## Masanori Sugisaka's Research on artificial robotics.



Editor-in-Chief Masanori Sugisaka Visiting Professor of Open University (UK) President, ALife Robotics Co., Ltd. (Japan)

masanori Sugiraka

A new journal **"Journal of Robotics, Networking and Artificial Life (JNRAL)**" & **"Journal of Advances in Artificial Life Robotics**" together with Atlantis Press & AROB Jimukyoku, the contents of these journals are often based on articles submitted to The International Conference on Artificial Life and Robotics (ICAROB).

The ICAROB conferences that has been indexed with Scopus and CPCI-Web of Science has resulted from the AROBsymposium (also indexed with Scopus and CPCI-Web of Science) (International Symposium on Artificial Life and Robotics) whose first edition was held in 1996 and the eighteenth and last edition in 2013. The AROB symposium was annually organized by Oita University and ALife Robotics Corporation Ltd., under the sponsorship of the Science and Technology Policy Bureau, the Ministry of Education, Science, Sports, and Culture (Monbusho), presently, the Ministry of Education, Culture, Sports, Technology Science, and (Monkasho), Japanese Government, Japan Society for the Promotion of Science (JSPS), the Commemorative Organization for the Japan World Exposition ('70), Air Force Office of Scientific Research, Asian Office of Aerospace Research and Development (AFOSR/AOARD), USA. I would like to express my sincere thanks to not only Monkasho (annually fund support from 1996 to 2013) but also JSPS, the Commemorative Organization for the Japan World Exposition ('70), and various other Japanese companies for their repeated support.

The old symposium was organized by the International Organizing Committee of AROB and was co-operated by the Santa Fe Institute (USA), RSJ, IEEJ, ICASE (Now ICROS) (Korea), CAAI (P. R. China), ISCIE, IEICE, IEEE (Japan Council), JARA, and SICE. The old AROBsymposium expanded much by absorbing much new knowledge and technologies into it.

This history and character of the former AROB symposiums are passed on the current ICAROB conference and to this journal. From now on, ALife Robotics Corporation Ltd. is in charge of management of both the conference and the journal. The future of the ICAROB is brilliant from a point of view of yielding new technologies to human society in the 21st century.

Resume (CV)									
Name		Masanori Sugisaka	Male · Female	Address	8-Ban 4-Gou, Higashi 2-Choyme, Hanndada Oita, Oita Prefecture				
Birth Date		1944/01/24							
			Academic Backgr	ound (Degree	2)				
Year	month		Matters						
1975	1975 10 Doctor Course in Electrical Engineering, Graduate School, Kyushu University (Doctor of Engineering's degree, mber 101)								
	Professional Experience								
Year	month	Matters							
1973	4	Research Assistant, Faculty of Engineering, Oita University							
1974 1975	4 10	Lecturer, Faculty of Engineering, Oita University Associate Professor, Faculty of Engineering, Oita University							
1980	9				America (until 1981/8/31, one year) (full-time)				
1988	8		gineering, Oita University						
1993	10				993/10/1-1994/3/31, 1994/10/1-1995/1995/3/31,1				
		995/10/1-1996/3/31, 1999/4/1-1999/9/31)							
1995	10	Vesting Professor, Facu	Vesting Professor, Faculty of Engineering, Kyushu Institute of Technology(until 1996/3/31)						
1996	4	Visiting Professor, Korea	a Advanced Institute of S	Science and Teo	chnology (KAIST)(until 1997/3/31, one year)(part-ti				
2000	4	me)	me)						
2002	4	Visiting Professor, Tokyo Medical Dental University (until 2001/3/31, one year) Visting, Bio-Mimetic Control Research Center, RIKEN (The Institute of Physical and Chemical Research) (part-tim							
2003	4	e)							
2003	1	-	Visiting Professor, Graduate School, Fukui University						
2005	4	Examiner, KUKUM, Malsting2 years)							
2006	6	Visiting Professor, Waseda University (until 2007/3/31)							
2007	10	Academic Adviser, University of Malysia-Perlis, Malaysia (2 years)							
2008	4	Visiting Professor, Waseda University (until 2008/3/31)							
2008	4	Visiting Professor, Information, Production and Systems Research Center, Waseda University (until 2009/3/31)							
2008	4	Professor, Nippon Bunri University (from 2008/04/01 to 2013/03/31) President, ALife Robotics Co., Ltd							
2008 2014	4 18 5 1	Visiting Professor, Open University (UK) (for the period of 2014/05/01 to 2017/04/30)							
2014	12 1	Visiting Professor, Open University (UK) (for the period of 2014/05/01 to 2022/ 12/31)							
		1	Activities in	n Society					
Year	month			Matters					
1994	4		(The Society of Instrument						
1995									
			•	•	2013/31)) From 2014 (Fourteenth) changed				
1995	10	, ,	as International 'Conference'						
2006	10	Founder and Editor-in-Chief, Artificial Life and Robotics (Springer) (from 1995 to 2013) Fellow, SICE							
2000	4		tional Conference on Artificia	I life and Robotic	rs (until now)				
2014	6	Founder and Editor-in-Chief, Robotics, Networking and Artificial Life (Atlantis-Press) (2014 to now)							
			Reward and P						
Year	month			Matters					
1969	3	Esso graduate school so	ientific bounty (Esso Stan	ndard Oil Co., Lt	:d.)				
2000	7				ence on Control & Measurement (APCCM '2000), P. R.				
2000	10		and Support Award from t	he Institute of C	Control, Automation and Systems Engineers (ICASE),				
2000 2003	10 1	First Prize, Kyongju World Culture Expo 2000, Intelligent Robot Control 2000, Robot Eye, Korea AROB Award (Remarkable Contributions of International Exchanges in the Field of Artificial Life and Robotics), The Eighth International Symposium on Artificial Life and Robotic (AROB, 8th, '03)							
		he above is not differe			2019/ 10/20				
	Ν	lame: Masanori Sugisa	ka n	racanori Suzi	ncha				

# Publications and Others

# 2019/10/20

Name SUGISAKA MASANORI

Matter in Educational Abilities	Year Month Date	Outline		
1 Practice in Education Method				
2 Text Book、Text Introduction for System Theory and Control (in Japanese)	1997 pp. 1-201	Nikkann Kougyou Shinbunnsya		
3 Evaluation of Educational Ability by University Doctor Couse of Graduate School at Oita University		After establishment of doctor course at Oita University by Japanese Government, I supervised 10 and more students and gave Ph.D (Doctor of Engineering) degrees for 9 students.		
4 Others AROB Best Paper Award	2003/1	The 8 <sup>th</sup> International Symposium on Artificial Life and Robotics, Fast face detection using genetic algorithms and pyramid structure, (with X Fan and H. Kimura)		
AROB Young Author Award	2003/1	The 8 <sup>th</sup> International Symposium on Artificial Life and Robotics, Application of resonance algorithm for image segmentation, (with F. Dai)		
The Best Paper Award	2005/9	International Conference on Systems Science ICCS XV, Wroclaw, Poland, Application of uncertain variables in an adaptive detection system for a complex of operations(with D. Orski)		
Matter on Achievment for Duty	Year Month Date	Outline		
1 qualification, license				
2 Patents etc.				
Patent Number 3254241	2001.11.22	Pecognition and Tracking System for Moving Object (in Japanese)		
Patent Number 3278000 Patent Number 3344731	2002.2.15 2002.8.30	Pulsatyle Pump (in Japanese) Pattern Recognition Method of Chestnut (in Japanese)		
Patent Number 3352727	2002.9.20	Device for Identification of Parameters of Elastic Tubes (in Japanese)		
Patent Number 3394287	2003.1.31	Autonomous Vehicle (in Japanese)		
Patent Number 3499285	2003.12.5	Inspection Vehicle of Underground Tubes (in Japanese)		
Patent Number 4044079	2007.11.22	Humanoid Robot (in Japanese)		
Patent Number 4496161 Patent Number 4693755	2010.4.16 2011. 3. 4	Elevating device for columnar objects Device for function recovery and assistance to tibialis anterior muscle (in Japanese)		
 P2004-118638	2004.4.14	Remote Control of Automatic Measurement Device of Sea Water Quality (in Japanese)		

P0204-274535	2004.9.22	Muscle Trousers (in Japanese)		
P2005-360719	2005.12.14	Device for Going Up and Down for Pillared Material and Tree (in Japanese)		
P2006-320478	2006.11.28	Equipment for Recovery and Assistance of Til Muscle Function (in Japanese)		
3 Others				
Department Head	1992,1996, 2000, 2004	Department of Electrical and Electronic Engineering, Oita University		
Examiner for Grand-in-Aid for Scientific Research	2002	Japan Society for the Promotion of Science (JSPS) Category for Examination, First Stage, Cont Engineering (Scientific Reasearch (C) Others)		
Examiner for Grand-in-Aid for Scientific Research	2003	Japan Society for the Promotion of Science (JSPS), Category for Examination, First Stage, Cont Engineering (Scientific Reasearch (S),(A),(B))		
Examiner for Grand-in-Aid for Scientific Research	2005	Japan Society for the Promotion of Science (JSPS), Category for Examination, First Stage, Intelligent Information Processing • Intelligent Robotics A, 1000 (Scientific Reasearch (C) Others)		
Examiner for Grand-in-Aid for Scientific Research	2006	Japan Society for the Promotion of Science (JSPS), Category for Examination, First Stage, Intelligent Information Processing • Intelligent Robotics A, 1006A (Scientific Reasearch (S),(A),(B)))		
General Chairman	From 1996 to now	"International Symposium on Artificial Life and Robotics" sponsored by the Ministry of Education, Culture, Sports, Science and Technology, Japanese Government		
Vice President	2002-2005	Artificial Life Society (Headquarters, USA)		
Councilor	1994-1996	The Society of Instrument and Control Engineers (SICE)		
Director	2000	The Institute of Systems, Control and Information Engineers (ISCIE)		
Councilor	2001-2003	The Institute of Systems, Control and Information Engineers(ISCIE)		
Member		The Institute of Electrical Engineers of Japan (IEEJ)		
Member		IEEE		
Fellow	2006/10/20	SICE		
A member of the Organizing Committee	1993~	The ISCIE International Symposium on StochasticSystemsTheory and Its Applications		
A member of the Program Committee	1995~	The ISCA(the International Society for Computers and Their Applications) International Conference on Intelligent Systems		

A member of the Steering and Program Committee	1996~	The International Conference on Systems Engineering
The Chairman	1996	The forum on the future for science and technology in the twenty-first century-challenge for complexity-, Oita
A member of National Organizing Committee	1997	The 11th IFAC Symposium on System Identification
A member of the International Organizing Committee	1997	1977 Micro-Robot World Cup Soccer Tournament (MIROSOT)
A member of Program Committee	1998~	Asian Pacific Conference on Control and Measuremen
A member of the Executive Committee	1998~	The FIRA Robot World Cup
A member of the Advisory Committee	1999	1999 International Conference on Mechatronic Technology (ICMT'99) and 1999 International Symposium on Innovations in Mechatronics
A member of the Organizing Committee and the Steering Committee	2000	2000 IEEE International Conference on Industrial Electronics, Control and Instrumentation (IECON 2000)-Industrial Opportunities-
A member of the Scientific Advisory Board	2000	The Seventh International Conference on Artificial Life
A member of the Scientific Advisory Board	2000	The Seventh International Conference on Simulation and Synthesisof Living Systems
A member of the Advisory Committee	2000	2000 International Symposium on Mechatronics and Intelligent Mechanical System for 21 Century (ISIM 2000)
A member of the International Advisory Board	2001	The 2001 IEEE International Symposium on Industrial Electronic (ISIE2001)
A member of the Program Committee	2001	The SICE/ICASE Joint Workshop-Control Theory and Applications
Special Session Co-Chairs	2001	The 2001 International Conference on Control, Automation and Systems
Chairpersons	2005	A2-4 Artificial Life System and Robotic Applications,:, 6 papers, SICE Annual Conference 2005 in Okayama, August 8-10, 2005 Okayama University, Japan
General Chairman	2005	The 1st International Workshop on Artificial Life and Robotics 2005(AROB 05), May 14-15, 2005, Kangar, Perlis, Malaysia
Member of International Programme Committee	2006	The 7th Asia-Pacific Conference on Control & Measurement (APCCM' 2006), 10-18, August, 2006, Tibet, China
Member of International Advisory Committee	2006	International Conference on Man-Machine Systems(ICoMMS 2006), Sept.15-16, City BayView Hotel, Langkawi, Malaysia
Honorary Chairs	2006	2006 International Symposium on Humanized Systems, Busan, Korea, Oct.16-19, 2006
Honorary Chair	2007	2007 International Symposium on Humanized System (ISHS07), Muroran, Sept. 13-15, 2007, Japan
General Chairman	2007	1st European Workshop on Artificial Life and Robotics, July 12-13, 2007, Vienna, University of Technology, Austria

Name of Authors	Name of Book, Academic Article, etc.	Name of Pubishers, Journal, and	Published Year	Outline	
		Conference	fear		

### (Doctor Degree)

Research on Identification of Nonlinear Systems Via Quasilinealization and Invariant Imbedding, 197 5.10, Kyushu University, Doctor of Engineering (Kou 101)

## (Academic Articles (Refereed Articles))

(1) S. Sagara and M. Sugisaka, "Identification of nonlinear systems via quasi-linearization," Trans. SICE, Vol.7, No.5, pp.58-65, 1971, 10 (in Japanese)

(2) S. Sagara and M. Sugisaka, "Higher-order approximated optimal filter via invariant imbedding," Trans. SICE, Vol.8, No.5, pp.75-87, 1972, 10 (in Japanese).

