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Current Position:

Professor, Mechanical Engineering and Intelligent Systems, The University of Electro-Communications, Tokyo, Japan

Education:

Ph.D., Systems Science, Tokyo Institute of Technology, Yokohama, 1990
Dissertation: An Approach to Modelling, Analysis and Design of Fuzzy Control Systems (Advisor: Michio Sugeno)

M.S., Electrical Engineering, Hosei University, Tokyo, 1987

B.S, Electrical Engineering, Hosei University, Tokyo, 1985

Professional Experience:

Professor 2002 – Present
The University of Electro-Communications, Tokyo

Associate Professor 1998 – 2002
The University of Electro-Communications, Tokyo

Associate Professor 1994 – 1998
Kanazawa University, Kanazawa

Assistant Professor 1990 – 1994
Kanazawa University, Kanazawa

Awards and Honors:

Best Young Researchers Award from the Japan Society for Fuzzy Theory and Systems in 1990

Outstanding Papers Award at the 1990 Annual NAFIPS Meeting in Toronto, Canada, in 1990

Outstanding Papers Award at the Joint Hungarian-Japanese Symposium on Fuzzy Systems and Applications in Budapest, Hungary, in 1991

Best Young Researchers Award from the Japan Society for Mechanical Engineers in 1994

Best Book Awards from the Japan Society for Fuzzy Theory and Systems in 1995

1999 IFAC World Congress Best Poster Paper Prize in 1999

2000 IEEE Transactions on Fuzzy Systems Outstanding Paper Award in 2000

Best Paper Selection at 2005 American Control Conference in Portland, USA, in 2005

IEEE Senior Member, 2009.

Grants: (US$1 is approximately 100 yen.)

New Energy and Industrial Technology Department Organization (NEDO):

Industrial Technology Fellowship Program, 23,139,390 yen, 2005

Industrial Technology Fellowship Program, 29,920,050 yen, 2006

Independent Administrative Corporation Japan Science and Technology Agency (JST)

FY2009 Research for Promoting Technological Seeds, 2,000,000 yen, 2009

Collaborative Research Projects: Total 36, 998,331 yen

Ishikawajima-Harima Heavy Industry Co., Ltd., 1999

Ishikawajima-Harima Heavy Industry Co., Ltd., 2001

Kyowa Medex Co., Ltd., 2002

Toyota Motor Corporation, 2003

Toyota Motor Corporation, 2004

Seiko Epson Corporation, 2004

Toyota Motor Corporation, 2005

Seiko Epson Corporation, 2005

Campus Create Co., Ltd., 2005

Toyota Motor Corporation, 2006

Campus Create Co., Ltd., 2006

Honda Research Institute Japan, 2007

Toyota Motor Corporation, 2007

Honda Research Institute Japan, 2008

Campus Create Co., Ltd., 2008

Campus Create Co., Ltd., 2009

Campus Create Co., Ltd., 2010

Campus Create Co., Ltd., 2010

Grant-in-Aid for Scientific Research from the Ministry of Education, Science and Culture of Japan

April 1995 – March 1996 Grant-in-Aid for Scientific Research from the Ministry of Education, Science and Culture of Japan 1,000,000 yen

1996 April -1998 March Grant-in-Aid for Scientific Research from the Ministry of Education, Science and Culture of Japan 7,500,000 yen

1998 April -2000 March Grant-in-Aid for Scientific Research 10750187 from the Ministry of Education, Science and Culture of Japan 2,900,000 yen

2000 April -2002 March Grant-in-Aid for Scientific Research 12750209 from the Ministry of Education, Science and Culture of Japan 2,200,000 yen

2003 April -2006 March Grant-in-Aid for Scientific Research 15560217 from the Ministry of Education, Science and Culture of Japan 3,700,000 yen

2006 April -2009 March Grant-in-Aid for Scientific Research 18560244 from the Ministry of Education, Science and Culture of Japan 2,800,000 yen

2009 April -2011 March Grant-in-Aid for Scientific Research 21560258 from the Ministry of Education, Science and Culture of Japan 4,550,000 yen

Private Research Foundations:

Total 20,000,000 yen from 16 research foundations

Details:

April 1991- March 1992	1,500,000 yen
April 1994- March 1994	500,000 yen
April 1995- March 1996	8,200,000 yen
April 1996- March 1997	4,200,000 yen
April 1997- March 1998	1,000,000 yen
April 1998- March 1999	2,800,000 yen
April 1999- March 2000	1,000,000 yen
April 2002- March 2003	800,000 yen

Donations from Companies:

Total 12,955,000 yen from 10 private companies

Publications: Only papers and books written in English are listed below.

