

Prof. Zhihong Man

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Research Interests

- Control Systems
- Neural Networks
- Signal Processing
- Diagnosis of Industrial systems
- Vehicle dynamics and control
- Robotics and Automation
- Non-linear control
- Fuzzy systems

Biography

- Education
 - PhD from University of Melbourne Australia 1987.
 - Master's Degree from Chinese Academy of Science in 1987
 - B.Eng from Shanghai Jiaotong University China 1982

From 1994 to 1996, Zhihong was the Lecturer in the Department of Computer and Communication Engineering at Edith Cowan University, Perth, Australia. From 1996 to 2001, he was the Lecturer and then Senior Lecturer in the School of Engineering at The University of Tasmania, Australia. In 2001, he was the Visiting Senior Fellow in the School of Computer Engineering at Nanyang Technological University (NTU), Singapore. From 2002 to 2007, he was the Associate Professor of Computer Engineering at NTU. From 2007 to 2008, Zhihong was with Monash University Sunway Campus (Malaysia), where he served as the Professor and Head of Electrical and Computer Systems Engineering, the Chair of the Research Committee of the School of Engineering, and the Chair of the Monash Sunway Campus Research Committee. Zhihong is currently the Professor of Robotics and Mechatronics in the Faculty of Science, Engineering and Technology at Swinburne University of Technology, Melbourne, Australia.

Zhihong's research interests are in nonlinear control, signal processing, robotics, neural networks, fuzzy systems, engineering optimization, diagnosis of industrial systems, vehicle dynamics and control. He has published more than 200 papers in refereed international journals and refereed international conferences proceedings. Since 1994,

Zhihong was the Guest Editor of 6 Special Issues on neural networks, diagnosis of industrial systems and nonlinear control, published in ISCI and ERA journals. Zhihong has been involved in many international conferences in control, robotics, signal processing, neural networks and industrial electronics as General Chair, Program Committee Chair, Track Chair, Session Chair, and the International Advisory Committee

and Technical Committees member, including the Chair of the Technical Committee of the third IEEE International Conference on Industrial Electronics and Applications (ICIEA 2008) and the co–Chair of the Program Committee of the Fourth IEEE International Conference on Industrial Electronics and Applications (ICIEA 2009).

In addition, Zhihong received the Nanyang Technological University Best Teacher Award in 2004, and the Most Popular Lecturer in the School of Computer Engineering at NTU from 2002 to 2007.

Research Grant awards

- 2014: Real time intelligent data mining for the Squeak and Rattle problem *; AUTO CRC - Data mining for Squeak and Rattle
- 2013: Component-level fault prognosis for aircraft systems *; Defence Science and Technology Organisation
- 2012: From diesel to electric: a new era in personnel transport for underground coal mines *; ARC Linkage Projects Scheme
- 2011: Component-level Fault Prognosis for Aircraft Propulsion Systems *; Defence Science and Technology Organisation
- 2009:Modelling and Removal of Noise and Artefacts in Surveillance and Security Video for Forensic Image Analysis and Enhancement *; ARC Discovery Projects Scheme

Publications and Books

- Book
 - Book chapter Man, Zhihong ; Khoo, Suiyang ; Yu, Xinghuo ; Miao, Chunyan ; Jin, Jiong ; Tay, Feisiang ; 2011. A new design of sliding mode control systems. Lecture Notes in Control and Information Sciences: Sliding Modes After the First Decade of the 21st Century: selected papers from the 11th IEEE Workshop on Variable Structure Systems (VSS2010), Mexico City, Mexico, 26-28 June 2010, and the principal meeting for the international project supported by the Fondo de Cooperacion Internacional en Ciencia y Tecnologia Union Europea, Mexico City, Mexico (FONCICYT) 93302 / Leonid Fridman, Jaime Moreno and Rafael Iriarte (eds.). Vol. 412, chapter 5, pp. 151-167
 - Book chapter Zhang, Yanliang;Ang, Wei Tech;Jin, Jiong;Zhang, Shudong;Man, Zhihong;2008. Nonlinear adaptive sliding mode control for a rotary inverted pendulum. Lecture notes in electrical engineering: Proceedings of the International Multi-Conference of Engineers and Computer Scientists (IMECS 2007), Hong Kong, 21-23 March 2007. Vol. 5, pp. 345-360
 - Book Man, Zhihong;2007. An introduction to signals and systems
 - Book Man, Zhihong;2004. Robotics for computer engineering students.
 - Book Man, Zhihong;2005. Robotics