(3) S. Sagara and M. Sugisaka, "Invariant imbedding," Trans. ISCIE, Vol.17, No.10, pp.596-601, 1973, 10 (in Japanese).

(4) M. Sugisaka and S. Sagara, "Identification algorithm of nonlinear dynamical systems using quasi-linearization and invariant imbedding," Trans. SICE, Vol.10, No.6, pp.641-648, 1974, 12 (in Japanese).

(5) M. Sugisaka and S. Sagara, "A nonlinear filter with higher order weighting functions via invariant imbedding," International Journal of Control, Vol.21, No.5, pp.801-823, 1975, 5.

(6) M. Sugisaka, "A new sequential Wiener-type filter via invariant imbedding-eigen-value and eigen-function method-, " Trans. SICE, Vol.13, No.6, pp.553-560, 1977, 12 (in Japanese).

(7) S. Nakamori and M. Sugisaka, "Initial-value system for linear smoothing problem by covariance information, " Automatica, Vol.13, No.6, pp.623-627, 1977, 12.

(8) S. Nakamori and M. Sugisaka, "Design of linear filter by covariance information," Trans. ISCIE, Vol.22, No.2, pp.111-119, 1978, 2 (in Japanese).

(9) S. Nakamori and M. Sugisaka, "Design of linear fixed-lag smoother by covariance information," Trans. SICE, Vol.14, No.4, pp. 405-412, 1978, 8 (in Japanese).

(10) S. Nakamori and M. Sugisaka, "Design of linear predictor by covariance information," Trans. ISCIE, Vol.22, No.12, pp.761-768, 1979, 1 (in Japanese).

(11) M. Sugisaka, "Imbedding approach for optimal receiver design using covariance information," Modeling and Simulation, Vol.10, Part 2, pp.669-673, 1979.

(12) M. Sugisaka, "An initial-value solution for on-line filtering and smoothing in two-dimensional stochastic fields," Modeling and Simulation, Vol.11, Part 3, pp.669-673, 1980.

(13) M. Sugisaka, "An initial-value solution of nonlinear Fredholm integral equation with separable covariance in optimum receiver design," Modeling and Simulation, Vol.11, Part 3, pp.927-931, 1980.

(14) M.Sugisaka and S. Sagara, "Imbedding approach for optimal input design of linear system

identification," Identification and System Parameter Estimation, Vol.1, pp.611-618, Pergamon Press, 1980.

(15) M. Sugisaka, P. Kalata, R. Fischl, P. Herczfeld and C. Rorres, "On estimating the fluid temparature in a solar collection system," Modeling and Simulation, Vol.12, Part 1, pp.131-135, 1981.

(16) M. Sugisaka, "Linear systems identification via imbedding method," IFAC Symposium on Theory and Application of Digital Control, pp.15-20, Pergamon Press, 1982.

(17) M. Sugisaka, "The design of on-line linear least-squares estimation given covariance specification via imbedding method," Applied Mathematics and Comutation, Vol.13, No.1-2, pp.55-85, 1983.8.

(18) M. Sugisaka, "Initial-value solution for on-line smoothing and filtering of linear stationary signals," IEEE Trans. Automatic Control, Vol.AC-29, No.2, pp.174-177, 1984, 2.

(19) M. Sugisaka, P. Kalata and R. Fischl, "Approximate initial-value solutions of a nonlinear Fredhom integral equations with semi-degenerate covariance kernels in optimum receiver design," IEEE Trans. System, Man and Cybernetics, Vol.SMC-14, No.5, pp.556-560, 1984, 5.

(19-1) M. Sugisaka, A. Tominaga, T. Sakamoto, R. Fischl, P. Herczfeld, P. Kalata, C. Rorres, "Parameter Identification in Solar Collectors," IFAC Proceedings Volumes 18, Issue 5, July 1985, PP. 1101-1105

(20) M. Sugisaka and A. Tominaga, "Detection of Gaussian signals with semi-degenerate covariance by invariant imbedding," No.3, pp.420-426, 1987, 3 (in Japanese).

(21) M. Sugisaka, "Design of Chandrasekhar-type filter and smoother," Trans. SICE, Vol.23, No.4, pp. 347-352, 1987, 4 (in Japanese).

(22) M. Sugisaka, "The design of a linear regulator based on integral equations representation," Applied Mathematics and Computation, Vol.2, No.2, pp.163-169, 1987, 8.

(23) J. J. Helferty, R. Fischl, P. R. Herczfeld, T. E. Brisbane, D. K. Anad and M. Sugisaka, "On the selection of distributed parameter models for control studies of solar energy systems," Solar Engineering, Vol.2, pp.976-984, 1987.

(24) M. Sugisaka, R. Fischl, P. Herczfeld, P. Kalata and C. Rorres, "Filtering algorithm for estimating fluid temperature profile in solar collectors," Automatica, Vol.24, No.3, pp.411-414, 1988, 5.

(25) T. Mastuo, S. Sagara, A. Tominaga and M. Sugisaka, "Robust design of feedback control systems by observers with unknown inputs," Trans. of The Institute of Electrical Engineers of Japan (IEEJ), Vol.108D, No.7, pp.639-645, 1988, 7 (in Japanese).

(26) M. Sugisaka, A. Tominaga, T. Sakamoto, R. Fischl, P. Herczfeld, P. Kalata, C. Rorres,

"On parameter identification of solar collectors using two temperature plug-flow model," Distributed Parameter Systems: Modeling and Simulation, pp.23-28, North Holland, 1988, 9.

(27) M. Sugisaka and E. Veloso, "A simulation study on minimum prediction error controllers based on super conducting magnetic energy storage," Control Theory and Advanced Technology (C-TAT), Vol.4, No.4, pp.473-481, 1988, 12.

(28) M. Sugisaka, "Chandrasekhar filtering and smoothing models given covariance model and properties

of X and Y functions," Lecture Notes in Control and Information Sciences, 113, System Modeling and Optimization, M. Iri and K. Yajima(Eds.), pp. 129-138, Springer-Verlag, 1988.

(29) M. Sugisaka and S. Abe, "Continuous adaptive Chandrasekhar filtering and prediction," Systems Science, Vo.15, No.4, pp.37-49, 1989, 9.

(30) M. Sugisaka, S. Sagara and S. Ueno, "On-line estimation and learning via neural network systems based on digital Chandrasekhar filter," in Identification and System Parameter Estimation, CS. Banyasz and L. Keviczky(Ed.), Pergamon Press, pp.533-537, 1991.

(31) M. Sugisaka and M. Technelab, "Fast pattern recognition by using moment invariants computation via artificial neural networks," Control Theory and Advanced Technology(C-TAT), Vol.9, No.4, pp.877-886, 1993, 12.

(32) M. Sugisaka and M. Ino, "Model predictive control based on neural identification method," Computers & Mathematics with Applications, Vol.27, No.9/10, pp.83-93, 1994, 5.

(33) M. Sugisaka and M. Ino, "A neuro identifier for linear and nonlinear systems," Systems Science, Vol.20, No.3, pp.55-64, 1994, 9.

(34) M. Sugisaka, K. Murakami, F. Ishikawa, H. Shibuya and M. Kitagawa, "The calculation of electric power flow using neural network systems," Trans. of The Institute of Electrical Engineers of Japan, C, Vol.114C, No.9, pp.960-963, 1994, 9. PDF

(35) M. Sugisaka, F. Goto, S. Sagara, S. Ueno and R. Fischl, "Model predictive control with command generator for nonlinear systems," Systems Science, Vol.20, No.4, pp.19-24, 1994, 12

(36) M. Sugisaka and K. Kawamura, "PI control of pulsatile pump-motor," Trans. SICE, Vol.31, No.1, pp. 132-134, 1995, 1 (in Japanese).

(37) M. Sugisaka, "A control study pulsatile pump-motor," Systems Science, Vol.21, No.1, pp.61-65, 1995, 2.

(38) M. Sugisaka and S. Ueno, "Introduction to special issue on adaptive filtering and estimation," Applied Mathematics and Computation, Vol.69, No.1, pp.1-2, 1995, 4.

(39) M. Sugisaka and T. Okada, "Continanuous-time Chandrasekhar smoother in detection and tracking," Applied Mathematics and Computation, Vol.69, No.1, pp.123-136, 1995, 4.

(40) M. Sugisaka, "Adaptive Chandrasekhar filter for linear discrete-time stationary stochastic systems", Applied Mathematics and Computation, Vol.69, No.1, pp.137-145, 1995, 4.

(41) M. Sugisaka and N. Tonoya, "Neuro control for recognition and tracking system of moving object," Systems Science, Vol.22, No.2, pp.22-28, 1996, 2.

(42) M. Sugisaka, "Intelligent control and learning using artificial brain constructed by neurocomputer," Intelligent Automation and Control, Recent Trends in Development and Applications, Vol.4, pp.685-689, TSI Press Series, 1996, 3. (43) M. Sugisaka, "Artificial Life and Robotics-Message from the Editor-in-Chief," Artificial Life and Robotics, Vol.1, No.1, pp.1-1, 1997, 8. (\*\*\*)

(44) M. Sugisaka, "Neurocomputer control in an artificial brain for tracking moving objects," Artificial Life and Robotics, Vol.1, No.1, pp.47-51, 1997, 8.

(45) M. Sugisaka, "Fast pattern recognition using a neurocomputer," Artificial Life and Robotics, Vol.1, No.2, pp.69-72, 1997. (\*\*\*)

(46) M. Sugisaka, S. Motomura, T. Kitaguchi, H. Eguchi and T. Furuta, "Hardware based neural identification: linear dynamical systems," Artificial Life and Robotics, Vol.1, No.3, pp.151-155, 1997.

(47) M. Sugisaka, "Neural filtering method for stationary signal processes," Artificial Life and Robotics, Vol.1, No.4, pp.165-168, 1997.

(48) M. Sugisaka, X. Wang and J. J. Lee, "Control strategy for an intelligent mobile vehicle," Artificial Life and Robotics, Vol.1, No.4, pp.185-190, 1997.

(49) M. Sugisaka, "Development of mobile vehicles with recognition," Science of Machine, Vol.49, No.6, pp.626-633, 1997, 6 (in Japanese).

(50) M. Sugisaka, "Introduction to the Special Issue on Artificial Life and Robotics," Applied Mathematics and Computation, Vol.91, No.1, pp.1-3, 1998, 4

(50-1) M Sugisaka, N Tonoya, T Furuta, "Neural networks for control in an artificial brain of a recognition and tracking system" Artificial Life and Robotics, Vol. 2, pp. 119–122, 1998

(51) Y. G. Zhang, M. Sugisaka and X. J. Li, "Lifelike artificial trees based on growth IFS," Applied Mathematics and Computation, Vol.91, No.1, pp.3-8, 1998, 4.

(52) T. D. Eom, M. Sugisaka and J. J. Lee, "New skill learning paradigm using various kinds of neurons," Applied Mathematics and Computation, Vol.91, No.1, pp.9-22, 1998, 4.