Books

1. Kazuo Tanaka（Coauthor）, Fuzzy Logic - State of the Art - (Ed. R. Lowen and M. Roubens), Kluwer Academic Publishers (1993).
2. Kazuo Tanaka（Coauthor）, Theoretical Aspects of Fuzzy Control (Ed. H T. Nguyen, M. Sugeno, R. Tong and R. Yager), John Wiley & Sons Publishing Company (1995).
3. Kazuo Tanaka（Coauthor）, Fuzzy Logic and Intelligent Systems (Ed. H. Li and M. M. Gupta), Kluwer Academic Publishers (1995).
4. Kazuo Tanaka（Coauthor）, The Handbooks of Fuzzy Sets Series (Volume 6: Fuzzy Systems : Modeling and Control) (Ed. H. T. Nguyen and M. Sugeno), Kluwer Academic Publishers (1998).
5. Kazuo Tanaka （Coauthor）, Soft Computing in Mechatronics (Ed. K. Hirota and T. Fukuda), Physica-Verlag Heidelberg New York (Springer-Verlag) (1999).
6. Kazuo Tanaka（Coauthor）, Fuzzy Control: Synthesis and Analysis (Ed. S. Farinwata, D. Filev and R. Langari), John Wiley & Sons (2000).
7. Kazuo Tanaka and Hua O. Wang, Fuzzy Control System Design and Analysis: A Linear Matrix Inequality Approach, John Wiley & Sons (2001).
8. Kazuo Tanaka（Coauthor）, Integration of fuzzy logic and chaos theory (Ed. Z. Li, W. A. Halang and G. Chen), Springer (2006).

Others: 11 books written in Japanese

Journal Papers

1. Toshiro Terano, Shigehiro Masui, Kazuo Tanaka and Yujiro Murayama, Manual Control of an Intrinsically Unstable System and Its Modeling by Fuzzy Logic, Information Sciences, Vol.45, No.2, pp.249-273 (1988).
2. Michio Sugeno and Kazuo Tanaka, Successive Identification of a Fuzzy Model and Its Applications to Prediction of a Complex System, Fuzzy Sets and Systems, Vol.42, pp.315 - 334 (1991).
3. Kazuo Tanaka and Michio Sugeno, Stability Analysis and Design of Fuzzy Control Systems, Fuzzy Sets and

