONAL CONFERENCE ON ADVANCED ROBOTICS, 5., 1991, Pisa, Italy. **Proceedings...** Piscataway: IEEE, 1991. p.1081–1086.

ORIOLO, G.; LUCA, A. D.; VENDITTELLI, M. WMR Control Via Dynamic Feedback Linearization: design, implementation and experimental validation. **IEEE Transactions on Control Systems Technology**, New York, v.10, n.6, p.835–852, Nov. 2002.

OYA, M.; YU, C. H.; KATOH, R. Robust Adaptive Motion/Force Tracking Control of Uncertain Nonholonomic Mechanical Systems. **IEEE Transactions on Robotics and Automation**, New York, v.19, n.1, p.175–181, Feb. 2003.

POMET, J. B. et al. A Hybrid Strategy for the Feedback Stabilization of Nonholonomic Mobile Robots. In: IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION, 1992, Nice, France. **Proceedings...** Piscataway: IEEE, 1992. p.129–134.

QIN, S. J.; BADGWELL, T. A. An Overview of Industrial Model Predictive Control Technology. In: INTERNATIONAL CONFERENCE ON CHEMICAL PROCESS CONTROL, 5., 1997, Tahoe City, CA. **Proceedings...** USA: AlChe, 1997. v.93, n.316, p.232–256.

QIN, S. J.; BADGWELL, T. A. An Overview of Nonlinear Model Predictive Control Applications. In: ALLGÖWER, F.; ZHENG, A. (Ed.). **Nonlinear Model Predictive Control**. Basel, Switzerland: Birkhäuser Verlag, 2000. v.26, p.369–393.

RAMÍREZ, D. R. et al. Nonlinear MBPC for Mobile Robots Navigation Using Genetic Algorithms. In: IEEE INTERNATIONAL CONFERENCE ON ROBOTICS & AUTOMATION, 1999, Detroit, MI. **Proceedings...** Piscataway: IEEE, 1999.

RAWLINGS, J. B. Tutorial Overview of Model Predictive Control. **IEEE Control Systems Magazine**, New York, v.20, n.3, p.38–52, June 2000.

RIBEIRO, M. I.; LIMA, P. **Nonlinear Control of Wheeled Mobile Robots**. Lisboa, Portugal: Instituto Superior Técnico, 2002. Disponível on-line em: `http://omni.isr.ist.utl.pt/~mir/cadeiras/robmovel/Guidance.pdf`. Acesso em Nov. 2003.

RICHALET, J. et al. Algorithmic Control of Industrial Processes. In: IFAC SYMPOSIUM ON IDENTIFICATION AND SYSTEM PARAMETER ESTIMATION, 4., 1976, Tucson, AZ. **Proceedings...** [S.l.: s.n.], 1976. p.1119–1167.

ROSSITER, J. A. **Model Based Predictive COntrol**: a practical approach. Boca Ratón, FL: CRC Press, 2003.

SAKAGAMI, Y. et al. The Intelligent ASIMO: system overview and integration. In: IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS, 2002, Lausanne, Switzerland. **Proceedings...** Piscataway: IEEE, 2002.

SAMSON, C. Velocity and Torque Feedback Control of a Nonholonomic Cart. In: INTERNATIONAL WORKSHOP IN ADAPTIVE AND NONLINEAR CONTROL: issues in robotics, 1990, Grenoble, France. **Proceedings...** London: Springer-Verlag, 1990.

SAMSON, C. Control of Chained Systems: application to path following and time-varying point-stabilization of mobile robots. **IEEE Transactions on Automatic Control**, New York, v.40, n.1, p.64–77, Jan. 1995.

SAMSON, C.; AIT-ABDERRAHIM, K. Feedback Stabilization of a Nonholonomic Wheeled Mobile Robot. In: IEEE/RSJ INTERNATIONAL WORKSHOP ON INTELLIGENT ROBOTS AND SYSTEMS, 1991, Osaka, Japan. **Proceedings...** Piscataway: IEEE, 1991. p.1242–1247.

SAMSON, C.; AIT-ABDERRAHIM, K. Feedback Control of a Nonholonomic Wheeled Cart in Cartesian Space. In: IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION, 1991, Sacramento, CA. **Proceedings...** Piscataway: IEEE, 1991. p.1136–1141.

SARKAR, N.; YUN, X.; KUMAR, V. Dynamic Path Following: a new control algorithm for mobile robots. In: IEEE CONFERENCE ON DECISION AND CONTROL, 32., 1993, San Antonio, TX. **Proceedings...** Piscataway: IEEE, 1993. p.2670–2675.

SCHRAFT, R. D. Mechatronics and Robotics for Service Applications. **IEEE Robotics & Automation Magazine**, New York, v.1, n.4, p.31–35, Dec. 1994.

SHANNO, D. F. Conditioning of Quasi-Newton Methods for Function Minimization. **Mathematics of Computing**, [S.l.], v.24, p.647–656, 1970.

SICILIANO, B. Control in Robotics: open problems and future directions. In: IEEE INTERNATIONAL CONFERENCE ON CONTROL APPLICATIONS, 1998, Trieste, Italy. **Proceedings...** Piscataway: IEEE, 1998. p.81–84.

SLOTINE, J.-J. E.; LI, W. **Applied Nonlinear Control**. [S.l.]: Prentice-Hall, 1997.

SONTAG, E. D. **Mathematical Control Theory. Deterministic Finite Dimensional Systems**. New York: Springer-Verlag, 1990.