- Book chapter Yu, Xinghuo;Man, Zhihong;2002. Variable structure systems with terminal sliding modes. Lecture notes in control and information sciences: variable structure systems: towards the 21st century / Xinghuo Yu and Jian-Xin Xu (eds.). pp. 109-127
- Book chapter Seng, Kah Phooi;Man, Zhihong;Wu, Hong Ren;Tse, K. M.;2002. An adaptive recurrent network training algorithm using IIR filter model and Lyapunov theory. Recent advances in computers, computing and communications / Nikos Mastorakis and Valeri Mladenov (eds.). pp. 287-289
- Book chapter Yu, Shuanghe;Yu, Xinghuo;Man, Zhihong;2001. Indirect adaptive fuzzy control of nonlinear systems with terminal sliding modes. Studies in fuzziness and soft computing: fuzzy logic: a framework for the new millenium / Vladimir Dimitrov and Victor Korotkich (eds.). pp. 263-276

- Journal Publications
- 2016
 - Zhi, Linxian ; Zhu, Yuyang ; Wang, Hai ; Xu, Zhengming ; Man, Zhihong ; 2016. A recurrent neural network for modeling crack growth of aluminium alloy. Neural Computing and Applications. Vol. 27, no. 1 (Jan 2016), pp. 197-203
 - Xie, L. ; Yang, Y. ; Zhou, Z. ; Zheng, J. ; Tao, M. ; Man, Z. ; 2016. Dynamic neural modeling of fatigue crack growth process in ductile alloys. Information Sciences. Vol. 364-365, (Oct 2016), pp. 167-183
 - Al-Ghanimi, A. ; Zheng, J. ; Man, Z. ; 2016 (in press). A fast non-singular terminal sliding mode control based on perturbation estimation for piezoelectric actuators systems. International Journal of Control.
 - Man, Zhihong ; Huang, Guang-Bin ; 2016. Guest editorial: Special issue on Extreme learning machine and applications (II). Neural Computing and Applications. Vol. 27, no. 2 (Feb 2016), pp. 253-254
 - Xie, Linsen ; Lu, Chengbo ; Mei, Ying ; Du, Hong ; Man, Zhihong ; 2016. An optimal method for data clustering. Neural Computing and Applications. Vol. 27, no. 2 (Feb 2016), pp. 283-289
 - Do, Manh Tuan ; Man, Zhihong ; Jin, Jiong ; Zhang, Cishen ; Zheng, Jinchuan ; Wang, Hai ; 2016. Sliding mode learning control of non-minimum phase nonlinear systems. International Journal of Robust and Nonlinear Control. Vol. 26, no. 11 (Jul 2016), pp. 2281–2298
 - Man, Zhihong ; Huang, Guang-Bin ; 2016. Guest editorial: Special issue on Extreme learning machine and applications (I). Neural Computing and Applications. Vol. 27, no. 1 (Jan 2016), pp. 1-2
- 2015
 - Zheng, Jinchuan ; Wang, Hai ; Man, Zhihong ; Jin, Jiong ; Fu, Minyue ; 2015. Robust motion control of a linear motor positioner using fast nonsingular terminal sliding mode. IEEE/ASME Transactions on Mechatronics. Vol. 20, no. 4 (Aug 2015), pp. 1743-1752