Systems, Vol.45, pp.135 - 156 (1992).
4. Kazuo Tanaka and Manabu Sano, Fuzzy Stability Criterion of a Class of Nonlinear Systems, Information Sciences, Vol.71, No.1 & 2, pp.3-26 (1993).
5. Kazuo Tanaka and Manabu Sano, A Robust Stabilization Problem of Fuzzy Control Systems and Its Applications to Backing up Control of a Truck-Trailer, IEEE Transactions on Fuzzy Systems, Vol.2, No.2, pp.119-134 (1994).
6. Kazuo Tanaka and Manabu Sano, Trajectory Stabilization of a Model Car via Fuzzy Control, Fuzzy Sets and Systems, Vol.70, pp.155-170 (1995).
7. Kazuo Tanaka and Manabu Sano, Frequency Shaping for Fuzzy Control Systems with Unknown Nonlinear Plants by a Learning Method of Neural Network, Fuzzy Sets and Systems, Vol.71, pp.71-84 (1995).
8. Kazuo Tanaka, Manabu Sano and Hiroyuki Watanabe, Modeling and Control of Carbon Monoxide Concentration using a Neuro-Fuzzy Technique, IEEE Transactions on Fuzzy Systems, Vol.3, No.3, pp.271-279 (1995).
9. Kazuo Tanaka, Stability and Stabilizability of Fuzzy-Neural-Linear Control Systems, IEEE Transactions on Fuzzy Systems, Vol.3, No.4, pp.438-446 (1995).
10. Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, Robust Stabilization of a Class of Uncertain Nonlinear Systems via Fuzzy Control, IEEE Transactions on Fuzzy Systems, Vol.4, No.1, pp.1-13 (1996).
11. Hua O. Wang, Kazuo Tanaka and Michael F. Griffin, An Approach to Fuzzy Control of Nonlinear Systems, IEEE Transactions on Fuzzy Systems, Vol.4, No.1, pp.14-23 (1996).
12. Kazuo Tanaka, An Approach to Stability Criteria of Neural Network Control Systems, IEEE Transactions on Neural Networks, Vol.7, No.3, pp.629-642 (1996).
13. Kazuo Tanaka and Takahiro Kosaki, Design of a Stable Fuzzy Controller for an Articulated Vehicle, IEEE Transactions on Systems, Man and Cybernetics: Part B, Vol.27, No.3, pp.552-558 (1997).
14. Kazuo Tanaka and Takayuki Ikeda, Absolute Stability Conditions in a Fuzzy Phase-Lead Compensation and their Extension to MIMO Systems, IEEE Transactions on Industrial Electronics, Vol.45, No.2, pp.333-340, April (1998).
15. Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, Fuzzy Regulators and Fuzzy Observers, IEEE Transactions on Fuzzy Systems, Vol. 6, No.2, pp.250-265, May (1998).
16. Kazuo Tanaka, Takahiro Kosaki and Hua O. Wang, Backing Control Problem of a Mobile Robot with Multiple Trailers, IEEE Transactions on Systems, Man and Cybernetics Part C, Vol.28, No.3, August pp.329-337 (1998)
17. Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, A Unified Approach to Controlling Chaos via an LMI-based Fuzzy Control System Design, IEEE Transactions on Circuits & Systems-1, Vol.45, No.10, pp.1021-1040 (1998).
18. Tadanari Taniguchi and Kazuo Tanaka, Nonlinear Model Following Control via Takagi-Sugeno Fuzzy Model, Journal of Advanced Computational Intelligence, Vol.3, No.2, pp.68-74 (1999).
19. V. S. Ulyanov, Kazuo Yamafuji, S. V. Ulyanov and Kazuo Tanaka, Computational Intelligence with New Physical Controllability Measure for Robust Control Algorithm of Extension-Cableless Robotic Unicycle, Journal of Advanced Computational Intelligence, Vol.3, No.2, pp.136-147 (1999).
20. Hong Z. Yang, Kazuo Yamafuji and Kazuo Tanaka, Development of a Robotic System which Assists Unmanned Production Based on Cooperation between Off-line Robots and On-line Robots Part 2: Operational Analysis of Off-line Robots in a Cellular Assembly Shop, International Journal of Advanced Manufacturing Technology, Vol.16, No.1, pp.65-70 (2000).
21. Jing Li, Hua O. Wang, David Niemmann and Kazuo Tanaka, Dynamic Parallel Distributed Compensation for Takagi-Sugeno Fuzzy Systems, Information Sciences No. 123, pp.201-221 (2000)
22. Takashi Kawamura, Kazuo Yamafuji and Kazuo Tanaka, Principle of Cat-Turn Motion and Realization of Cat-Turning by a Robot with Vertebrate-type Backbones Driven by Rubber Actuators, Machine Intelligence & Robotic Control, Vol.2, No.1, pp.27-34 (2000).
23. Tadanari Taniguchi, Kazuo Tanaka and Hua O. Wang, Fuzzy Descriptor Systems and Nonlinear Model Following Control, IEEE Transactions on Fuzzy Systems Vol.8, No.4, pp.442-452 August (2000).
24. Tadanari Taniguchi, Kazuo Tanaka and Hua O. Wang, Model Construction, Rule Reduction, and Robust Compensation for Generalized Form of Takagi-Sugeno Fuzzy Systems, IEEE Transactions on Fuzzy Systems Vol.8, No.4, August pp.525-538 (2001).
25. Kazuo Tanaka, Masaaki Iwasaki and Hua O. Wang, Switching Control of an R/C Hovercraft: Stabilization and Smooth Switching, IEEE Transactions on Systems, Man and Cybernetics, Part B, Vol.31, No.6, pp.853-863 (2001)
26. Takayuki Tanaka, Hisanobu Suzuki and Kazuo Tanaka, Principle of Stable Running of an Unicycle Robot, Journal of Robotics and Mechatronics, Vol.4, No.1, pp.37-45 (2002)
27. Kazuo Tanaka, Shigeki Hori and Hua O. Wang, "Multi-objective Control of a Vehicle with Triple Trailers", IEEE/ASME Transactions on Mechatoronics, Vol.7, No.3, pp.357-368 (2002).