(53) M. Sugisaka, X. Wang and J. J. Lee, "Intelligent control strategy for a mobile vehicle," Applied Mathematics and Computation, Vol.91, No.1, pp.91-98, 1998, 4.

(54) M. Sugisaka, X. Wang and J. J. Lee, "Intelligent control with new image processing strategy for a mobile vehicle," Artificial Life and Robotics, Vol.2, No.3, pp.113-118, 1998.

(55) M. Sugisaka, N. Tonoya and T. Furuta, "Neural networks for control in an artificial brain of recognition and tracking system," Artificial Life and Robotics, Vol.2, No.3, pp.119-122, 1998.

(56) M. Sugisaka, "The Third International Symposium on Artificial Life and Robotics in Beppu, Japan," Artificial Life and Robotics, Vol.3, No.1, pp.1-2, 1999.

(57), "Design of an artificial brain for robots," Artificial Life and Robotics, Vol.3, No.1, pp.7-14, 1999. (\*\*\*)

(58) X. Wu, Y. G. Zhang and M. Sugisaka, "Developing an artificial retina by evolutionary cellular automata and self-organizing neural network," Artificial Life and Robotics, Vol.3, No.2, pp.61-64, 1999.

(59) M. Sugisaka, X. Wang and J. J. Lee, "Genetic algorithms (GAs) to evolve multi-agent cooperative systems," Artificial Life and Robotics, Vol.3, No.3, pp.139-142, 1999.

(60) Y. G. Zhang, M. Sugisaka and C. Xu, "A new look at metabolism-repair systems- a living system on screen," Artificial Life and Robotics, Vol.3, No.4, pp.225-229, 1999.

(61) M. Sugisaka, Z. J. Liu, "The application of neurocomputer for a control problem," Artificial Life and Robotics, Vol.3, No.4, pp.260-264, 1999.

(62) M. Sugisaka and X. Wang, "Intelligent control of a mobile vehicle using on-line learning," Systems Science, Vol.25, No.2, pp.41-49, 1999.

(63) M. Sugisaka, "The Fourth International Symposium on Artificial Life and Robotics," Artificial Life and Robotics, Vol.4, No.1, pp.1-2, 2000.

(64) Y. G. Zhang, M. Sugisaka and X. Wu, "Bottom-up development of multi-cellular digital organisms," Artificial Life and Robotics, Vol.4, No.3, pp.143-147, 2000.

(65) G. Matsumoto, J. L. Casti and M. Sugisaka, "Introduction to the special issue on artificial brain, brain computing, and brainware," Applied Mathematics and Computation, Vol.111, No.2&3, pp.133-135, 2000, 5.

(66) M. Sugisaka, X. Wang and J.J. Lee, "Artificial brain for a mobile vehicle," Applied Mathematics and Computation, Vol.111, No.2&3, pp.137-145, 2000, 5.

(67) M. Sugisaka, Research on artificial life robotics, Artificial Life 7 Workshop Proceedings, Carlo C. Maley and Eilis Boudreau(Editors), pp.173-176, 2000,

(68) H. Natsuyama, J. Casti, K. Kawabata, S. Mukai and M. Sugisaka, "Guest editor's introduction," Applied Mathematics and Computation, Vol.116, No.1&2, pp.1-2, 2000, 11.

(69) M. Sugisaka, "Sugisaka-Ueno-Chandrasekhar algorithm for digital communication and estimation," Applied Mathematics and Computation, Vol.116, No.1&2, pp.217-229, 2000, 11.

(70) S. G. Hong, T. D. Eom, C. Y. Lee, M. S. Kim, J. J. Lee and M. Sugisaka, "Developing soccerplaying robots based on the centralized approach," Intelligent Automation and Soft Computing, Vol.6, No.1, pp.57-63, 2000.

(71) M. Sugisaka and M. Nagasaki, "Learning performance of a neurocomputer for nonlinear system identification," Applied Mathematics and Computation, Vol.120, Issue1-3, pp.65-77, 2001, 5.

(71-1) M Sugisaka, YG Zhang, "Review of the International Symposium on Artificial Life and Robotics (AROB)," Artificial Life and Robotics, Vol. 5, pp. 207–210, 2001

(71-2) T Kubik, M Sugisaka, Use of a cellular phone in mobile robot voice control, SICE 2001. Proceedings of the 40th SICE Annual Conference. International Session Papers (IEEE Cat. No.01TH8603) pp.106 - 111, 2001

(72) K. Bogunia-Kubik and M. Sugisaka, "From molecular biology to nanotechnology and nanomedicine, BioSystems," Volume 65, ssues 2–3, pp.123-138, 2002.

(73) P. Sapaty and M. Sugisaka, "Universal distributed brain for mobile multi-robot systems," Distributed

Autonomous Robotic Systems 5, H. Asama, T. Arai, T. Fukuda, and T. Hasegawa(Eds.),

Springer-Verlag-Tokyo, pp.434-443, 2002

(74) A. A. Loukianov and M. Sugisaka "Supervised learning technique for a mobile robot controller in a visual line tracking task, Artificial Life and Robotics, Vol.6, No.3, pp.108-112, 2002

(75) A. A. Loukianov, M. Sugisaka," A selective vision and landmark based approach to improve the

efficiency of position probability grid localization", Transactions of IEEJ Journal (C: Electronics, Information and Systems), Vol.123, No. 4, pp. 804-809, 2003

(76) J. Wang, M. Sugisaka, "Improvement on the digit recognition technique of backpropagation neural networks", Transactions. of the society of instrument and control engineers, Vol. 39, No. 4, pp.394-398, 2003

(77) M. Sugisaka, F. Dai ,"Adaptive Fuzzy control based on Neural Network for a Mobile Vehicle", Transactions of IEEJ Journal (C: Electronics, Information and Systems), Vol.123, No. 4, pp.786-795, 2003

(78) M. Itou and M. Sugisaka, "Research on maintaining diversity of gene type in genetic algorithm", Transactions. of the society of instrument and control engineers, Vol.39, No.3, pp.310-312, 2003

(79) A. A. Loukianov and M. Sugisaka, Supervised learning technique for a mobile robot controller in a visual line tracking, Artificial Life and Robotics, Vol.6, No.4, pp.108-112,2003

(80) Masanori Sugisaka, Fengzhi Dai, Adaptive Fuzzy Control Based on Neural Network for a Mobile Vehicle, IEEJ Trans. EIS, C, Vol. 123, No.4, pp. 786-795,2003

(81) T. Kubik and M. Sugisaka, Image segmentation techniques and their use in artificial life robot implementation, Artificial Life and Robotics, Vol. 7, No. 1-2, pp.12-15, 2003

(82) J. Wang and M. Sugisaka, Camera calibration for a mobile robot prototype, Artificial Life and Robotics,Vol.7, No.3, pp.91-94, 2003

(83) M. Iida, M. Sugisaka and K. Shibata, Direct-vison-based reinforcement learning in a real mobile robot, Artificial Life and Robotics, Vol.7, No.3, pp. 102-106, 2003

(84) K. Shibata and M. Sugisaka, Dynamics of a recurrent neural network acquired through learning a context-based attention task, Artificial Life and Robotics, Vol.7, No.4, pp.145-150, 2003

(85) M. Sugisaka and F. Dai, Pattern recognition and control by adaptive methods for an intelligent mobile vehicle, Artificial Life and Robotics, Vol.7, No.4, pp. 164-169, 2003

(86) M. Sugisaka and S. Sato, Improvement of the precision of the gradient method and object tracking using optical flow, Artificial Life and Robotics, Vol.7, No.4, pp. 182-184, 2003

(87) A. A. Loukianov, H. Kimura and M. Sugisaka, Implementing distributed control system for intelligent mobile robot, Artificial Life and Robotics, Vol.8, No.2, pp.159-162, 2004

(88) M. Sugisaka, K. Imamura, K. Tokuda, and N. Masuda, A new artificial life body: biologically inspired dynamic bipedal humanoid robots, Artificial Life and Robotics, Vol.8, No.1, pp.1-4, 2004

(89) J. Wang, H. Kimura, and M. Sugisaka, Intelligent control for the vision-based indoor navigation of an A-life mobile robot, Artificial Life and Robotics, Vol.8, No.1, pp.29-33, 2004

(91) M. Sugisaka, F. Dai, H. Kimura, Application of a neuro-fuzzy system to control a mobile vehicle, Artificial Life and Robotics, Vol.8, No.1, pp.77-82, 2004

(92) M. Sugisaka and X. Fan, Fast and robust face detection using genetic search, IEEJ Trans. EIS, C , Vol. 124, No.10, pp. 2072-2078, 2004

(93) X. Wang, M. Sugisaka and W. Xu, Feature point-based object tracking, IEEJ Trans. EIS, Vol.124, No.8, pp.1585-1591, 2004

(94) X. Feng, M. Sugisaka, X. Yang and Y. Xu, Neural network based non-parametric confidence bound estimation for MSPC chart, SICE , Vol. 40 , No. 6 , pp.599-604, 2004

(95) M. Itou, M. Sugisaka, A study of selection operator using correlation between individuals in genetic algorithm, IEEJ Trans. EIS, C, Vol.124, No.1, pp.170-175, 2004

(96) D. Orski, M. Sugisaka, Application of uncertain variables in an adaptive decision system for a complex of operations, Systems Science, Vol.30, No.3, pp85-94, 2004

(97) Tomaz Kubik, K. Bogunia-Kubik and M. Sugisaka, Nanotechnology on duty in medical application,

Current Pharmaceutical Biotechnology, Vol.6, pp. 17-33, 2005

(98) Masanori Sugisaka, Xinjian Fan, An effective search method for neural network based face detection using particle swarm optimization, IEICE transactions on Information and Systems, Vol.E88-D, No.2, pp. 214-222, February 2005

(99) Masanori Sugisaka and Zacharie Mbaitiga, Design of PID fuzzy controller for electric vehicle brake control system based on parallel structure of PI fuzzy and PD fuzzy, IEEJ Trans. IA, Vol. 125, No.3, pp. 245-252, 2005

(100) Masanori Sugisaka, Andrey A. Loukianov, F. Xiongfeng, Tomaz. Kubik, and K. Bogunia-Kubik,

Development of an artificial brain for LifeRobot, Applied Mathematics and Computation, Vol.164,

pp.507-521, 2005

(101) M. Rizon, H. Yazid, P. Saad, A. Y. M. Shakaff, A. R. Saad, M. Sugisaka, S. Yaacob, M. R. Mamat and M. Karthigayan, Object Detection using Circular Hough Transform, American Journal of Applied Science 2(12): 1606-1609, 2005

(101-1) M Rozailan, Y Sazali, N Fazli, M Nasir, M Sugisaka, An application of finite element modelling to pneumatic artificial muscle, American Journal of Applied Sciences, Volume 2, Issue 11, Pages 1504-1508, 2006

(102) M. Sugisaka and D. Hazry, Predictive Proportional Nonlinear Control for Stable-Target Tracking of a

Mobile Robot: An Experimental Study, Artificial Life and Robotics, Vol. 10, pp.81-89, 2006

(103) D. Hazry, M. Sugisaka and T. Yuji, Human-Robot Interface over the Web Based Intelligent System,

American Journal of Applied Sciences Vol 3 (1), pp. 1634-1639, 2006

the

(104) D. Hazry and M. Sugisaka, Optimal Parameter Tuning in a Predictive Nonlinear Control Method for

A Mobile Robot, the American Journal of Applied Sciences Vol 3 (4), pp. 1803-1809, 2006.

(105) M.Sugisaka, D.Hazry, Development of A Proportional Control Method for A Mobile Robot, Applied Mathematics and Computation, Volume 186, Issue 1, 1 March 2007, Pages 74-82

(106) M. Norrima, M. Sugisaka, O. Rosli: Automatic motion detection for surveillance, Artificial Life and Mathematics and Computation, Vol.186, Issue 1, 1 March 2007, Pages 74-82 Robotics, Vol.11, No.1, pp.91-95, 2007

(107) P. Sapaty, M. Sugisaka, R. Finkelstein, J. Delgado-Frias, N. Mirenkov, Emergent societies: advanced IT

support of crisis relief missions, Artificial Life and Robotics, Vol. 11, No.1, pp.116-122, 2007

(108) M. Karthigayan, M.R.M. Juhari, R. Nagarajab, M. Sugisaka, S. Yaacob, M.R. Mamat, H. Desa,

Development of a personified face emotion recognition technique using fitness function, Artificial Life and

Robotics, Vol. 11, No.2, pp.197-203, 2007

(109) M. Sugisaka and H. Zhao, The characteristics of McKibben muscle based on the pneumatic experiment system, Artificial Life and Robotics, Vol. 11, No.2, pp.223-226, 2007

(109-1) M Sugisaka, A control method for soft robots based on artificial musles, 2007 IEEE International Conference on Mechatronics, 8-10 May 2007, Changchun, Jilin, China

(109-2) Huailin Zhao, Masanori Sugisaka, Leilei Cui & Guanglin Shi, Research on the intelligent control algorithm for a robot joint actuated by McKibben muscles, Artificial Life and Robotics, Vol. 14, pp. 85–88, 2009

(109-3) M Sugisaka, An approach for soft humanoid robot with artificial muscles, 2009 IEEE International Symposium on Industrial Electronics, 5-8 July 2009.

