
Bibliographie

- [1] T. Takagi and M. Sugeno, " Fuzzy identification of systems and its applications to modeling and control ", *IEEE Transactions on Systems Man and Cybernetics*, Vol. 115, pp. 116-132, 1985.
- [2] K. Tanaka, T. Hori and H. O. Wang , " New parallel distributed compensation using time derivative of membership functions : a fuzzy Lyapunov approach ", *In Proc. Of the CDC, Orlando, Florida*, Vol. 4, pp.3942-3947, 2001.
- [3] S. Boyd, L. El Ghaoui, E. Feron, and V. Balakrishnan," Linear Matrix Inequalities in System and Control Theory ", *Society for Industrial and Applied Mathematics, Philadelphia*, 1994.
- [4] L. El Ghaoui, F. Oustry and M. Ait Rami, " Cone complementary linearization algorithm for static output-feedback and related problems ", *IEEE Transaction and Automatic Control*, Vol. 42, No. 8, pp. 1171-1176, 1997.
- [5] D. J. Stilwell and W. G. Rugh, " interpolation of observer state feedback controllers for gain scheduling ", *IEEE Transaction and Automatic Control*, Vol. 44, No. 6, pp. 1225-1229, 1999.
- [6] E. Kim and H. Lee, " New approaches to relaxed quadratic stability condition of fuzzy Control systems ", *IEEE Transactions on fuzzy systems*, Vol. 8, No. 5, pp. 523-534. 2000.
- [7] H. D. Tuan, P. Apkarian, T. Narikiyo and Y. Yamamoto, " Parameterized linear matrix inequality techniques in fuzzy control system design ", *IEEE Transactions on fuzzy systems*, Vol. 9, No. 2, pp. 324-332. 2001.
- [8] M. Boumehraz, K. Benmahammed, " Switching controller design for nonlinear systems via fuzzy models ", *International journal of modeling identification and control*, Vol.2, No. 1, pp.800-808, 2007.
- [9] R. Boukezzoula, " *Commande floue d'une classe de systèmes non linéaires: application au problème de suivi de trajectoire* ", Thèse de Doctorat, Université de Savoie, 2000.
- [10] K. Guelton, " *Estimation des caractéristiques du mouvement humain en station debout. Mise en œuvre d'observateurs flous sous forme descripteur* ", Thèse de Doctorat, Université de Valenciennes et du Hainaut Cambrésis, 2003.
- [11] Y. Morère, " *Mise en œuvre de lois de commande pour les modèles flous de type Takagi Sugeno* ", Thèse de Doctorat, Université de Valenciennes et du Hainaut Cambrésis, 2001.

-
- [12] A. Kruszewski, " *Lois de commande pour une classe de modèles non linéaires sous la forme Takagi-Sugeno : Mise sous forme LMI* ", Thèse de Doctorat, Université de Valenciennes et du Hainaut Cambrésis, 2006.
- [13] K. Tanaka and M. Sugeno, " Stability analysis and design of fuzzy control systems ", *Fuzzy Sets and Systems*, Vol.45, No. 2, pp135-156, 1992.
- [14] Y. Nesterov and A. Nemirovski, " Interior point polynomial methods in convex programming : theory and applications ", *SIAM*, Philadelphia, PA, 1994.
- [15] B. Mansouri, " *Contribution a la synthèse de lois de commandes en poursuite de trajectoire pour les systèmes flous de type Takagi-Sugeno incertains* ". Thèse de Doctorat Université de Reims Champagne Ardenne, 2005.
- [16] B. Gao, " *Contribution à la synthèse de commandes référencées vision 2D multi-Critères* ", Thèse de Doctorat, Université de Paul Sabatier de Toulouse, 2006.
- [17] M. Boumehraz, " *Stabilisation des systèmes non linéaires via des modèles flous de type Takagi-Sugeno* ", Thèse de Doctorat, Université Mohamed Kheider, Biskra, 2006.
- [18] J. Lauber, " *Moteur à allumage commandé avec EGR : modélisation et commande non linéaires* ", Thèse de Doctorat, Université de Valenciennes et du Hainaut Cambrésis, 2003.
- [19] M. Chilali, P. Gahinet, P. Apkarian, " Robust pole placement in LMI regions ", *IEEE Transactions on Automatic Control*, Vol. 44, No. 12, pp. 2257-2270, 1999.
- [20] W. El Messoussi, O. Pagès, A. El Hajjaji, " Robust Pole Placement for Fuzzy Models with Parametric Uncertainties : An LMI Approach ", *EUSFLAT - LFA 2005*. pp. 810-815, 2005.
- [21] D. Henrion, " *Stabilité des systèmes linéaires incertains à commande contrainte* ", Thèse de Doctorat, Institut national des sciences appliquées de Toulouse, 1999.
- [22] M. Chadli, " *Stabilité et commande de systèmes décrits par des multi modèles* ", Thèse de Doctorat, Institut national polytechnique de Lorraine, 2002.
- [23] K. Tanaka, T. Ikeda, and H. O. Wang, "Fuzzy Regulators and Fuzzy Observers: Relaxed Stability Conditions and LMI-Based Designs ", *IEEE Transactions on fuzzy systems*, Vol. 6, No. 2, pp. 1-16, 1998.
- [24] T. M. Gurra, L. Vermeiren, " conditions for non quadratic stabilization of discrete fuzzy models ", *IFAC advances in fuzzy and neural control, Spain*, pp. 15-20. 2001.
- [25] M. Chadli, D. Maquin et J. Ragot, " Stabilité et la stabilisation des modèles de Takagi-Sugeno continus ", *Journées Doctorales d'Automatique (JDA'2001)*, pages 85-88, Toulouse, France. 2001.