- Al-Ghanimi, Ali ; Zheng, Jinchuan ; Man, Zhihong ; 2015. Robust and fast non-singular terminal sliding mode control for piezoelectric actuators. *IET Control Theory and Applications*. Vol. 9, no. 18 (2015), pp. 2678–2687
- Choudhury, T. A. ; Berndt, C. C. ; Man, Zhihong ; 2015. Modular implementation of artificial neural network in predicting in-flight particle characteristics of an atmospheric plasma spray process. *Engineering Applications of Artificial Intelligence*. Vol. 45, (Oct 2015), pp. 57-70
- 2014
 - Zhao, Lei ; Cai, Wen-Jian ; Man, Zhihong ; 2014. Neural modeling of vapor compression refrigeration cycle with extreme learning machine. *Neurocomputing*. Vol. 128, (Mar 2014), pp. 242–248
 - Khoo, Suiyang ; Xie, Lihua ; Zhao, Shengkui ; Man, Zhihong ; 2014. Multi-surface sliding control for fast finite-time leader-follower consensus with high order SISO uncertain nonlinear agents. *International Journal of Robust and Nonlinear Control*. Vol. 24, no. 16 (Nov 2014), pp. 2388–2404
 - Zhao, Shengkui ; Jones, Douglas L. ; Khoo, Suiyang ; Man, Zhihong ; 2014. Frequency-domain beamformers using conjugate gradient techniques for speech enhancement. *The Journal of the Acoustical Society of America*. Vol. 136, no. 3 (Sep 2014), pp. 1160
 - Tjiam, Aijiwati ; Jin, Jiong ; Man, Zhihong ; Cao, Zhenwei ; 2014. System dynamics analysis of adaptive modulation problem for rayleigh flat-fading channel. *IEEE Wireless Communications Letters*. Vol. 3, no. 3 (Jun 2014), pp. 325-328
 - Man, Zhihong ; Wang, Dianhui ; 2014. Introduction to the special issue on fault diagnosis and prognosis for engineering systems. *Computers & Electrical Engineering*. Vol. 40, no. 7 (2014), pp. 2151-2153
 - Tuan, Do Manh Tuan ; Man, Zhihong ; Zhang, Cishen ; Jin, Jiong ; Wang, Hai ; 2014. Robust sliding mode learning control for uncertain discrete-time multi-input multi-output systems. *IET Control Theory and Applications*. Vol. 8, no. 12 (Aug 2014), pp. 1045-1053
 - Wang, Dianhui ; Man, Zhihong ; 2014. Editorial: Special issue: Data-driven fault diagnosis of industrial systems. *Information Sciences*. Vol. 259 (Feb 2014), pp. 231-233
 - Yin, Juliang ; Wang, Wenyi ; Man, Zhihong ; Khoo, Suiyang ; 2014. Statistical modeling of gear vibration signals and its application to detecting and diagnosing gear faults. *Information Sciences*. Vol. 259 (Feb 2014), pp. 295-303
 - Kurniawan, Edi ; Cao, Zhenwei ; Man, Zhihong ; 2014. Digital design of adaptive repetitive control of linear systems with time-varying periodic disturbances. *IET Control Theory and Applications*. Vol. 8, no. 17 (2014), pp. 1995 - 2003
 - Wang, Hai ; Man, Zhihong ; Shen, Weixiang ; Cao, Zhenwei ; Zheng, Jinchuan ; Jin, Jiong ; Tuan, Do Manh ; 2014. Robust control for steer-by-wire systems with partially known dynamics. *IEEE Transactions on Industrial Informatics*. Vol. 10, no. 4 (Nov 2014), pp. 2003-2015