(109-4) F Dai, N Kushida, L Shang, M Sugisaka, A survey of genetic algorithm-based face recognition. Vol.16, No.2, Artificial Life and Robotics, 2011

(110) M. Sugisaka, Editor's Preface (download PDF), , Robotics, Networig and Artificial Life (JRNAL),

Vol.1, Issue 1, PP.1-1, June 2014

(111) M. Sugisaka et. al, Study on the Improvement of Flexibility for an Industrial Robot Based on Machine Vision, JRNAL Vol. 1, Issue 1, pp.45-48, June 2014

(112) M. Sugisaka et. al, Study on the Target Recognition and Location Technology of industrial Sorting

Robot based on Machine Vision, JRNAL, Vol. 1, Issue 2, pp.108-110, September 2014

(113) M. Sugisaka et. al, Robot Pose Measurement Based on Sensor Fusion, JRNAL, Vol. 1, Issue 3 pp. 216-219, December 2014

(114) M. Sugisaka et. al, Target Recognition based on Machine Vision for Industrial Sorting Robot, JRNAL, Issue 2, pp. 100-102, September 2015

(114) M. Sugisaka et. al, Study on the ORB algorithm in the application of Monocular SLAM, JRNAL, Vol.

2, Issue 3, pp. 186-189, December 2015

(115) M. Sugisaka et. al, Study on the Technology of MPPT of the Solar Photovoltaic Based on the Model

Predictive Control, JRNAL, Vol. 3, Issue 2, pp. 111-115, Septmeber 2016

(116) M. Sugisaka et. al, Geometric Parameters Measurement of Wheel Tread Based on Line Structured

Light, JRNAL, Vol. 3, Issue 2, pp. 124-127, Septmeber 2016

(117) M. Sugisaka et al, An accurate method for the extraction of line structured light stripe, JRNAL, Vol. 4, Issue 1, pp. 1-4, June 2017

(118) M. Sugisaka et. al, A Method of Detecting Abnormal Crowd Behavior Events Applied in Air Patrol Robot, Vol.4, Issue 1, pp. 77-80, June 2017

(119) M. Sugisaka et al, Study On The Target Positioning For An Omni-Directional 3 DOF Mobile Manipulator Based On Machine Vision, Vol. 4, Issue 3, pp. 217-220, December

#### (Books)

(1) Control by Neuro Theory, ACCUM, Vol.3, pp.98-101, 1991, 7 (in Japanese)

(2) Artificial Eye-Recognition and Tracking Equipment for Mobing Object-, ACCUM, Vol.5, pp.98-101, 1993, 7 (in Japanese)

(3) The Special Issue on Adaptive Filtering and Estimation, Applied Mathematics and Computation, Editor, Vo1.69, No.1, April, 1995.

(4) Proceedings of International Symposium on Artificial Life and Robotics (AROB) 1st, Editor,

ISBN4-9900462-6-9, Mebundo, pp.1-274, 1996.

(5) Proceedings of International Symposium on Artificial Life and Robotics (AROB'97), Editor, (with S. Fujimura), ISBN4-9900462-7-7, Mebundo, pp.1-154, 1997.

(6) Artificial Life and Robotics, Editor-in-Chief, Vol.1, No.1-No.4, Springer, 1997-2013.

(7) Proceedings of The Third International Symposium on Artificial Life and Robotics (AROB 3rd '98), Editor, Vol.1, Vol.2, ISBN4-9900462-8-5, Mebundo, pp.1-744, 1998.

(8) Artficial Life and Robotics, Editor-in-Chief Vol.2, No.1-No.4, Springer, 1998.

(9) Introduction to the special issue on Artificial Life and Robotics, Applied Mathematics and Computation, Guest Editor, Vol.91, No.1, April, 1998.

(10) Proceedings of The Fourth International Symposium on Artificial Life and Robotics (AROB 4th `99), Editor, (with H. Tanaka), Vol.1, Vol.2, ISBN4-9900462-9-3, Mebundo, pp.1-770, 1999.

(11) Artificial Life and Robotics, Editor-in-Chief, Vol.3, No.1-No.4, Springer, 1999-2013.

Proceedings of The Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00),Editor, (with H. Tanaka), Vol.1, Vol.2, ISBN4-9900462-0-X, Mebundo, pp.1-861, 2000.

(13) Artificial Life and Robotics, Editor-in-Chief, Vol.4, No.1-No.4, Springer, 2000.

(14) Introduction to the special issue on artificial brain, brain computing, and brainwar, Guest Editor, Vol.111, No.2&3, May (2000).

(15) The Special Issue Dedicated to Sueo Ueno, Applied Mathematics and Computation, Guest Editor, Vol. 116, No. 1&2, November (2000).

Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01),Editor, (with H. Tanaka), Vol.1, Vol.2, ISBN4-9900462-1-8, Shubundo Insatsu Co. Ltd., pp.1-565, 2001.

(17) Artificial Life and Robotics, Editor-in-Chief, Vol.5, No.1-No.4, Springer, 2001

Proceedings of The Seventh International Symposium on Artificial Life and Robotics (AROB 7th '02),
 Editor, (with H. Tanaka), Vol.1, Vol.2, ISBN4-9900462-2-6, Shubundo Insatsu Co. Ltd., pp.1-688, 2002.

(19) Artificial Life and Robotics, Editor-in-Chief, Vol.6, No.1-2, No.3, No.4, Springer, 2002

(20) Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03),Vol.1, Vol.2, Editor, (with H. Tanaka), ISBN4-9900462-3-4, Shubundo Insatsu Co. Ltd., pp.1-709, 2003

(21) Artificial Life and Robotics, Editor-in-Chief, Vol.7, No.1-2, No.3, No.4, Springer, 2003

(22) Proceedings of The Ninth International Symposium on Artificial Life and Robotics (AROB 9th '04),
 Vol.1, Vol.2, Editor, (with H. Tanaka), ISBN4-9900462-4-2, pp.1-701, Sanwa Insatsu Syuppan Co. Ltd,
 Oita, Japan, 2004

(23) M. Sugisaka, Artificial Life and Robotics, Vol.8, No.1-No.4, 2004

(24). Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), Editor, (with H. Tanaka), ISBN4-9900462-5-0, pp.1-745, ISAROB, CD Rom, Oita, Japan, 2005

(25) Artificial Life and Robotics, Editor-in-Chief, Vol.9, No.1-No.4, Springer, 2004

(26) Proceedings of The Eleventh International Symposium on Artificial Life and Robotics (AROB

11th '06), Editor, (with H. Tanaka), ISBN4-9902880-0-9, pp.1-810, ISAROB, CD Rom, Oita, Japan, 2006

(27) M. Sugisaka, Artificial Life and Robotics, Vol.10, No.1-No.2, Springer, 2005

(28) Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07),B-Con Plaza, Beppu, Oita, pp.709-714, 25-27 Jan. 2007, CD Rom

(29) Artificial Life and Robotics, Vol.11, No.1-2, 2006

(30) Proceeding of The Thirteenth International Symposium on Artificial Life and Robotics (AROB

13th '08), Jan.31-Feb.2, 2008, Beppu, B-Con Plaza, Oita, Japan, CD Rom

(31) Artificial Life and Robotics, Vol.12, No.1-No.2, 2007

## (Articles in International Conferences (Refereed Articles))

(1) M. Sugisaka, "Some initial-value methods for sequential estimation problems via invariant imbedding," IFAC 4th Int. Symp. on Multivariable Technological Systems, Preprint, pp.329-338, Pergamon Press, 1977.

(2) M. Sugisaka and S. Sagara, "Imbedding approach for optimal input design of linear system identification," The 5th IFAC Symp. on Identification and System Parameter Estimation, Sept.24-28, Darmstadt, Germany, 1979.

(3) M. Sugisaka, "Imbedding approach for optimal receiver design using covariance information, The 10th Annual Pittsburgh Conf. on Modeling and Simulation, Pittsburgh, 1979.

(4) M. Sugisaka, "An initial-value solution for on-line filtering and simulation in two-dimensional stochastic fields, The 11th Annual Pittsburgh Conf. on Modeling and Simulation, Pittsburgh, 1980.

(5) M. Sugisaka, "An initial-value solution of nonlinear Fredholm integral equation with separable covariance in optimum receiver design, The 11th Annual Pittsburgh Conf. on Modeling and Simulation, Pittsburgh, 1980.

(6) M. Sugisaka, "A Cauchy system for on-line estimation in two-dimensional stochastic flieds," Proc. of the 19th IEEE Conf. on Decision and Control, Vol.1, pp.399-400, 1980.

(7) M. Sugisaka, P. Kalata, R. Fischl, P. Herczfeld and C. Rorres "On estimating the fluid temperature in a solar collection system," Proc. of the 12th Annual Pittsburgh Conf. on Modeling and Simulation, Pittsburgh, 1981.

(8) M. Sugiaka, P. Kalata, R. Fischl, P. Herczfeld and C. Rorres, "Filtering algorithm for estimating fluid temperature profiles in solar collectors," Proc. of the 6th IFAC Symposium on Identification and System Parameter Estimation, pp.761-766, Pergamon Press, Washington D.C., 1982.

fl-Ł M. Sugisaka, A. Tominaga, et al., "Parameter identification in solar collectors," Proc. of the 7th IFAC<sup>-</sup> Symposium on Identification and System Parameter Estimation, pp.1101-1105, 1985.

fllls M.Sugisaka, A. Tominaga, et al., "A simulation study on identification of blood flow resistance of arteries," Proc. of the 7th IFAC Symposium on Identification and System Parameter Estimation, pp.1125-1130, 1985.

flow J. J. Helferty, R. Fischl, P. R. Herczfeld, D. K. Anad, T.E. Brisbane and M. Sugisaka, "On the selection of distributed parameter models for control studies of solar energy systems," 1986 ASME-JSME-JSES Solar Energy Conference: Solar Energy Efficient Buildings, March 22-27, Honolulu, 1987.

fleek J. J. Helferty, R. Fischl, M. Richman, T. Jurnad, M. Sugisaka and T. Mastuo, "Solar collector loop" parameter identification using distributed parameter model from experimental data," The 18th Annual" Pittsburgh Conf. on Modeling and Simulation, April 23-24, Pittsburgh, 1987.

fl% Ł J. J. Helferty, R. Fischl, P. R. Herczfeld, T. E. Brisbane, D. K. Anad and M. Sugisaka, "On the observability of solar energy system using distributed parameter models," The Sixth American Control<sup>®</sup> Conference, Minneapolis, June 10-12, 1987.

fl%(Ł M. Sugisaka, "Chandrasekhar filteringand smoothing methods given covariance model and properties of X and Y functions," The 13th IFIP Conf. on System Modeling and Optimization, Aug.31-Sept.4, Tokyo, 1987.

fl% Ł M. Sugisaka, T. Matsuo, R. Fischl, P. Kalata, P. Herczfeld, C. Rorres and J. J. Helferty, "On parameter identification of solar collectors using two temperature plug-flow model," IMACS/IFAC Int. Symp., Modeling and Simulation of Distributed Parameter Systems, Oct. 6-9, Hiroshima, 1987.

fl%\* Ł M. Sugisaka and K. Kuroiwa, "Simulation study on one-step ahead control of a photovoltaic energy storage system," 1987 Korean Automatic Control Conf., pp. 741-746, Taejion, Oct. 16-17,1987.

f‰Ł M. Sugisaka, "Adaptive Chandrasekhar-type filter based on state-space models for linear continuous time-invariant systems," The 12th IMACS World Congress on Scientific Computation, June 18-22, Paris, 1988.