-
- [26] L. Hetel, " *Stabilité et commande robuste des systèmes à commutation* ", Thèse de Doctorat, Institut National Polytechnique de Lorraine, 2007.
- [27] K. Tanaka, T. Hori and H. O. Wang, " A Multiple Lyapunov Function Approach to Stabilization of Fuzzy Control Systems ", *IEEE Transactions on fuzzy systems*, Vol. 11, No. 4, pp. 582-589. 2003.
- [28] M. Thoma, M. Morari, " *Fuzzy control and filter design for uncertain fuzzy systems* ", Springer, Berlin, Vol. 347. 2006.
- [29] A. Jadbabaie, " *Robust, non-fragile controller synthesis using model-based fuzzy systems : a linear matrix inequality approach* ", Master of science Thesis, The university of New Mexico, USA, 1997.
- [30] L. Seddiki, " *Développement et commande TS d'une machine de rééducation des membres inférieurs en chaîne musculaire fermée* ", Thèse de Doctorat, Université de Reims Champagne Ardenne, 2008.
- [31] M. C. M. Teixeira, E. Assunção, and R. G. Avellar, " On Relaxed LMI-Based Designs for Fuzzy Regulators and Fuzzy Observers ", *IEEE Transactions on fuzzy systems*, Vol. 10, No. 5, pp. 613-623, 2003.
- [32] M. X. Jun, Z. Q. Sun and Y. Y. He, " Analysis and Design of Fuzzy Controller and Fuzzy Observer ", *IEEE Transactions on fuzzy systems*, Vol. 6, No 1, pp. 41-51. 1998.
- [33] S. Tonga et H. Li, " Observer-based robust fuzzy control of nonlinear systems with parametric uncertainties ", *Fuzzy Sets and Systems*, Vol. 131, No. 02, pp. 165-184, 2002.
- [34] W. El Messoussi, O. Pagès, A. El Hajjaji, " Observer-Based Robust Control of Uncertain Fuzzy Dynamic Systems with Pole Placement Constraints : An LMI Approach ", *Proceedings of the 2006 American Control Conference Minneapolis, Minnesota, USA*, 2006.
- [35] H. J. Lee, J. B. Park, and G. Chen, " Robust Fuzzy Control of Nonlinear Systems with Parametric Uncertainties ", *IEEE Transactions on fuzzy systems*, Vol. 9, No. 2, pp. 369-379, 2001.
- [36] H. J. Lee, J. B. Park, and Y. H. Joo, " Robust load-frequency control for uncertain nonlinear power systems: A fuzzy logic approach ", *Information Sciences*. pp. 402-751, 2006.
- [37] Y. Wang, and Z. Q. Sun, " Guaranteed Cost Control of Discrete-Time Fuzzy Systems Based on Fuzzy Lyapunov Function Approach ", *International Journal of Computer Sciences and Engineering Systems*, Vol.1, No. 2, pp. 85-91, 2007.
- [38] Y. Mi, W. Pan, Y. W. Jing and G. M. Dimirovski, " Robust stabilization of nonlinear

discrete-time systems based on T-S model ", *Journal of electrical and electronics engineering*, 2004.

- [39] K. R. Lee , E. T. Jeung and H. B. Park, " Robust fuzzy H_∞ control for uncertain nonlinear systems via state feedback: an LMI approach ", *Fuzzy Sets and Systems*, Vol. 120 No. 1, pp. 123-134, 2002.
- [40] J. Chang Lo and M. B. L. Lin, " Robust H_∞ nonlinear modeling and control via uncertain fuzzy systems ", *Fuzzy Sets and Systems*, Vol. 143, No. 4, pp.189-209, 2003.
- [41] P. F. Toulotte, " *Attelage virtuel pour véhicules automatisés* ", Thèse de Doctorat, Université de Valenciennes et du Hainaut Cambrésis, 2006.