- Kurniawan, E. ; Cao, Z. ; Man, Z. ; 2014. Design of robust repetitive control with time-varying sampling periods. *IEEE Transactions on Industrial Electronics*. Vol. 61, no. 6 (Jun 2014), pp. 2834-2841
- Zhao, S. ; Jones, D. L. ; Khoo, S. ; Man, Z. ; 2014. New variable step-sizes minimizing mean-square deviation for the lms-type algorithms. *Circuits, Systems, and Signal Processing*. Vol. 33, no. 7 (2014), pp. 2251-2265
- Wang, H. ; Kong, H. ; Man, Z. ; Tuan, D. M. ; Cao, Z. ; Shen, W. ; 2014. Sliding mode control for steer-by-wire systems with AC motors in road vehicles. *IEEE Transactions on Industrial Electronics*. Vol. 61, no. 3 (2014), pp. 1596-1611
- Do, M. T. ; Man, Z. ; Zhang, C. ; Wang, H. ; Tay, F. S. ; 2014. Robust Sliding Mode-Based Learning Control for Steer-by-Wire Systems in Modern Vehicles. *IEEE Transactions on Vehicular Technology*. Vol. 63, no. 2 (Feb 2014), p. 580-590
- 2013
 - Yin, Juliang ; Wang, Wenyi ; Man, Zhihong ; Khoo, Suiyang ; 2013. Modeling and analysis of gear tooth crack growth under variable-amplitude loading. *Mechanical Systems and Signal Processing*. Vol. 40, no. 1 (Oct 2013), pp. 105-113
 - Lee, Kevin ; Man, Zhihong ; Wang, Dianhui ; Cao, Zhenwei ; 2013. Classification of bioinformatics dataset using finite impulse response extreme learning machine for cancer diagnosis. *Neural Computing and Applications*. Vol. 22, no. 3-4 (Mar 2013), pp. 457-468
 - Peng, Dezhong ; Xiang, Yong ; Trinh, Hieu ; Man, Zhihong ; 2013. Adaptive blind equalization of time-varying SIMO systems driven by QPSK inputs. *Digital Signal Processing*. Vol. 23, no. 1 (Jan 2013), pp. 268-274
 - Choudhury, T. A. ; Berndt, C. C. ; Man, Zhihong ; 2013. An extreme learning machine algorithm to predict the in-flight particle characteristics of an atmospheric plasma spray process. *Plasma Chemistry and Plasma Processing*. Vol. 33, no. 5 (Oct 2013), pp. 993-1023
 - Man, Zhihong ; Lee, Kevin ; Wang, Dianhui ; Cao, Zhenwei ; Khoo, Suiyang ; 2013. An optimal weight learning machine for handwritten digit image recognition. *Signal Processing*. Vol. 93, no. 6 (Jun 2013), pp. 1624-1638
 - Khoo, Suiyang ; Yin, Juliang ; Man, Zhihong ; Yu, Xinghuo ; 2013. Finite-time stabilization of stochastic nonlinear systems in strict-feedback form. *Automatica*. Vol. 49, no. 5 (May 2013), pp. 1403-1410
 - Wang, Hai ; Man, Zhihong ; Shen, Weixiang ; Zheng, Jinchuan ; Tuan, Do Manh ; 2013. Robust sliding mode control for steer-by-wire systems in ground vehicles. *SAE-A Technical Journal*. 2013 Excellence Awards, (2013), pp. 47-55
- 2012
 - Tay, Feisiang ; Man, Zhihong ; Cao, Zhenwei ; Khoo, Suiyang ; Tan, Chee Pin ; 2012. Sliding mode-like learning control for SISO complex systems with T-S fuzzy models. *International Journal of Modelling, Identification and Control*. Vol. 16, no. 4, pp. 317-326

- Man, Zhihong ; Yu, Xinghuo ; 2012. Preface: variable structure systems. Australian Journal of Electrical and Electronics Engineering. Vol. 9, no. 1 (2012)
- Man, Zhihong ; Lee, Kevin ; Wang, Dianhui ; Cao, Zhenwei ; Khoo, Suiyang ; 2012. Robust single-hidden layer feedforward network-based pattern classifier. IEEE Transactions on Neural Networks and Learning Systems. Vol. 23, no. 12 (2012), pp. 1974-1986
- Khoo, Suiyang ; Zhao, Shengkui ; Man, Zhihong ; 2012. Adaptive fast finite-time multiple-surface sliding control for a class of uncertain non-linear systems. International Journal of Modelling, Identification and Control. Vol. 16, no. 4 (2012), pp. 392-400
- Man, Zhihong ; Wang, Wenyi ; Khoo, Suiyang ; Yin, Juliang ; 2012. Optimal sinusoidal modelling of gear mesh vibration signals for gear diagnosis and prognosis. Mechanical Systems and Signal Processing. Vol. 33 (Nov 2012), pp. 256-274
- 2011
 - Yu, Xinghuo ; Wang, Bin ; Batbayar, Batsukh ; Wang, Liuping ; Man, Zhihong ; 2011. An improved training algorithm for feedforward neural network learning based on terminal attractors. Journal of Global Optimization. Vol. 51, no. 2 (Oct 2011), pp. 271-284
 - Yin, Juliang ; Khoo, Suiyang ; Man, Zhihong ; Yu, Xinghuo ; 2011. Finite-time stability and instability of stochastic nonlinear systems. Automatica. Vol. 47, no. 12 (Dec 2011), pp. 2671-2677
 - Man, Zhihong ; Lee, Kevin ; Wang, Dianhui ; Cao, Zhenwei ; Miao, Chunyan ; 2011. A new robust training algorithm for a class of single-hidden layer feedforward neural networks. Neurocomputing: selected papers of the 10th International Work-Conference on Artificial Neural Networks (IWANN2009), Salamanca, Spain, 10-12 June 2009. Vol. 74, no. 16 (Sep 2011), pp. 2491-2501
- 2010
 - Ng, Kok Yew ; Tan, Chee Pin ; Man, Zhihong ; Akmeliawati, Rini ; 2010. New results in disturbance decoupled fault reconstruction in linear uncertain systems using two sliding mode observers in cascade. International Journal of Control Automation and Systems. Vol. 8, no. 3 (Jun 2010), pp. 506-518
 - Tan, Chee Pin ; Yu, Xinghuo ; Man, Zhihong ; 2010. Terminal sliding mode observers for a class of nonlinear systems. Automatica. Vol. 46, no. 8 (Aug 2010), pp. 1401-1404
- Other
 - Zhao, Shengkui;Man, Zhihong;Khoo, Suiyang;Wu, Hong Ren;2009. Stability and convergence analysis of transform-domain LMS adaptive filters with second-order