28. Naoki Kanamori and Kazuo Tanaka, Operating Feeling Based in Human-robot Collaborative Control Systems, Journal of Robotics and Mechatronics, Vol.14, No.16, pp.604-614 (2002)
29. Tsuyoshi Hori and Kazuo Tanaka, State Feedback Stabilization in Nonlnear Time Delay, International Journal of Advanced Computational Intelligence, Vol.3, No.3, pp.109-114 (2002).
30. Kazuo Tanaka, Tsuyoshi Hori and Hua 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, August 2003.
31. Hua O. Wang, Jing Li and Kazuo Tanaka, "T-S fuzzy Model with Linear Rule Consequence and PDC Controller:A Universal Framework for Nonlinear Control Systems", International Journal of Fuzzy Systems, Vol.5, No.2, pp.106-113, June 2003.
32. Kazuo Tanaka, Hiroshi Ohtake and Hua O. Wang, A Practical Design Approach to Stabilization for 3DOF RC Helicopter, IEEE Transactions on Control Systems Technologies, Vol.12, No.2, pp.315-325, March (2004).
33. Wei Li, Kazuo Tanaka and Hua O. Wang, Acrobatic Control of a Pendubot, IEEE Transactions on Fuzzy Systems, Vol.12, No.4, pp.549-552, August (2004).
34. Takanori Emaru, Kazuo Tanaka and Takeshi Tsuchiya, Resolving Crosstalk of Sonar by Applying Nonlinear Filter Based on the Sliding Mode, Journal of Robotics and Mechatronics, pp.587-596, Vol.16, No.6 (2004)
35. Kazuo Tanaka, Kazuyuki Matsunaga, Hua. O. Wang, Electroencephalogram-Based Control of an Electric Wheelchair, IEEE Transactions on Robotics, vol.21, no.4, pp.762-766, August 2005.
36. Hiroshi Ohtake, Kazuo Tanaka, Switching Model Construction and Stability Analysis for Nonlinear Systems, Journal of Advanced Computational Intelligence and Intelligent Informatics, Vol.10, No.1, pp.3-10, 2006.
37. Hiroshi Ohtake, Kazuo Tanaka, Hua O. Wang, Switching Fuzzy Controller Design based on Switching Lyapunov Function for a Class of Nonlinear Systems, IEEE Transactions on Systems, Man, and Cybernetics Part B, Vol.36, No.1, pp.13-23, Feb., 2006.
38. Kazuo Tanaka, Hiroshi Ohtake, Hua. O. Wang, Recursive Pointwise Design for Nonlinear Systems, IEEE Transactions on Fuzzy Systems, IEEE Transactions on Fuzzy Systems, Vol.14, No.2, pp.305-313, April, 2006.
39. Kazuo Tanaka, Hiroshi Ohtake and Hua O. Wang, A Descriptor System Approach to Fuzzy Control System Design via Fuzzy Lyapunov Functions, IEEE Transactions on Fuzzy Systems, Vol.15, No.3, pp.333-341, June 2007.
40. Kazuo Tanaka, Ryohei Suzuki, Tokanori EMaru, Y. Higashi and Hua O. Wang, Development of a Cyclogyro-Based Flying Robot With Variable Attack Angle Mechanisms, IEEE/ASME Transactions on Mechatronics, Vol.12, No.5, pp. 565-570, Oct. 2007.
41. Hiroshi Ohtake, Kazuo Tanaka, Switching Model Construction and Controller Design for Dynamical Systems with Input Nonlinearity, Journal of Advanced Computational Intelligence and Intelligent Informatics, Vol.12, No.6, Dec., pp.537-545, 2008.
42. Naohiro Hara, Kazuo Tanaka, Hiroshi Ohtake and Hua O. Wang, Development of a Flying Robot with Pantograph-based Variable Wing Mechanism, IEEE Transactions on Robotics, Vol.25, No.1, pp.79-87 Feb. 2009.
43. Kazuo Tanaka, Kenji Yamauchi, Hiroshi Ohtake and Hua. O. Wang, Sensor Reduction for Backing-UP Control of a Vehicle with Triple Trailers, IEEE Transactions on Industrial Electronics, Vol.59, No.2, pp.497-509 Feb. 2009
44. Kazuo Tanaka, Hiroshi Ohtake and Hua O. Wang, Guaranteed Cost Control of Polynomial Fuzzy Systems via a Sum of Squares Approach, IEEE Transactions on Systems, Man and Cybernetics Part B, Vol.39, No.2, pp.561-567 April, 2009.
45. Kazuo Tanaka, Hiroshi Ohtake and Hua O. Wang, A Sum of Squares Approach to Modeling and Control of Nonlinear Dynamical Systems with Polynomial Fuzzy Systems, IEEE Transactions on Fuzzy Systems, Vol.17, No.4, pp.911-922, August 2009.
46. Henri Aguesse, Hua O. Wang and Kazuo Tanaka, Information Control in a Unified Framework of Consensus Seeking, International Journal of Information and Systems Science, Vol.5, No. 2, pp. 199-209, 2009.

Others: 38 Journal papers written in Japanese

International Conference Papers

1. Kazuo Tanaka and Michio Sugeno, Stability Analysis of Fuzzy Systems Using Lyapunov's Direct Method, North American Fuzzy Information Society Annual Meeting (NAFIPS'90), Toronto, Vol.1, pp.133 - 136 (1990).
2. Kazuo Tanaka and Michio Sugeno, Fast Stability Checking Algorithm for Fuzzy Dynamical Systems, Joint Hungarian-Japanese Symposium on Fuzzy Systems and Applications, Budapest, Vol.1, pp.159-162 (1991).