(18) M. Sugisaka, "Integral equation representations and initial-value solutions for optimal estimation," The 12th IMACS World Congress on Scientific Computation, June 18-22, Paris, 1988.

(19) M. Sugisaka, "Digital adaptive Chandrasekhar-type filters based oncovariance and state-space models," The 8th IFAC Symp. on Identification and System Parameter Estimation, Aug.27-31, Beijing, China, 1988.

(20) M. Sugisaka, S. Sagara, S. Ueno and R. Fischl "The design of linear regulators by Kalaba's new integral-equation approach and the relations to Chandrasekhar-type filters," The 8th IFAC Symp. on Identification and System Parameter Estimation, Aug.27-31, Beijing, China, 1988.

(21) M. Sugisaka, T. Jinzenji and R. Fischl, "Feeder current prediction in DC transit systems using AR model," The 20th ISICE Symp. on Stochastic Systems Theory and Its Applications, Nov.16-18, Osaka,

1988.

(22) M. Sugisaka, "Adaptive Chandrasekhar filter for linear discrete-time stationary stochastic systems," 1988 Korean Automatic Control Conf. ('88 KACC), Seoul, 1988.

(23) M. Sugisaka and S. Abe "Continous adaptive Chandrasekhar filtering and prediction," The 10th Int. Conf. on Systems Science, Sept.12-22, Wroclaw, Poland, 1989.

(24) M. Sugisaka, "Model predictive control with command generator for nonlinear systems," Proc. of the 1989 Korean Automatic Control Conf., Vol.2, Oct., pp.394-398, 1989.

(25) M. Sugisaka, F. Goto, S. Sagara, S. Ueno and R. Fischl, "Model predictive control with command generator for nonlinear systems," Proc. of the 7th Int. Conf. on Systems Engineering, pp.390-393, July 18-20, Las- Vegas, 1990.

(26) M. Sugisaka, Y. Kodama, S. Ueno and H. H. Kagiwada, "Character recognition via artificial neural network systems," Proc. of Int. Conf. on Fuzzy Logic & Neural Networks, Vol.1, pp.57-59, Iizuka, 1990.

(27) M. Sugisaka, F. Goto and S. Okubo,"Fuzzy control algorithm of a chemical system," Proc. of Int. Conf. on Fuzzy Logic & Neural Networks, Vol.1, pp.311-314, Iizuka, 1990.

(28) M. Sugisaka, S. Sagara and S. Ueno, "Pattern recognition via artificial neural network systems," Proc. of the 1990 Korean Automatic Control Conf., Vol.2, Oct., pp.929-932, 1990.

(29) M. Sugisaka and T. Okada, "Continuous-time Chandrasekhar smoohers in detection and tracking," The 13th IMACS World Congress on Computation and Applied Mathematics, July 22-26, Dublin, 1991.

(30) M. Sugisaka, S. Sagara and S. Ueno, "On-line estimation and learning via neural network systems based on digital Chandrasekhar filter," Proc. of the 9th IFAC/IFORS Symposium on Identification and System Parameter Estimation, Vol.1, pp.533-537, July 8-12, 1991.

(31) M. Sugisaka, T. Aso and M. Kobayashi, "Two step method of identification of physiological parameters in arteries," Proc. of the 8th Int. Conf. on Systems Engineering, pp.810-816, Coventry, Sept.10-12, 1991.

(32) M. Sugisaka, "Water level control using Z-80 microcomputer," Proc. of the 1991 Korean Automatic Control Conf., pp.1899-1903, Oct.22-24, 1991.

(33) M. Sugisaka and M. Eto, "Fuzzy control of mobile vehicle," IFAC Workshop an Automatic Control for Quality and Productivity, Preprints, (Eds.) A. Kuzuzu, I. Eksin and A. T. Dinibuton, Vol.2, pp.687-694, Istanbul, 1992, 7.

(34) M. Sugisaka, M. Kumashiro and T. Mastuo, "Design of new smoothers for stationary system and their implementations to third order electric circuit," Proc. of the IEEE Int. Conf. on Systems Engineering, pp.91-93, Sept.17-19, Kobe, 1992.

(35) T. Mastuo and M. Sugisaka, "Adaptive identification and control based on Riccati equation," Proc. of the IEEE Int. Conf. on Systems Engineering, pp.94-96, Sept.17-19, Kobe, 1992.

(36) M. Sugisaka, N. Katsuragi, S. Sagara, R. Fischl "Parameter identification of fluid," Proc. of the IEEE

Int. Conf. on Systems Engineering, pp.381-384, Sept.17-19, Kobe, 1992.

(37) M. Sugisaka, H. Kaita, M. Hara and K. Nakano, "Recognition and tracking system of moving objects based on artificial neural network and PWM control," Proc. of the IFToMM-jc Int. Symp. on Theory of Machines and Mechanisms, Vol.1, pp.104-107, Sept.24-26, Nagoya, 1992.

(38) M. Sugisaka, "Recognition and tracking system of moving objects based on artificial neural network and PWM control," Proc. of the 1992 Korean Automatic Control Conf., pp.573-574, Oct.19-21, 1992.

(39) M. Sugisaka and M. Ino, "A neuro identifier for linear and nonlinear systems, The 11th Int. Conf. on Systems Science, Sept.12-22, Wroclaw, Poland, 1992.

(40) M. Sugisaka and M. Ino, "Model predictive control based on neural identification method," The 5th Int. Workshop of the Bellman Continuum, Jan. 11-12, Honolulu, Hawaii, 1993.

(41) M. Sugisaka, "Control study of pulsatile pump motor." Proc. of 9th Int. Conf. on Systems Engineering, pp.430-434, Las Vegas, July 14-16, 1993.

(42) S. W. Kim, J. J. Lee and M. Sugisaka, "Inverse kinematics solution based on fuzzy logic for redundant manipulator, Proc. of the 1993 Int. Conf. on Intelligent Robotics and Systems, pp.904-910, July 26-30,pp.201-204, 1993.

(43) M. Sugisak and K. Eguchi, "Adaptive control based on neural network system," Proc. of the 1993 Korean Automatic Control Conf., pp.401-405, Oct.20-22, Seoul, 1993.

(44) S. W. Kim, J. J.Lee and M. Sugisaka, "Optimal control approach toresolve the redundancy of robot manipulator," Proc. of the 1993 Korean Automatic Control Conf., pp.234-249, Oct.20-22, Seoul, 1993.

(45) M. Sugisaka and T. Nogai, "Estimation of fluid flow resistance of elastic tube," Proc. of 25th ISCIE Int. Symp. on Stochastic Systems Theory and Its Applications, pp.205-210, Mita Press, Nov., 1993.

(45-1) M. Sugisaka and M. Ino, "Model Predictive Control Based on Neural Identification Method, Computers Math. Applic. Vol. 27, No. 9110, pp. 83-93, 1994. same paper

(46) M. Sugisaka, M. Hara and N. Tonoya, "Neuro-fuzzy control for recognition and tracking system of moving objects based on PWM," Proc. of Int. Workshop on Advanced Motion Control, pp.1091-1098, March 20-23, Berkeley, 1994.

(47) M. Sugisaka, M. Hara, N.Tonoya, Y. Ike, N. Tanaka, S. W. Kim and J. J. Lee, "Running tests of a mobile vehicle," Proc. of First Asian Control Conf., Vol.1, pp.439-442, July 27-30, Tokyo, 1994.

(48) M. Sugisaka, S. Motomura, T. Kitaguchi and H. Eguchi, "Hardware based neural identification: linear dynamical systems," Proc. of Int. Workshop on Intelligent Systems and Innovative Computations-The 6th Bellman Continuum-, pp.124-131, August 1-2, Tokyo, 1994.

(49) M. Sugisaka, "Neural filtering method for stationary signal processes," Proc. of Int. Workshop on Intelligent Systems and Innovative Computations-The 6th Bellman Continuum-, pp.132-138, August 1-2, Tokyo, 1994.

(50) M. Sugisaka, "A micro-robot for inspection in undergroundtubes," Proc. of 10th Int. Conf. on Systems Engineering, Vol.2, pp.1201-1205, Sept.6-8, Coventry, UK, 1994.

(51) Y. G. Zhang and M. Sugisaka, "Fuzzy clustering analysis of a class of stochastic systems," Proc. of 26 th ISCIE Int. Symp. on Stochastic Systems Theory and Its Applications, pp.143-148, Oct.26-28, 1994.

(52) M. Sugisaka, "Running tests of a micro-robot for inspection in underground tubes," Proc. of 26th ISCIE Int. Symp. on Stochastic Systems Theory and Its Applications, Oct.26-28, 1994.

(53) C. Cho, J. J. Lee and M. Sugisaka, "Variable structure control of chaotic systems," Proc. of the 9th Korean Automatic Control Conf., pp.505-510, Oct.17-20, 1994.

(54) M. Sugisaka, "Neural Chandrasekhar filtering method for stationary signal processes," Proc. of the 9th Korean Automatic Control Conf., pp.742-745, Oct.17-20, 1994.

(55) M. Sugisaka, M. Sato, Y. G. Zhang and J. Casti, "Initial states in cellular automata – design of artificial neural decision systems," Proc. of the 9th Robotics and Automation Workshop, pp.179-180, KOEX, Seoul, Korea, April 1, 1995.

(56) M. Sugisaka, "Neural network control for recognition and tracking of moving objects," Proc. of the ISCA Int. Conf. (Fourth Golden West Conf. on Intelligent Systems), pp.189-193, June 12-18, San Francisco, California, USA, 1995.

(57) M. Sugisaka, "Hardware based neural identification : nonlinear dynamical systems," Proc. of the 2nd Asia – Pacific Conf. On Control & Measurement, June 23-27, pp 255-259, 1995, Wuhan – Chongqing, China

(58) M. Sugisaka and T. Baba, Propotional controls for running of a micro-robot in an underground tube, Int. Conf. on Recent Advances in Mechatronics, pp.790-793, August 14-16, 1995, Istanbul, Turkey

(59) M. Sugisaka, Fast pattern recognition using a neurocomputer, IFAC Workshop on Human – Oriented Design of Advanced Robotics Systems (DARS '95), pp.169-172, Sept. 19-20, 1995, Vienna, Austria

(60) M. Sugisaka, N. Tonoya, Neuro control for recognition and tracking system of moving object, Proc. of 12th Int. Conf. on Systems Science, pp. 522-532, Sept. 12-15, 1995, Wroclaw, Poland

(61) M. Sugisaka, M. Sato, Y. Zhang, J. Casti, L- system in cellular automata – design of artificial neural decision systems - , Proc. of the 10th Korea Automatic Control Conf. , pp.69-70, Oct. 23-15, 1995, Seoul, Korea

(62) M. Sugisaka, M. Hara, Driving control of a visual system, Proc. of the 10th Korea Automatic Control Conf. , pp.131-134, Oct. 23-25, 1995, Seoul, Korea

(63) M. Sugisaka, M. Hara, Tracking control of a visual system, Proc. of the 27th ISCIE Int. Symp. on Stochastic Systems Theory and Its Applications, pp.65-70, 1995, Beppu, Oita, Japan

(64) Y. G. Zhang, M. Sugisaka, A note on hidden Markov model and classification, Proc. of the 27th ISCIE Int. Symp. on Stochastic Systems Theory and Its Applications, pp.175-180, 1995, Beppu, Oita, Japan

(66) M. Sugisaka, X. Wang, J. J. Lee, The fuzzy – PID control for the steering of an intelligent mobile vehicle, Proc. of the 27th ISCIE Int. Symp. on Stochastic Systems Theory and Its Applications, pp.89-93,1995, Beppu, Oita, Japan

(67) Y. G. Zhamg, X. J. Li, M. Sugisaka, Artificial plant tree based on IFS, Proc. of Int. Symp. on Artificial Life and Robotics (AROB) 1st, pp.30-33, Feb. 18-20, 1996, Beppu, Oita, Japan

(68) M. Sugisaka, X. Wang, J. J. Lee, Development of practical control method for an intelligent mobile vehicle, Proc. of Int. Symp. on Artificial Life and Robotics (AROB)1st, pp.234-237, Feb. 18-20, 1996, Beppu, Oita, Japan

(69) M. Sugisaka, Neurocomputer control for tracking of moving objects, Proc. of Int. Symp. on Artificial Life and Robotics (AROB)1st, pp.243-247, Feb. 18-20, 1996, Beppu, Oita, Japan