- autoregressive process. *IEEE Transactions on Signal Processing*. Vol. 57, no. 1 (Jan 2009), pp. 119-130
- Zhao, Shengkui;Man, Zhihong;Khoo, Suiyang;2009. A generalized data windowing scheme for adaptive conjugate gradient algorithms. *Signal Processing*. Vol. 89, no. 5 (May 2009), pp. 894-900
 - Zhao, Shengkui;Man, Zhihong;Khoo, Suiyang;Wu, Hong Ren;2009. Variable step-size LMS algorithm with a quotient form. *Signal Processing*. Vol. 89, no. 1 (Jan 2009), pp. 67-76
 - Khoo, Suiyang;Xie, Lihua Hua;Man, Zhihong;2009. Robust finite-time consensus tracking algorithm for multirobot systems. *IEEE/ASME Transactions on Mechatronics*. Vol. 14, no. 2 (Apr 2009), pp. 219-228
 - Gao, Shiyu;Man, Zhihong;Yu, Xinghuo;2009. Feedback control of T-S fuzzy systems based on LTV system theory. *International Journal of Electrical Engineering Education*. Vol. 46, no. 1 (Jan 2009), pp. 47-58
 - Khoo, Suiyang;Man, Zhihong;Zhao, Shengkui;2008. Comments on 'Adaptive multiple-surface sliding control for non-autonomous systems with mismatched uncertainties'. *Automatica*. Vol. 44, no. 11 (Nov 2008), pp. 2995-2998
 - Zhang, Xiaojiang;Man, Zhihong;2008. A new stability criterion and its application on process control systems with time-delay. *Proceedings of the 3rd IEEE Conference on Industrial Electronics and Applications (ICIEA 2008)*, Singapore, 03-05 June 2008. pp. 1650-1653
 - Suiyang, Khoo;Man, Zhihong;Zhao, Shengkui;2008. Adaptive fast finite time control of a class of uncertain nonlinear systems. *Proceedings of the 3rd IEEE Conference on Industrial Electronics and Applications (ICIEA 2008)*, Singapore, 03-05 June 2008. pp. 2167-2172
 - Zhao, Shengkui;Man, Zhihong;Khoo, Suiyang;2008. On performance of transform domain adaptive filters with Markov-2 inputs. *Proceedings of the 3rd IEEE Conference on Industrial Electronics and Applications (ICIEA 2008)*, Singapore, 03-05 June 2008. pp. 989-994
 - Yu, Shuanghe;Yu, Xinghuo;Man, Zhihong;Feng, Yong;2008. On singularity free recursive fast terminal sliding mode control. *Proceedings of the 10th IEEE International Workshop on Variable Structure Systems (VSS 2008)*, Antalya, Turkey, 08-10 June 2008. pp. 163-166
 - Man, Zhihong;Shen, Weixiang;Yu, Xinghuo;2008. A new terminal sliding mode tracking control for a class of nonminimum phase systems with uncertain dynamics. *Proceedings of the 10th International Workshop on Variable Structure Systems (VSS 2008)*, Antalya, Turkey, 08-10 June 2008. pp. 147-152
 - Khoo, Suiyang;Man, Zhihong;Zhao, Shengkui;2007. Sliding mode control of fuzzy dynamic systems. *International Journal of Systems and Control*. Vol. 1 (2007), pp. 24-32
 - Man, Zhihong;Yu, Xinghuo;2007. Modelling and stability analysis of nonlinear TCP dynamics with RED. *WSEAS Transactions on Mathematics*. Vol. 6, no. 8 (Aug 2007), pp. 796-801