3. Manabu Sano, Kazuo Tanaka and Toshinori Fujita, Application of Fuzzy Controller to Pneumatic Servosystems, Joint Hungarian-Japanese Symposium on Fuzzy Systems and Applications, Budapest, Vol.1, pp.147-150 (1991).
4. Manabu Sano, Kazuo Tanaka and Hirofumi Nakata, A Simple Learning Algorithm of Handwritten Character Recognition Using Fuzzy Relation, Fourth International Fuzzy Systems Association World Congress, Brussels, Vol.1, pp.183-186 (1991).
5. Kazuo Tanaka, Manabu Sano and Kazuyuki Suzuki, A New Tuning Method of Fuzzy Controllers, Fourth International Fuzzy Systems Association World Congress, Brussels, Vol.1, pp.207-210 (1991).
6. Tetsuji Tani, Makoto Sakota and Kazuo Tanaka, Fuzzy Modeling by ID3 Algorithm and Its Application to Prediction of Heater Outlet Temperature, IEEE International Conference on Fuzzy Systems, San Diego, pp.923-930 (1992).
7. Kazuo Tanaka and Manabu Sano, Stability Conditions for Design Problem of Fuzzy Controller, Korea-Japan Joint Conference on Fuzzy Systems and Engineering, Seoul, pp.21-24 (1992).
8. Kazuo Tanaka, Manabu Sano and Hiroyuki Watanabe, Fuzzy Modeling for Prediction of CO Concentration, Korea-Japan Joint Conference on Fuzzy Systems and Engineering, Seoul, pp.214-217 (1992)
9. Manabu Sano, Kazuo Tanaka, Akihiko Sakakibara and Tsuyoshi Muto, Prediction of Precipitation Percentage by Neural Networks, Korea-Japan Joint Conference on Fuzzy Systems and Engineering, Seoul, pp.149-152 (1992).
10. Kazuo Tanaka and Manabu Sano, Some Properties of Stability of Fuzzy Nonlinear Feedback Systems, IEEE International Conference on Industrial Electronics, Control, Instrumentation and Automation, San Diego, Vol.3, pp.1252-1257 (1992).
11. Kazuo Tanaka, Manabu Sano and Hiroyuki Watanabe, Identification and Analysis of Fuzzy Model for Air Pollution, IEEE International Conference on Industrial Electronics, Control, Instrumentation and Automation, San Diego, Vol.3, pp.1431-1436 (1992).
12. Kazuo Tanaka and Manabu Sano, On Improvement of Frequency Response in Fuzzy Control Systems, 1993 International Fuzzy Systems and Intelligent Control Conference, Louisville, pp.107-115 (1993).
13. Kazuo Tanaka, Manabu Sano and Hiroyuki Watanabe, Self-Organizing Fuzzy Identification of a Municipal Refuse Incinerator, 1993 International Fuzzy Systems and Intelligent Control Conference, Louisville, pp.13-22 (1993).
14. Kazuo Tanaka and Manabu Sano, Stability Analysis of Neural Networks Using Stability Conditions of Fuzzy Systems, 2nd IEEE International Conference on Fuzzy Systems, San Francisco, Vol.1, pp.422-428 (1993).
15. Kazuo Tanaka and Manabu Sano, Design of Fuzzy Controllers Based on Frequency and Transient Characteristics, 2nd IEEE International Conference on Fuzzy Systems, San Francisco, Vol.1, pp.111-116 (1993).
16. Kazuo Tanaka and Manabu Sano, Concept of Stability Margin for Fuzzy Systems and Design of Robust Fuzzy Controllers, 2nd IEEE International Conference on Fuzzy Systems, San Francisco, Vol.1, pp.29-34 (1993).
17. Tetsuji Tani, Shunji Murakoshi, Tsutomu Sato, Motohide Umano and Kazuo Tanaka, Application of Neuro-Fuzzy Hybrid Control System to Tank Level Control, 2nd IEEE International Conference on Fuzzy Systems, San Francisco, Vol.1, pp.618-623 (1993).
18. Kazuo Tanaka, Manabu Sano and Hiroyuki Watanabe, Simulation Study on Self-learning Fuzzy Control of CO Concentration, Fifth International Fuzzy Systems Association World Congress, Seoul, Vol.2, pp.1366-1369 (1993).
19. Manabu Sano, Kazuo Tanaka and Keisuke Yoshioka, Prediction System on Chance of Rain by Fuzzy Relational Model, Fifth International Fuzzy Systems Association World Congress, Seoul, Vol.2, pp.1222-1225 (1993).
20. Kazuo Tanaka and Manabu Sano, Phase Compensation of Fuzzy Control Systems and Realization of Neuro-Fuzzy Compensators, Fifth International Fuzzy Systems Association World Congress, Seoul, Vol.2, pp.845-848 (1993).
21. Kazuo Tanaka and Manabu Sano, Analysis and Design of Fuzzy Controllers in Frequency Domain, IEEE International Conference on Industrial Electronics, Control, and Instrumentation, Hawaii, Vol.1, pp.236-241 (1993).
22. Kazuo Tanaka and Manabu Sano, On Learning Properties of Neuro-Fuzzy Phase-lead Compensators, IEEE International Conference on Industrial Electronics, Control, and Instrumentation, Hawaii, Vol.1, pp.418-423 (1993).
23. Tetsuji Tani, Tsutomu Sato, Motohide Umano and Kazuo Tanaka, Application of Neural Network to Tank Level Control of Petrochemical Plants, IEEE International Conference on Industrial Electronics, Control, and Instrumentation, Hawaii, Vol.1, pp.321-326 (1993).
24. Kazuo Tanaka, Manabu Sano, Kazuyuki Suzuki and Hiroyuki Watanabe, Prediction of O_2 Concentration in a Furnace by SOFIA, First Asian Fuzzy Systems Symposium, Singapore, Vol.1, pp.996-1001 (1993).
25. Kazuo Tanaka and Manabu Sano, Design of Fuzzy Phase-lead Compensators and Self-learning by Neural