(70) M. Sugisaka, Pattern recognition using neurocomputer, Proc. of Int. Symp. on Artificial Life and Robotics (AROB)1st, pp.248-251, Feb. 18-20, 1996, Beppu, Oita, Japan

(71) M. Sugisaka, Intelligent Control and learning using artificial brain constructed by neurocomputers, Second World Automation Congress, WAC'96, May 27-30, Montpellier, France, 1996

(72) M. Sugisaka, Hardware realization of an artificial brain using neurocomputers, Proc. of the Eleventh International Conf. on Systems Eng., July 9-11, 1996, Univ. of Nevada-Las Vegas, Las Vegas, Nevada, USA

(73) M. Sugisaka, X. Wang, J. J. Lee, Neural fuzzy control for a mobile vehicle, Proc. of the 11th Korean Automatic Control Conf., pp.338-341, Oct., 1996, Korea

(74) M. Sugisaka, N. Tonoya, T. Furuta, Intelligent Control of visual tracking system based on artificial brain, Proc. of the 11th Korean Automatic Control Conf., pp.201-206, Oct, 1996, Korea

(75) M. Sugisaka, X. Wang, A complex control method for an intelligent mobile vehicle, Proc. of 1996 IEEE Intelligent Vehicle Symposium, pp.53-57, Sept. 19-20, 1996, Tokyo, Japan

(76) M. Sugisaka, N. Tonoya, T. Furuta, Neural networks for control in an artificial brain of recognition and tracking system, Proc. of Int. Symposium on Artificial Life and Robotics (AROB '97), pp.99-102, Feb. 18-20, 1997, Beppu, Oita, Japan

(77) Y. G. Zhang, M. Sugisaka, Some new look at metabolism – repair system, Proc. of Int. Symposium on Artificial Life and Robotics (AROB '97), pp.34-37, Feb. 18-20, 1997, Beppu, Oita, Japan

(78) M. Sugisaka, X. Wang, J. J. Lee, Intelligent control with new imaging processing strategy for a mobile vehicle, Proc. of Int. Symp. on Artificial Life and Robotics (AROB '97), pp.95-98, Feb. 18-20, 1997, Beppu, Oita, Japan

(79) M. Sugisaka, X. Wang, T. Matsumoto, Control strategy for a smooth running of a mobile vehicle with neurocomputer, Proc. of Twelfth Int. Conf. on Systems Eng., pp.664-669, Sept. 9-11, 1997, Coventry, UK

(80) M. Sugisaka, Prediction of a complex adaptive system using neurocomputer, Proc. of Twelfth Int. Conf. on Systems Eng., pp.656-659, Sept. 9-11, 1997, Coventry, UK

(81) M. Sugisaka, H. Okuzono, K. Yamada, Recognition of object and measurement of distance using visual system with two cameras, Proc. of Twelfth Int. Conf. on Systems Eng., pp.660-663, Sept. 9-11, 1997, Coventry, UK

(82) M. Sugisaka, A new identification method using a neurocomputer, Preprint, 11th IFAC Symp. on System Identification, Vol. 3, pp.1367-1370, July 8-11, 1997, Kitakyushu, Fukuoka, Japan

(83) M. Sugisaka, X. S. Wang, The autonomous evolution of cooperation activity of micro-robots by genetic algorithms (GAS), Proceedings of the 29th ISCIE Int, Symp. on Stochastic Systems Theory and Applications, pp.29-32, Nov. 10-12,1997, Waseda University, Tokyo, Japan

(84) M. Sugisaka, Zhi-Jun Liu, Artificial neural network models using neurocomputer, Proceedings of the 2nd Workshop on Advanced Mechatronics, pp.80-82, Dec. 4-6, 1997, The Hotel Nampuro, Simabara, Japan

(85) M. Sugisaka, H. Okuzono, K. Yamada, Recognition of object and measurement of distance using a visual system with two camaras, Proceedings of the 2nd Int. Workshop on Advanced Mechatronics, pp.279-282, Dec. 4-6, 1997, The Hotel Nampuro, Simabara, Japan

(86) M. Sugisaka, X. Wang, Artificial brain for a mobile vehicle, Proc. of The Third Int. Symp. on Artificial Life and Robotics (AROB 3rd '98), pp.275-278, Jan. 19-21, 1998, B-Con Plaza, Beppu, Oita, Japan

(87) M. Sugisaka, X. S. Wang, J. J. Lee, The genetic algorithms (GAS) to evolve multiple agent cooperative system, Proc. of The Third Int. Symp. on Artificial Life and Robotics (AROB 3rd '98), pp.178-186, Jan. 19-21, 1998, B-Con Plaza, Beppu, Oita, Japan

(88) M. Sugisaka, Zhi-Jun Liu, The application of neurocomputer for a control problem, Proc. of The Third Int. Symp. on Artificial Life and Robotics (AROB 3rd '98), pp.444-447, Jan. 19-21, 1998, B-Con Plaza, Beppu, Oita, Japan

(89) Y. G. Zhang, M. Sugisaka, C. M. Xu, A modification of (M-R) systems and its simulation, Proc. of The Third Int. Symp. on Artificial Life and Robotics (AROB 3rd '98), pp.499-502, Jan. 19-21, 1998, B-Con Plaza, Beppu, Oita, Japan

(90) S. G. Hong, T. D. Eom, C. Y. Lee, M. S. Kim, M. Sugisaka, J. J. Lee, Designing soccer-playing robot team (F.B.I.) based on the centralized approach, Proc. of Micro-Robot World Cup Soccer Tournament (MIROSOT), pp.119-123, June 1-5, 1998, KAIST, Taejon, Korea

(91) M. Sugisaka, X. Wang, J. J. Lee : A complex control method for an intelligent mobile vehicle, Proceedings of the 1997 Korean Automatic Control Conference, pp.815-818, Pohang, Korea, 1997

(92) M. Sugisaka, X. Wang, J. J. Lee, Intelligent motion of a mobile vehicle, World Automation Congress (WAC) 98, May 10-14, Ancharge, Alaska, USA

(93) M. Sugisaka, Design of an artificial brain in a tracking and recognition robot, The 3rd European Robotics, Intelligent Systems and Control Conference National Technical University of Athens, Athens, Greece, June 22-24, 1998

(94) M. Sugisaka, Z. J. Liu, The simulation of artificial neural network models in cooler control using neurocomputer, Special session intelligent and adaptive systems with uncertainties, The 3rd Int. Workshop organized by the Int. Institute for General Systems Studies, Beidaihe, Qinhuangdao, China, July

26-28, 1998

(95) M. Sugisaka, Premiteve artificial brain hardware for robotics, Proc. of the 3rd Asia-Pacific Conf. on Control & Measurement, pp.360-365, Aug. 31 - Sept. 4, Dunhuang, P. R. China, 1998

(96) M. Sugisaka, X. Wang, A new learning algorithm for driving a mobile vehicle, Proc. of the 1998 Korean Automatic Control Conference, pp.173-178, Pusan, Korea, Oct. 15-17, 1998

(97) M. Sugisaka, X. S. Wang, Evolution of multiple agent system from basic action to intelligent behavior, Proc. of the 1998 Korean Automatic Control Conference, pp.190-194, Pusan, Korea, Oct. 15-17, 1998

(98) M. Sugisaka, Z. Liu, Artificial neural network and application in temperature control system, Proc. of the 1998 Korean Automatic Control Conference, pp.260-264, Pusan, Korea, Oct. 15-17, 1998

(99) M. Sugisaka, K. Sakamoto, How to design CATV trunk line system, Proc. of the 1998 Korean Automatic Control Conference, Pusan, Korea, Oct. 15-17, 1998

(100) M. Sugisaka, H. Hayashi, Image processing of voids on semiconductor chip surface, Proc. of the 1998 Korean Automatic Control Conference, Pusan, Korea, Oct. 15-17, 1998

(101) M. Sugisaka, T. Kurimoto, Control of micro robot, Proc. of the 1998 Korean Automatic Control Conference, Pusan, Korea, Oct. 15-17, 1998

(102) M. Sugisaka, M. Shono, The evolution of cellular automata, Proc. of the 1998 Korean Automatic Control Conference, Pusan, Korea, Oct. 15-17, 1998

(103) M. Sugisaka, S. Seki, Control of driving speed of a mobile, Proc. of the 1998 Korean Automatic Control Conference, Pusan, Korea, Oct. 15-17, 1998

(104) M. Sugisaka, Learning and control based on an artificial brain, Proc. of the 13th International Conference on Systems Science, pp.343-351, Sept. 15-18, 1998, Wroclaw, Poland, 1998

(105) M. Sugisaka, Z. Liu, Application of neurocomputer for controlling the temperature of cooler of sinter plant, pp.342-358, Sept. 15-18, Wroclaw, Poland, 1998

(106) M. Sugisaka, X. Wang, Intelligent control of a mobile vehicle using on-line learning, Proc. of the13th Int. Conf. on Systems Science, Sept. 15-18, Wroclaw, Poland, 1998

(107) Y. Niino, M. Sugisaka, A simulation of the defense of a honey bee comb, Proc. of The 30th ISCIE
 Int. Symp. on Stochastic Systems Theory and Its Applications, pp.233-237, Nov. 4-6, 1998, Kyoto,
 Japan, 1998

(108) X. Wang, M. Sugisaka, The multi-agent systems design based on behavior-based on-line learning method, Proc. of The 30th ISCIE Int. Symp. on Stochastic Systems Theory and Its Applications, pp.239-242, Nov. 4-6, 1998, Kyoto, Japan

(109) Y. G. Zhang, M. Sugisaka, X. Wu, A bottom-up way to develop multi-cellular digital organism,
Proc. of The Fourth Int. Symp. on Artificial Life and Robotics (AROB 4th '99), pp.I/22-I/26, Jan. 19-22,
Beppu, Oita, Japan 1999

(110) Y. Niino, M. Sugisaka, Simulations of group action of artificial honey bees, Proc. of The Fourth Int. Symp. on Artificial Life and Robotics (AROB 4th '99), pp.648-649, Jan. 19-22, Beppu, Oita, Japan 1999

(111) X. Wang, M. Sugisaka, The multi-agent systems design on behavior-based learning model, Proc. of The Fourth Int. Symp. on Artificial Life and Robotics (AROB 4th '99), pp.654-657, Jan. 19-22, Beppu, Oita, Japan 1999

(112) X. Wang, M. Sugisaka, Application of neural and fuzzy control strategies for a mobile vehicle, Proc. of The Fourth Int. Symp. on Artificial Life and Robotics (AROB 4th '99), pp.729-732, Jan. 19-22, Beppu, Oita, Japan 1999

(113) Z. Liu, M. Sugisaka, Neural network architecture optimization and application using genetic algorithm, Proc. of The Fourth Int. Symp. on Artificial Life and Robotics (AROB 4th '99), pp.767-770, Jan. 19-22, Beppu, Oita, Japan 1999

(114) Sugisaka, M., Nagasaki, M, Learning performance of a neurocomputer for nonlinear system identification, 7th Bellman Continuum, Santa Fe Institute, May 24-25, 1999

(115) Sugisaka, M, Lui, Z. J., Improved genetic algorithm for generating the neural network structures,
 Proceedings of Thirteenth International Conference on Systems Engineering, pp. EE.199-EE.204,
 University of Nevada-Las Vegas, August 10-12, 1999

(116) Sugisaka M., Wang, X., Practical on-line learning intelligent control for a mobile vehicle, Proceedings of Thirteenth International Conference on Systems Engineering, pp.EE205-EE210, University of Nevada-Las Vegas, August 10-12, 1999

(117) Sugisaka, M., Wang, X and Shyono, M., Learning robot soccer strategy by genetic programming, Proceedings of Thirteenth International Conference on Systems Engineering, pp.EE211-EE216, University of Nevada-Las Vegas, August 10-12, 1999

(118) Sugisaka, M., Wang, X, Feasible On-Line learning neural and fuzzy intelligent control for a mobile vehicle, IEEE / RSJ International Conference on Intelligent Robots and Systems(IROS '99), Kyongju, Korea, October 17-21, 1999, pp. 769-774

(119) Sugisaka, M. , Lui, Z. , A genetic algorithm approach used to generate the neural networks structure, IEEE / RSJ International Conference on Intelligent Robots and Systems(IROS '99), Kyongiu, Korea, October 17-21, 1999, pp. 763-768