SØRDALEN, O. J. **Feedback Control of Nonholonomic Mobile Robots**. 1993. Tese (Dr. ing.) — The Norwegian Institute of Technology, Trondheim, Norway, 1993.

SØRDALEN, O. J. Conversion of the Kinematics of a Car with n Trailers Into a Chained Form. In: IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION, 1993, Atlanta, GA. **Proceedings...** Piscataway: IEEE, 1993. p.382–387.

SU, C. Y.; STEPANENKO, Y. Robust Motion/Force Control of Mechanical Systems with Classical Nonholonomic Constraints. **IEEE Transactions on Automatic Control**, New York, v.39, n.3, p.609–614, Mar. 1994.

SUN, S. Designing Approach on Trajectory Tracking Control of Mobile Robot. **Robotics and Computer-Integrated Manufacturing**, New York, Elsevier, v.21, n.1, p.81–85, Feb. 2005.

TARÍN, C. et al. Adaptive Self-Tunning Path Control System for an Autonomous Mobile Robot. In: IEEE CONFERENCE ON DECISION AND CONTROL, 38., 1999, Phoenix, AZ. **Proceedings...** Piscataway: IEEE, 1999. p.3886–3887.

TARÍN, C. et al. Optimal Feedback Position Control for an Autonomous Mobile Robot. In: IEEE CONFERENCE ON DECISION AND CONTROL, 31., 2000, Tucson, AZ. **Proceedings...** Piscataway: IEEE, 2000. p.1491–1492.

TEEL, A. R.; MURRAY, R. M.; WALSH, G. Nonholonomic Control Systems: from steering to stabilization with sinusoids. In: IEEE CONFERENCE ON DECISION AND CONTROL, 31., 1992, Tucson, AZ. **Proceedings...** Piscataway: IEEE, 1992. p.1603–1609.

TEEL, A. R.; MURRAY, R. M.; WALSH, G. C. Non-holonomic Control Systems: from steering to stabilization with sinusoids. **International Journal of Control**, [S.l.], v.62, n.4, p.849–870, 1995.

TØNDEL, P.; JOHANSEN, T. A.; BEMPORAD, A. An Algorithm for Multi-Parametric Quadratic Programming and Explicit MPC Solutions. **Automatica**, New York, v.39, n.3, p.489–497, Mar. 2003.

TRIERWEILER, J. O.; SECCHI, A. R. Exploring the Potentiality of Using Multiple Model Approach in Nonlinear Model Predictive Control. In: ALLGÖWER, F.; ZENG, A. (Ed.). **Nonlinear model predictive control**. Basel, Switzerland: Birkhäuser Verlag AG, 2000. v.26, p.191–203.

WEISBIN, C. R.; LAVERY, D. NASA Rover and Telerobotics Technology Program. **IEEE Robotics & Automation Magazine**, New York, v.1, n.4, p.14–21, Dec. 1994.

WIT, C. C.; BERGHUIS, H.; NIJMEIJER, H. Practical Stabilization of Nonlinear Systems in Chained Form. In: IEEE CONFERENCE ON DECISION AND CONTROL, 33., 1994, Lake Buena Vista, FL. **Proceedings...** Piscataway: IEEE, 1994. v.4, p.3475–3480.

WIT, C. C. et al. **Nonlinear Control Design for Mobile Robots**. Singapore: World Scientific Publisher, 1993. p.121–157. (Recent Trends in Mobile Robots).

WIT, C. C. et al. Hybrid Stabilizing Control on a Real Mobile Robot. **IEEE Robotics & Automation Magazine**, New York, v.2, n.2, p.16–23, June 1995.

WIT, C. C.; SICILIANO, B.; BASTIN, G. **Theory of Robot Control**. London: Springer-Verlag, 1996.

WIT, C. C.; SØRDALEN, O. J. Exponential Stabilization of Mobile Robots with Nonholonomic Constraints. **IEEE Transactions on Automatic Control**, New York, v.37, n.11, p.1791–1797, Nov. 1992.

WORLD ROBOTICS 2004. Geneva, Switzerland: United Nations Economic Commission for Europe, UNECE, 2004.

WU, W. et al. Adaptive Exponential Stabilization of Mobile Robots with Uncertainties. In: IEEE CONFERENCE ON DECISION AND CONTROL, 38., 1999, Phoenix, AZ. **Proceedings...** Piscataway: IEEE, 1999. p.3484–3489.

YAMAMOTO, Y.; YUN, X. Coordinating Locomotion and Manipulation of a Mobile Manipulator. **IEEE Transactions on Automatic Control**, New York, v.39, n.6, p.1326–1332, June 1994.

YANG, J. M.; KIM, J. H. Sliding Mode Control for Trajectory Tracking of Nonholonmic Wheeled Mobile Robots. **IEEE Transactions on Robotics and Automation**, New York, v.15, n.3, p.578–587, June 1999.

YANG, X.; HE, K.; GUO, M.; ZHANG, B. An Intelligent Predictive Control Approach to Path Tracking Problem of Autonomous Mobile Robot. In: IEEE INTERNATIONAL CONFERENCE ON SYSTEMS, MAN, AND CYBERNETICS, 1998, San Diego, CA. **Proceedings...** Piscataway: IEEE, 1998.

YUN, X.; SARKAR, N. Unified Formulation of Robotic Systems with Holonomic and Nonholonomic Constraints. **IEEE Transactions on Robotics and Automation**, New York, v.14, n.4, p.640–650, Aug. 1998.