Network, First Asian Fuzzy Systems Symposium, Singapore, Vol.1, pp. 94-99 (1993).

26. Kazuo Tanaka and Manabu Sano, On the Concepts of Regulator and Observer of Fuzzy Control Systems, 3rd IEEE International Conference on Fuzzy Systems, Orlando, Vol.2, pp.767-772 (1994).
27. Tetsuji Tani, Makoto Utashiro, Motohide Umano and Kazuo Tanaka, Application of Practical Fuzzy-PID Hybrid Control System to Petrochemical Plant, 3rd IEEE International Conference on Fuzzy Systems, Orlando, Vol.2, pp.1211-1216 (1994).
28. Kazuo Tanaka and Manabu Sano, Learning Control Algorithm and Its Validity of Fuzzy Frequency Compensation for Unknown Plants, 3rd IEEE International Conference on Fuzzy Systems, Orlando, Vol.2, pp.773-778 (1994)
29. Kazuo Tanaka, Learning Control of an Adaptive Structural Manipulator by Fuzzy Phase-Lead Compensation, International Joint Conference of NAFIPS/IFIS/NASA'94, San Antonio, Vol.1, pp.237-242 (1994).
30. Kazuo Tanaka, A Note on Stability and Stabilizability of Fuzzy-Neural-Linear Control Systems, International Joint Conference of NAFIPS/IFIS/NASA'94, San Antonio, Vol.1, pp.106-111 (1994).
31. Kazuo Tanaka, Model-based Fuzzy Control of a Trailer Type Mobile Robot, 4th IEEE International Conference on Fuzzy Systems, Yokohama, Vol.1, pp.65-70 (1995).
32. Hua O. Wang, Kazuo Tanaka and Michael F. Griffin, Parallel Distributed Compensation of Nonlinear Systems by Takagi-Sugeno Fuzzy Model, 4th IEEE International Conference on Fuzzy Systems, Yokohama, Vol.2, pp.531-538 (1995).
33. Kazuo Tanaka, and Keisuke Yoshioka, Design of Fuzzy Controller for Backer-Upper of a Five-Trailers and Truck, 4th IEEE International Conference on Fuzzy Systems, Yokohama, Vol.3, pp.1543-1548 (1995).
34. Hua O. Wang, Kazuo Tanaka and Michael F. Griffin, An Analytical Framework of Fuzzy Modeling and Control of Nonlinear Systems, 1995 American Control Conference, Seattle, Vol.3, pp.2272 - 2276 (1995).
35. Kazuo Tanaka and Keisuke Yoshioka, Fuzzy Trajectory Control and GA-based Obstacle Avoidance of a Truck with Five Trailers, 1995 IEEE International Conference on Systems, Man and Cybernetics, Vancouver, Vol.5, pp.4378-4382 (1995).
36. Kazuo Tanaka and Takayuki Ikeda, Stability Analysis of Feedback Systems in Fuzzy Phase-lead Compensation, 1995 IEEE International Conference on Systems, Man and Cybernetics, Vancouver, Vol.3, pp.2165-2170 (1995).
37. Kazuo Tanaka and Shinichirou Hatanaka, Genetic Tuning with Concept of Stabilizable Chromosomes in Nonlinear Controller Design, IEEE International Conference on Evolutionary Computation, Perth,Vol.1, pp.334-339 (1995)
38. Kazuo Tanaka, Stability Analysis of Neural Networks via Lyapunov Approach, IEEE International Conference on Neural Networks, Perth, Vol.6, pp.3192-3197 (1995).
39. Tetsuji Tani, Tomonari Sasada, Makoto Utashiro, Motohide Umano and Kazuo Tanaka, Neuro-Fuzzy Hybrid Control System of Nonlinear Process in Petroleum Plant, IEEE International Conference on Neural Networks, Perth, Vol.5, pp.2501-2506 (1995).
40. Kazuo Tanaka and Takayuki Ikeda, A Generalization of Fuzzy Phase-lead Compensation and Its Stability Analysis, International Joint Conference of CFSA/IFIS/SOFT'95 on Fuzzy Theory and Applications, Taipei, pp.145-150 (1995).
41. Kazuo Tanaka and Takahiro Kosaki, Path Tracking Control of an Automobile Robot with a Trailer using Parallel Distributed Compensation, International Joint Conference of CFSA/IFIS/SOFT'95 on Fuzzy Theory and Applications, Taipei, pp.555-560 (1995).
42. Hua O. Wang, Kazuo Tanaka and Takayuki Ikeda, Fuzzy Modeling and Control of Chaotic Systems, 1996 IEEE International Symposium on Circuits and Systems, Atlanta, Vol.3, pp.209-212 (1996).
43. Kazuo Tanaka, Takahiro Kosaki and Hua O. Wang, Fuzzy Control of an Articulated Vehicle and Its Stability Analysis, 13th World Congress International Federation of Automatic Control (IFAC'96), San Francisco, Vol.F, pp.115-120 (1996)
44. Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, Quadratic Stability and Stabilization of Fuzzy Control Systems, Biennial Conference of the North American Fuzzy Information Processing Society, San Francisco, Vol.1, pp.245-249 (1996).
45. Kazuo Tanaka and Takahiro Kosaki, Intelligent Control of a Car with N Trailers - Trajectory Stabilization and GA-based Path Planing-, Biennial Conference of the North American Fuzzy Information Processing Society, San Francisco, Vol.1, pp.250-254 (1996).
46. Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, An Approach to Stabilization of Uncertain Fuzzy Systems, 5th IEEE International Conf. on Fuzzy Systems, New Orleans,Vol.1, pp.72-77 (1996).
47. Hua O. Wang and Kazuo Tanaka, An LMI-based Stable Fuzzy Control of Nonlinear Systems and Its Applications to