(120) Sugisaka, M., Dai, F., Fuzzy query approach in fault diagnosis of a power plant, IEEE / RSJ International Conference on Intelligent and Systems(IROS '99), Kyongju, Korea, October 17-21, 1999, pp. 752-756

(121) Sugisaka, M., Lui, Z., Back-propagation algorithm based neural network and its application in the temperatures control system, The 11th World Congress of System and Cybernetics, Brunel University, Unbridge, Middlesex, UK, West London, August 23-27, 1999, pp. 326-329

(122) Sugisaka, M., Wang, X., Learning robot soccer strategy by GP, The 11th World Congress of System

and Cybernetics, Brunel University, Uxbridge, Middlesex, UK, West London, August 23-27, 1999, pp. 320-325

(123) Sugisaka, M., Dai, F., Application of fuzzy query approach to the fault diagnosis of an antiaircraft gun's servo system, The 31st ISCIE International Symposium on Stochastic Systems Theory and 1ts Applications, Yokohama, Japan, November 11-12, 1999, pp. 45-46

(124) Sugisaka, M., Wang, X., Learning soccer strategies by genetic programming, The 31st ISCIE International Symposium on Stochastic Systems Theory and 1ts Applications, Yokohama, Japan, November 11-12, 1999, pp.71-72

(125) Sugisaka, M., Liu, Z., Neural network architecture optimization and application, Proceedings of the 14th Korea Automatic Control Conference, The Institute for Advanced Engineering, Korea, October 14-16, 1999, pp.E214-E217

(126) Sugisaka, M., Wang, X., Learning soccer robot using genetic programming, Proceedings of the 14th Korea Automatic Control Conference, The Institute for Advanced Engineering, Korea, October 14-16, 1999, pp. E292-E297

(127) Sugisaka, M., Liu, Z., Time delay network based LD gas occurring amount prediction and distribution, Proceedings of the International Workshop on Emergent Synthesis, Kobe University, Japan, December 6-7, 1999

(128) Sugisaka, M., Mishiro, S., Control method of Sumo robot, Proceedings of the 1999 International Conference on Mechatoronic Technology (ICMT '99), 1999 International Symposium on Innovations in Mechatoronics, Pusan, Korea, October 21-23, 1999, pp.84-88

(129) Sugisaka, M., Wang, X., To evolve multi-argent system using genetic programming, Proceedings of the 1999 International Conference on Mechatoronic Technology (ICMT '99),1999 International Symposium on Innovations in Mechatoronics, Pusan, Korea, October 21-23, 1999, pp.224-229

(130) Sugisaka, M. , Zhang, Y. G. , A review to the international symposium on artificial life and robotics, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. I7-11

(131) Sugisaka, M., Liu, Z., Optimization of neural network structure based on a hybrid method, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 212-215

(132) Sugisaka, M., Ito, M., The optimization of a neural network by genetic algorithm, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 216-219

(133) Sugisaka, M., Shono, M., Search optimum in multi-peak goal function space by genetic algorithm, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 220-223 (134) Sugisaka, M., Kurimoto, T., The optimal design of the fuzzy membership function which used genetic algorithm, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 224-227

(135) Sugisaka, M., Wang, X., Primary control strategy based on the idea of Abrain, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 399-401

(136) Sugisaka, M., Ninomiya, Y., The predictive operation of a micro robot, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 476-479

(137) Sugisaka, M., Mishiro, S., Complex control approach for Sumo robot, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 491-494

(138) Sugisaka, M., Fengzhi, D., Approximation of nonlinear function using neural network based on genetic algorithm, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 568-571

(139) Sugisaka, M., Xiaoshu, W., Evolution of multi-agent system strategies using genetic programming, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 584-588

(140) Sugisaka, M., Hara, M., Experiment of a wheel type mobile robot, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 593-596

(141) Sugisaka, M. , Adachi, T. , Autonomous mobile vehicle, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 597-600

(142) Sugisaka, M., Mistuo, N., Studies on 3-D image processing for autonomous vehicle, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 601-604

(143) Sugisaka, M., Seki, S., The steering control of the mobile vehicle, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 605-608

(144) Sugisaka, M., Sakamoto, K., The development of inverter for generation of electricity from solar panel, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 621-623

(145) Sugisaka, M., Aito, H., The study of the language occurrence model using Associatoron,Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita,Japan, January 26-28, 2000, pp. 647-650

(146) Sugisaka, M., Watanabe, N., The study on the optimization problem by neural network, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 854-857

(147) Sugisaka, M., Koga, H., The prediction amount of LD gas consumption by neural network, Proceedings of the Fifth International Symposium on Artificial Life and Robotics (AROB 5th '00), Oita, Japan, January 26-28, 2000, pp. 858-861

(148) F. Dai, M. Sugisaka, Z. Lui, Automatic neural network design and its application based on genetic algorithm, World Congress of The Systems Sciences In Conjunction With 44th Annual Meeting, International Society For The Systems Sciences, Pyerson Polytechnic University, Toronto, Canada, July 16-22, 2000

(149) M. Sugisaka, Cognitive and behavioral intelligent artificial life, World Congress of The Systems Sciences In Conjunction With 44th Annual Meeting, International Society For The Systems Sciences, Pyerson Polytechnic University, Toronto, Canada, July 16-22, 2000, p120

(150) M. Sugisaka, S. Mishiro, Complexity in control for sumo robot, World Congress of The Systems Sciences In Conjunction With 44th Annual Meeting, International Society For The Systems Sciences, Pyerson Polytechnic University, Toronto, Canada, July 16-22, 2000, p120

(151) M. Sugisaka, X. Wang, Realization for prime brain, World Congress of The Systems Sciences In Conjunction With 44th Annual Meeting, International Society For The Systems Sciences, Pyerson Polytechnic University, Toronto, Canada, July 16-22, 2000, p120

(152) M. Sugisaka, Research on artificial life robotics, Artificial Life VII, The Seventh International Conference on the Simulation and Synthesis of Living Systems, Reed College, Portland, Oregon, USA, August 1-6, 2000

(153) M. Sugisaka, F. Dai, An application of image processing and on-line learning for a mobile vehicle, The 4th Asia-Pacific Conference on Control & Measurement, July 9-12, 2000

(154) J. Johnson, M. Sugisaka, Culture and communication in the design of swarm robot control systems, Fourteenth International Conference on Systems Engineering, Proceedings Volume 1, pp.270-275, September 12-14, Coventry University, UK, 2000

(155) M. Sugisaka, Behavioral control of artificial life robot, Fourteenth Internationl Conference on Systems Engineering, Proceedings Volume 2, pp.524-531, September 12-14, Coventry University, UK, 2000

(156) M. Sugisaka, M. Hara, Complex control strategies for a wheel type mobile robot, Fourteenth International Conference on Systems Engineering, Proceedings Volume 2, pp.532-535, September 12-14, Coventry University, UK, 2000

(157) M. Sugisaka, X. Wang, F. Dai, The application of image processing and on-line learning for an automobile vehicle, Fourteenth International Conference on Systems Engineering, Proceedings Volume 2,

pp.536-540, September 12-14, Coventry University, UK, 2000

(158) C. Radix, M. Sugisaka, Further development of an "artificial brain", Proceedings of 2000
International Symposium on Mechatronics and Intelligent Mechanical System for 21 Century, Oct. 4-7, 2000, Kyong Sang Nam-Do, Korea, pp.107-110

(159) M. Sugisaka, Cognitive and behavioral artificial liferobot, Proceedings of 2000 International Symposium on Mechatronics and Intelligent Mechanical System for 21 Century, Oct. 4-7, 2000, Kyong Sang Nam-Do, Korea, pp.194-198

(160) M. Sugisaka, M. Itou, The nonlinear function approximation based on the neural network application, 15th Korea Automatic Control Conference, October 19-21, 2000, Hyundai Learning Center, Korea, p.462

(161) M. Sugisaka, K. Nakanishi, N. Mitsuo, A consideration on photovoltaic power generation systems,15th Korea Automatic Control Conference, October 19-21, 2000, Hyundai Learning Center, Korea, p.468

(162) K. Shibata, M. Sugisaka, K. Ito, Hand reaching movement aquired through reinforcement learning, 15th Korea Automatic Control Conference, October 19-21, 2000, Hyundai Learning Center, Korea, p.474

(163) M. Sugisaka, T. Adachi, The running control for the mobile vehicle, 15th Korea Automatic Control Conference, October 19-21, 2000, Hyundai Learning Center, Korea, p.491

(164) J. Johnson, M. Sugisaka, Complexity Science for design of swarm robot control systems, 2000 IEEE International Conference on Industrial Electronics, Control and Instrumentation, 21st Century Technologies and Industrial Opportunities, pp.695-700, CD Rom, Oct. 22-28, 2000, Nagoya Congress Center, Nagoya, Aichi, Japan

(165) M. Sugisaka, Artificial liferobot for human welfare, International Workshop on Intelligent Systems Resolutions, 8th Bellman Continuum, Proceedings, December 11-12, 2000, National Tsing Hua University, Hsinchu, Taiwan, R. O. C. pp.373-375

(166) M. Sugisaka, M. Itou, The optimization of neural network structure using genetic algorithm, Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01), Vol. 1, pp.85-88, Tokyo, Japan, January 15-17, 2001

(167) A. Loukianov, M. Sugisaka, Supervised learning technique for a mobile robot controller in a visual line tracking task, Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01), Vol. 1, pp.238-241, Tokyo, Japan, January 15-17, 2001

(168) Y. G. Zhang, M. Sugisaka, Humanized robot (Hubot) with K-artificial brain, Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01), Vol. 1, pp.288-291, Tokyo, Japan, January 15-17, 2001

(169) K. Shibata, M. Sugisaka, K. Ito, Fast and stable learning in direct-vision-based reinforcement
learning, Proceedings of the Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01),
Vol. 1, pp.200-203, Tokyo, Japan, January 15-17, 2001

(170) M. Sugisaka, T. Adachi, The controlling of the welfare robot prototype, Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01), Vol. 2, pp.309-312, Tokyo, Japan, January 15-17, 2001

(171) M. Sugisaka, K. Nakanishi, N. Mitsuo, A consideration on photovoltaic power generation systems, Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01), Vol. 2, pp.551-554, Tokyo, Japan, January 15-17, 2001

(172) S. Maehara, M. Sugisaka, K. Shibata, Reinforcement learning using a Gauss-sigmoid neural network, Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01), Vol. 2, pp.562-565, Tokyo, Japan, January 15-17, 2001

(173) M. Sugisaka, H. Aito, The running experiment of the wheel type mobile robot, Proceedings of The Sixth International Symposium on Artificial Life and Robotics (AROB 6th '01), Vol. 2, pp.558-561, Tokyo, Japan, January 15-17, 2001

(174) C. A. Radix, A. A. Loukianov, M. Sugisaka, Evaluating Motion on the Alife Robot Prototype, Proc. of the 32nd International Symposium on Robotics(ISR 2001), pp.714-719, Seoul, Korea, April 19-21, 2001

(175) M. Sugisaka, X. Fan, Adaptive genetic algorithm with a cooperative mode, Proc. of the 6th IEEE International Symposium on Industrial Electronics, pp.1941-1949, Paradise Hotel, Pusan, Korea, June 12-16, 2001

(176) M. Sugisaka, F. Dai, The application of ART neural network to image processing for controlling a mobile vehicle, pp.1951-1955, Paradise Hotel, Pusan, Korea, June 12-16, 2001

(177) A. A. Loukianov, M. Sugisaka, An approach for learning a visual tracking skill on a mobile robot,
Proc. of SICE / ICASE Joint Workshop-Control Theory and Applications -, pp.83-87, Nagoya, Japan, July
24, 2001

(178) J. W. Wang, M. Sugisaka, "Study on a color based taget detection technique," Proc. of SICE / ICASE Joint Workshop-Control Theory and Applications -, pp.310, Nagoya, Japan, July 24, 2001

(179) P. Sapaty, M. Sugisaka, "Distributed artificial brain for collectively behaving mobile robots," Unmanned Systems 2001, Association for Unmanned Vehicle Systems International (AUVSI), CD Rom, pp.1-18, Baltimore, Maryland, July 31-August 2, 2001

(180) M. Sugisaka, "Development of Communication methods between artificial liferobot and human being," IEEE Region 10 Int. Conf. on Electrical and Electronic Technology, CD Rom, pp.894-898, August 19-22, 2001