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- Yu, Shuanghe;Yu, Xinghuo;Shirinzadeh, Bijan;Man, Zhihong;2005. Continuous finite-time control for robotic manipulators with terminal sliding mode. Automatica. Vol. 41, no. 11 (Nov 2005), pp. 1957-1964
- Yu, Shuanghe;Yu, Xinghuo;Man, Zhihong;2004. A fuzzy neural network approximator with fast terminal sliding mode and its applications. Fuzzy Sets and Systems. Vol. 148, no. 3 (Dec 2004), pp. 469-486
- Phooi, Seng Kah;Liu, Han Leih;Man, Zhihong;2002. Further investigation of Lyapunov stability theory. WSEAS Transactions on Mathematics. Vol. 1, no. 2 (2002), pp. 108-110
- Feng, Yong;Yu, Xinghuo;Man, Zhihong;2002. Non-singular terminal sliding mode control of rigid manipulators. Automatica. Vol. 38, no. 12 (Dec 2002), pp. 2159-2167
- Man, Zhihong;Yu, Xinghuo;2002. A new output regulation using sliding-mode technique for a class of SISO linear time-varying systems. IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications. Vol. 49, no. 12 (Dec 2002), pp. 1880-1884
- Yu, Xinghuo;Man, Zhihong;2002. Fast terminal sliding-mode control design for nonlinear dynamical systems. IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications. Vol. 49, no. 2 (Feb 2002), pp. 261-264
- Seng, Kah Phooi;Man, Zhihong;Wu, Hong Ren;2002. Lyapunov-theory-based radial basis function networks for adaptive filtering. IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications. Vol. 49, no. 8 (2002), pp. 1215-1220
- Mei, F.;Man, Zhihong;Nguyen, T.;2001. Fuzzy modelling and tracking control of nonlinear systems. Mathematical and Computer Modelling. Vol. 33, no. 6-7 (Mar-Apr 2001), pp. 759-770
- Journal article Yu, Xinghuo;Man, Zhihong;1999. Fuzzy sliding mode control systems with adaptive estimation. Cybernetics and Systems. Vol. 30, no. 7 (1999), pp. 663-680
- Journal article Man, Zhihong;Wu, H. R.;Palaniswami, M.;1998. An adaptive tracking controller using neural networks for a class of nonlinear systems. IEEE Transactions on Neural Networks. Vol. 9, no. 5 (Sep 1998), pp. 947-955
- Journal article Man, Zhihong;Papilinski, A. P.;Wu, H. R.;1994. A robust MIMO terminal sliding mode control scheme for rigid robotic manipulators. IEEE Transactions on Automatic Control. Vol. 39, no. 12 (Dec 1994), pp. 2464-2469

- Conference Publications

- Al-Ghanimi, Ali ; Zheng, Jinchuan ; Man, Zhihong ; 2015. Robust control of Piezoelectric Actuator using Fast Nonsingular Terminal Sliding Mode. Proceedings of the 10th IEEE Conference on Industrial Electronics and Applications, Auckland, New Zealand, 15-17 June 2015. pp. 256-261

- Sun, Zhe ; Zheng, Jinchuan ; Man, Zhihong ; Jin, Jiong ; 2014. Discrete-time iterative learning control for vehicle Steer-by-Wire systems. Proceedings of the 2014 9th IEEE Conference on Industrial Electronics and Applications (ICIEA), Hangzhou, China, 09-11 June 2014.
- Sayem, A. H. M. ; Cao, Zhenwei ; Man, Zhihong ; Kurniawan, Edi ; 2014. Modified ESO based RC for improved disturbance rejection capability for the plant with time-varying uncertainty. Proceedings of the 6th International Conference on Modelling, Identification and Control (ICMIC 2014), Melbourne, Australia, 03-05 December 2014. pp. 184-189
- Law, Yee Wei ; Pota, Hemanshu R. ; Jin, Jiong ; Man, Zhihong ; Palaniswami, Marimuthu ; 2014. Control and communication techniques for the smart grid: an energy efficiency perspective. Proceedings of the 19th World Congress of the International Federation of Automatic Control, Cape Town, South Africa, 24-29 August 2014 / Edward Boje and Xiaohua Xia (eds.). Vol. 19, part 1, pp. 987-998
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- Wang, Hai ; Man, Zhihong ; Shen, Weixiang ; Zheng, Jinchuan ; 2013. Robust sliding mode control for Steer-by-Wire systems with AC motors in road vehicles. 8th IEEE Conference on Industrial Electronics and Applications (ICIEA), Melbourne, Victoria, Australia, 19-21 June 2013. pp. 674-679
- Tay, Fei Siang ; Man, Zhihong ; Jin, Jiong ; Khoo, Sui Yang ; Zheng, Jinchuan ; Wang, Hai ; 2013. Sliding mode based learning control for interconnected systems. Proceedings of the 8th IEEE Conference on Industrial Electronics and Applications (ICIEA 2013), Melbourne, Australia, 19-21 June 2013. pp. 816-821
- Khoo, Suisan ; Man, Zhihong ; Cao, Zhenwei ; Zheng, Jinchuan ; 2013. German vs. Austrian folk song classification. Proceedings of the 2013 IEEE 8th Conference on Industrial Electronics and Applications (ICIEA), Melbourne, Australia, 19-21 June 2013.. pp. 131-136
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- Khoo, Suisin ; Man, Zhihong ; Cao, Zhenwei ; 2012. Automatic Han Chinese folk song classification using the musical feature density map. Proceedings of the 6th International Conference on Signal Processing and Communication Systems (ICSPCS 2012), Gold Coast, Queensland, Australia, 12-14 December 2012.