Control of Chaos, 5th IEEE International Conf. on Fuzzy Systems, New Orleans, Vol.2, pp.1433-1438 (1996).

48. Kazuo Tanaka, Takahiro Kosaki and Hua O. Wang, Fuzzy Control of a Mobile Robot with Multiple Trailers, 11th IEEE International Symposium on Intelligent Control, Dearborn, pp.259-264 (1996).
49. Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, Design of Fuzzy Control Systems based on Relaxed LMI Stability Conditions, 35th IEEE Conference on Decision and Control, Kobe, Vol.1, pp.598-603 (1996).
50. Kazuo Tanaka, Tadanari Taniguchi and Hua O. Wang, An LMI Approach to Fuzzy Controller Design of a Mobile Robot with Multiple Trailers, Third Joint Conference of Information Sciences, Durham, Vol.1, pp.259-262 (1997).
51. Kazuo Tanaka, Daisuke Oku and Hua O. Wang, A Fuzzy Controlled Ping-Pong Robot - Robot vs Human -, Third Joint Conference of Information Sciences, Durham, Vol.1, pp.140-143 (1997).
52. Jing Li, Hua O. Wang and Kazuo Tanaka, Stable Fuzzy Control of the Benchmark Nonlinear Control Problem: A System-theoretic Approach, Third Joint Conference of Information Sciences, Durham, Vol.1, pp.263-266 (1997).
53. Kazuo Tanaka, Hua O. Wang and Tadanari Taniguchi, Fuzzy Control of a Vehicle with Two Trailers, 1997 American Control Conference, New Mexico, pp.2861-2862 (1997).
54 Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, Fuzzy Control System Design via LMIs, 1997 American Control Conference, New Mexico, pp. 2873- 2877 (1997).
55. Kazuo Tanaka, Takahiro Kosaki, Tadanari Taniguchi and Hua O. Wang, An LMI Approach to Backer-Upper Control of a Truck with Ten Trailers, Seventh International Fuzzy Systems Association World Congress, Prague, Vol.3, pp.376- 379 (1997).
56. Hua O. Wang, Jing Li, Kazuo Tanaka and Takayuki Ikeda, Fuzzy Modeling and Control of Chaotic Systems, Seventh International Fuzzy Systems Association World Congress, Prague, Vol.4, pp.272-278 (1997).
57. Takahiro Kosaki, Kazuo Tanaka and Manabu Sano, Application of Model-based Fuzzy Control to a Magnetic Suspension System, Seventh International Fuzzy Systems Association World Congress, Prague, Vol.3, pp.366-369 (1997).
58. Kazuo Tanaka, Takayuki Ikeda and Hua O. Wang, An LMI Approach to Fuzzy Controller Designs Based on Relaxed Stability Conditions, Sixth IEEE International Conference on Fuzzy Systems, Barcelona, Vol.1, pp.171-176 (1997).
59. Kazuo Tanaka, Tadanari Taniguchi and Hua O. Wang, Model-based Fuzzy Control for Two Trailers Problem: Stability Analysis and Design via Linear Matrix Inequalities, Sixth IEEE International Conference on Fuzzy Systems, Barcelona, Vol.1, pp.343-348 (1997).
60. Takahiro Kosaki, Manabu Sano and Kazuo Tanaka, Model-Based Fuzzy Control System Design for Magnetic Bearings, Six IEEE International Conference on Fuzzy Systems, Barcelona, Vol.2, pp.895-899 (1997).
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IEEE International Conference on Advances in Vehicle Control and Safety, International Program Committee, Amiens, France, July, 1998

2nd IEEE International Conference on Intelligent Processing System, Program Committee, Gold Coast, Australia, August, 1998

14th International Symposium on Intelligent Control/Intelligent Systems and Semiotics (ISIC'99), Program Committee, Cambridge, Massachusetts, Sept., 1999

IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'2000), San Antonio, Texas, May, 2000

IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2000), Program Committee, Kagawa University, Takamatsu, Oct., 2000

The 10th IEEE International Conference on Fuzzy Systems, Program Committee, The University of Melbourne, Melbourne, Australia, Dec. 2001

The 6th International Conference on Mechatronics Technology, Editor, Kitakushuu, Japan, Sep., 2002

ICASE/SICE Joint Workshop – Intelligent Control and Systems -, Muju Resort, South Korea, Oct. 2002

Joint 1st International Conference on Soft Computing and Intelligent Systems & 3rd International Symposium on Advanced Intelligent Systems, Associate Editor, Tsukuba, Japan, Oct., 2002

5th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA2003), Program Committee, Kobe, Japan, July, 2003

2003 IEEE International Conference on Systems. Man and Cybernetics, Program Committee, Washington D.C., USA. Oct., 2003

2004 IEEE International Conference on Systems. Man and Cybernetics, Program Committee, The Hague, Netherland, Oct., 2004

2005 IEEE International Conference on Fuzzy Systems, Technical Program Committee, Reno, Nevada, May, 2005.

2006 American Control Conference, Program Committee, Minneapolis, Minnesota USA, June, 2006

2006 IEEE International Conference on Fuzzy System, Program Committee, Vancouver, BC, Canada on July 16-21, 2006

2007 American Control Conference, Program Committee, Marriott Marquis Hotel at Times Square, New York City,

USA, July, 2007

2007 IEEE International Conference on Fuzzy System, Program Committee, London, England, July 24-26, 2007

2008 IEEE International Conference on Fuzzy System, Program Committee, Hong Kong, June 1-6, 2008

IEEE Symposium on Computational Intelligence in Control and Automation (CICA 2009), Program Committee, Nashville, March 30 -Apr 2, 2009

International Conference on System Science and Engineering (ICSSE 2010), Program Co-Chair, Taipei, July 1 – July 3, 2010

International Conference on System Science and Engineering (ICSSE 2010), Program Co-Chair, Macao, June 20 – June 22, 2011)

International Conference on Pantograph Catenary Framework for Intelligent Control, International Program Committee, Spet. 1- 2, 2011, Amiens, France.

Others: 10 Committees in Japanese

Associate Editors:

Associate Editor, Conference Editorial Board, IEEE Control Systems Society, January , 2001-present

Associate Editor, Editorial Board of IEEE Transactions on Fuzzy Systems (TFS) 2006.4-present

Associate Editor, Automatica April 1, 2008～March 31, 2011

Chair of Task Forces on Fuzzy Control Theory and Application, IEEE Computational Intelligence Society Fuzzy Systems Technical Committee, 2008.1～