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- Tay, Fei Siang ; Man, Zhihong ; Cao, Zhenwei ; Jin, Jiong ; Khoo, Sui Yang ; 2012. A robust learning control for SISO nonlinear systems with T-S fuzzy model: C02-robust control. Proceedings of the 2012 12th International Conference on Control, Automation, Robotics and Vision (ICARCV 2012), Guangzhou, China, 05-07 December 2012. pp. 492-497
- Khoo, Suisin ; Man, Zhihong ; Cao, Zhenwei ; 2012. Automatic Han Chinese folk song classification using extreme learning machines. Lecture notes in computer science: proceedings of the 25th Australasian Joint Conference on Artificial Intelligence (AI 2012), Sydney, New South Wales, Australia, 04-07 December 2012 / Michael Thielscher and Dongmo Zhang (eds.). Vol. 7691, pp. 49-60
- Khoo, Suiyang ; Yin, Juliang ; Man, Zhihong ; 2012. Adaptive finite-time stabilization of a class of stochastic nonlinear systems. Proceedings of the 2012 12th International Conference on Control, Automation, Robotics and Vision (ICARCV 2012), Guangzhou, China, 05-07 December 2012. pp. 1250-1255
- Tuan, Do Manh ; Man, Zhihong ; Zhang, Cishen ; Jin, Jiong ; 2012. A new sliding mode-based learning control for uncertain discrete-time systems. Proceedings of the 2012 12th International Conference on Control, Automation, Robotics and Vision (ICARCV 2012), Guangzhou, China, 05-07 December 2012. pp. 741-746
- Xu, Zhengya ; Wu, Hong Ren ; Yu, Xinghuo ; Man, Zhihong ; 2011. Adaptive surveillance video noise suppression. Proceedings of the 24th Canadian Conference on Electrical and Computer Engineering (CCECE 2011), Niagara Falls, United States, 08-11 May 2011. pp. 000985-000988
- Tay, Feisiang ; Man, Zhihong ; Cao, Zhenwei ; 2011. Sliding mode learning control for SISO complex systems with T-S fuzzy models. Proceedings of the 37th Annual Conference of the IEEE Industrial Electronics Society (IECON 2011), Melbourne, Victoria, Australia, 07-10 November 2011. pp. 751-756
- Man, Zhihong ; Khoo, Suiyang ; Yu, Xinghuo ; Jin, Jiong ; 2011. A new sliding mode-based learning control scheme. Proceedings of the 6th IEEE Conference on Industrial Electronics and Applications (ICIEA 2011), Beijing, China, 21-23 June 2011. pp. 1906-1911
- Lee, Kevin ; Man, Zhihong ; Wang, Dianhui ; Cao, Zhenwei ; 2011. Classification of microarray datasets using finite impulse response extreme learning machine for cancer diagnosis. Proceedings of the 37th Annual Conference of the IEEE Industrial Electronics Society (IECON 2011), Melbourne, Victoria, Australia, 07-10 November 2011. pp. 2347-2352
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- Khoo, Suiyang ; Yin, Juliang ; Wang, Bin ; Zhao, Shengkui ; Man, Zhihong ; 2011. Adaptive data based neural network leader-follower control of multi-agent networks. Proceedings of the 37th Annual Conference of the IEEE Industrial Electronics Society (IECON 2011), Melbourne, Victoria, Australia, 07-10 November 2011. pp. 3924-3929
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