(181) T. Kubik, M. Sugisaka, "Rule based robot navigation system working in an indoor environment," Proc. of XIV Int. Conf. on Systems Science, vol, II, pp.212-219, Wroclaw, Poland, Sept. 11-13, 2001

(182) M. Sugisaka, S. Otsu, T. Maeyama, "Fundamental wheel control for artificial life-robot," Proc. of Int. Conf. on Control, Automation and Systems, pp.270-273, Jeju University, Korea, Oct. 17-21, 2001

(183) M. Sugisaka, S. Kuriyama, "Image processing of artificial life-robot", Proc. of Int. Conf. on Control,

Automation and Systems, pp.274-276, Jeju University, Korea, Oct. 17-21, 2001

(184) J. Wang, M. Sugisaka, "Improvement on the image processing for an autonomous mobile robot with an intelligent control system", Proc. of Int. Conf. on Control, Automation and Systems, pp.280-283, Jeju University, Korea, Oct. 17-21, 2001

(185) J. Wang, M. Sugisaka, "Improve digital recognition capability of back propagation neural networks by enhancing image preprocessing technique", Proc. of Int. Conf. on Control, Automation and Systems, pp.437-440, Jeju University, Korea, Oct. 17-21, 2001

(186) A. A. Loukianov, M. Sugisaka, "A hybrid method for mobile robot probabilistic localization using a single camera", Proc. of Int. Conf. on Control, Automation and Systems, pp.284-287, Jeju University, Korea, Oct. 17-21, 2001

(187) T. Kubik, M. Sugisaka, "Intelligent navigation and control system for a mobile robot based on different programming paradigms", Proc. of Int. Conf. on Control, Automation and Systems, pp.288-291, Jeju University, Korea, Oct. 17-21, 2001

(188) M. Itou, M. Sugisaka, "Evolutionary designing neural network structure using genetic algorithm",
Proc. of Int. Conf. on Control, Automation and Systems, pp.296-299, Jeju University, Korea, Oct. 17-21,
2001

(189) M. Sugisaka, X. Fan, "Control of a welfare liferobot guided by voice commands", Proc. of Int. Conf. on Control, Automation and Systems, pp.390-393, Jeju University, Korea, Oct. 17-21, 2001

(190) Z. Wang, M. Sugisaka, "Color-based face detection for Alife robot", Proc. of Int. Conf. on Control, Automation and Systems, pp.430-432, Jeju University, Korea, Oct. 17-21, 2001

(191) X. Feng, Z. Wang, M. Sugisaka, "Non-parametric density estimation with application to face tracing on mobile robot", Proc. of Int. Conf. on Control, Automation and Systems, pp.426-429, Jeju University, Korea, Oct. 17-21, 2001

(192) T. Kubik K. B. Kubik, M. Sugisaka, "Graph coloring problem solving by calculations at the DNA level with operating on plasmids", Proc. of Int. Conf. on Control, Automation and Systems, pp.433-436, Jeju University, Korea, Oct. 17-21, 2001

(193) M. Sugisaka, F. Dai, "Fuzzy rules optimizing by neural network-based adaptive fuzzy control", Proc. of Int. Conf. on Control, Automation and Systems, pp.731-734, Jeju University, Korea, Oct. 17-21, 2001

(194) M. Sugisaka, X. Fan, "Control of a welfare liferobot guided by voice command", Proc. of Int. Conf. on Control, Automation and Systems, pp.390-393, Jeju University, Korea, Oct. 17-21, 2001

(195) M. Sugisaka, M. Hara, "Research of soccer robot system strategies", Proc. of Int. Conf. on Control, Automation and Systems, pp.1011-1014, Jeju University, Korea, Oct. 17-21, 2001

(196) P. Sapaty, M. Sugisaka, "Toward the distributed brain for collectively behaving robot", Proc. of Int. Conf. on Control, Automation and Systems, pp.571-574, Jeju University, Korea, Oct. 17-21, 2001

(197) M. Iida, M. Sugisaka, K. Shibata, Direct-vision-based reinforcement learning in a real mobile robot,

Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.42-45, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(198) S. Maehara, M. Sugisaka, K. Shibata, Effectiveness of sensory motion in the learning of computing task of a moving object, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.46-49, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(199) Y. Zhang, M. Sugisaka, Might we train an artificial brain as a baby, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.92-97, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(200) K. Shibata, M. Sugisaka, Dynamics of a recurrent neural network acquired through the learning of a context-based attention task, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.152-155, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(201) M. Sugisaka, S Sato, Improvement of the precision of the gradient method and object tracking using optical flow, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.234-237, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(201) M. Sugisaka, T. Maeyama, Obstacle avoidance in the mobile robot using the CCD camera, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.238-241, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(203) J. Wang, M. Sugisaka, Study on calibration of stereo camera for a mobile robot prototype, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.259-262, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(204) A. A. Loukianov, M. Sugisaka, A selective vision and landmark based approach to improve the efficiency of probabilistic localization, Proc. of The Seventh International Symposium on Artificial Life and Robotics (AROB 7th '02), Vol.1, pp.263-266, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(205) M. Sugisaka, R. Chen, Color-based landmark tracking for use in a mobile robot indoor navigation, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.267-270, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(206) X. Wang, M. Sugisaka, Solving problem of noise and uneven illumination for line navigating visual mobile robot duality in multi-edge detection and texture analysis, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.271-274, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(207) M. Sugisaka, K. Mori, Improvement of the efficiency of distributed GA, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.1, pp.294-297, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(208) M. Sugisaka, M. Zacharie, Network communication for electric vehicle navigation, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th'02), Vol.2, pp.505-508, B-Con

Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(209) T. Kubik, M. Sugisaka, Image segmentation technique and their use in artificial liferobot implementation, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.519-522, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(210) J. Wang, M. Sugisaka, Study on a color based target detection technique, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.532-535, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(211) M. Sugisaka, X. Fan, Relocation and resizing by AMSHIFT in face detection, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.536-537, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002•

(212) M. Sugisaka, X. Fan, Development of a face recognition system for the liferobot, Proc. of The Seventh InternationalSymposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.538-541, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(213) J. Johnson, M. Sugisaka, Desirable-event sub goal theory in the design of swarm robot control systems, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.572-575, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(214) P. Sapaty, M. Sugisaka, A language for programming distributed multi-robot systems, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.586-589, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(215) M. Sugisaka, F. Dai, Adaptive Methods for an intelligent mobile vehicle, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.634-637, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(216) X. Feng, M. Sugisaka, Non-parametric density estimation using neural network with application to multivariate statistical process monitoring, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.650-653, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(217) K. B. Kubik, T. Kubik, M. Sugisaka, Application of biomolecular computing for solving computationally hard problems, Proc. of The Seventh International Symposium on Artificial Life and Robotics(AROB 7th '02), Vol.2, pp.685-688, B-Con Plaza, Beppu, Oita, Japan, Jan. 16-18, 2002

(218) M. Sugiska, M. Zacharie, Road center localization using image processing for lectric vehicle navigation, Proceedings of 2002 FIRA Robot World Congress, pp.352-355, COEX, Seoul, Korea, May 27-29, 2002,

(219) M. Sugisaka, R.Chen, Map-based mobile robot navigation in indoor environment, Proceedings of 2002 FIRA Robot World Congress, pp.360-363, COEX, Seoul, Korea, May 27-29, 2002

(220) J. Wang, M. Sugisaka, Study on visual-based indoor navigation for an Alife mobile robot,Proceedings of Fifteenth International Conference on Systems Engineering, Editors H. Selvaraj and V.

Muthukukumar, pp. 390-396, Las Vegas, USA, August 6-8,2002

(221) M. Sugisaka, A. Loukianov, F. Xiongfeng, T. Kubik, K. B Kubik, Development of an artificial brain for LifeRobot, The 12th International Workshop on Dynamics and Control, Los Angeles, USA August 19-21, 2002 (Applied Mathematics and Computation, to be appeared)

(222) M. Ito, M. Sugisaka, A study of generation alternation model in genetic algorithm, International Conference on Control, Automation and Systems(ICCAS 2002), CD ROM, pp.1698-1701, Muju Ressort, Korea, October 16-19, 2002

(223) M. Sugisaka, T. Kiyomatsu, M. Hara, Research of succor robot system strategies, International Conference on Control, Automation and Systems(ICCAS 2002), CD ROM, pp.1673-1679, Muju Ressort, Korea, October 16-19, 2002

(224) M. Sugisaka, Z. Mbaitiga, Road center localization using image processing for vehicle navigation, May 2002 FIFA Robot World Congress, pp.352-355, Seoul, Korea, 2002

(225) M. Sugisaka, R. Chen, Map-based the mobile robot navigation in indoor environment May 2002 FIFA Robot World Congress, pp.360-363, Seoul, Korea, 2002

(226) M.Ito, M.Sugisaka, A study of generation alternation model in genetic algorithm, Proceedings of International Conference on Control, Automation and Systems, Muju, Korea, pp.1698-1701, 2002

(227) T. Kiyomatsu, M. Hara, M. Sugisaka, Research of robot system strategies, Proceedings of International Conference on Control, Automation and Systems, Muju, Korea, pp.1673-1676, 2002

(228) M. Sugisaka, K. Imamura, K. Tokuda, M. Masuda, A new artificial life body -Biologically inspired dynamic bipedal humanoid robot-, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.I-1-I-4, 2003.

(229) Y. Zhang, M. Sugisaka, Diversity in evolutionary system, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.I-23-I-25, 2003

(230)M. Sugisaka, T. Kiyomatsu, The Distributed effect of the Real-coded GA, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.54-57, 2003

(231) M. Ito, M. Sugisaka, The improvement of the diversity and the searching ability in GA, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.58-61, 2003

(232) K. Shibata, T. Masaki, M. Sugisaka , Autonomous learning of reward distribution in "Not 100 game", Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.78-81, 2003

(234) M. Iida., M. Sugisaka, K. Shibata, Application of Direct-Vision-Based Reinforcement Learning to a Real Mobile Robot with a CCD camera, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03),Vol.1, Beppu Oita Japan, pp.86-89, 2003 (235) D. Kiyosuke, K. Shibata, M. Sugisaka, Verification of body growth effect on reinforcement learning in a simple standing-up task, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.90-93, 2003

(236) M. Sugisaka, X. Fan, H. Kimura, Fast face detection using genetic algorithms and pyramid structure, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.160-163, 2003

(237) M. Sugisaka , R. Chen, A Study on color-based line tracking, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.164-167, 2003

(238) J. Wang, M. Sugisaka, H. Kimura, Gradient runs based guideline detection technique for the vision system of an alife mobile robot, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.168-171, 2003

(239) P. Sapaty, M. Sugisaka, Optimized space search by distributed robotic teams, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp. 189-193, 2003

(240) J. Wang, M. Sugisaka, H. Kimura, Intelligent control for the vision-based indoor navigation of an alife mobile robot, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.202-205, 2003

(241) Z. Wang, X. Feng, M. Sugisaka, H. Kimura, Robust decentralized control and robust output tracking for a class of linear uncertain interconnected systems with unmatched interconnections and uncertainties, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.206-211, 2003

(242) M. Sugisaka, F. Dai, H. Kimura, Application of neuro-fuzzy system to control a mobile vehicle, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.241-246, 2003

(243) F. Dai, M. Sugisaka, Application of resonance algorithm for image segmentation, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.251-254, 2003

(244) X. Feng, Z. Wang, M. Sugisaka, H. Kimura, Hough transform based line segment detection,Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1,Beppu Oita Japan, pp. 255-258, 2003

(245) R. Kurino, K. Shibata, M. Sugisaka, Acquisition of 2-layer structure in a growing neural network, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 2, Beppu Oita Japan, pp.391-394, 2003

(246) T. Kubik, H. Kimura, M. Sugisaka, Message passing implementation for the distributed robot control system, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03),

Vol. 2, Beppu Oita Japan, pp.399-402, 2003

(247) A. Loukianov, H. Kimura, M. Sugisaka, Implementing distributed control system for intelligent mobile robot, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 2, Beppu Oita Japan, pp.403-406, 2003

(248) M. Sugisaka, S. Otsu, Research of environmental recognition in a mobile vehicle, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 2, Beppu Oita Japan, pp. 407-410, 2003

(249) M. Sugisaka , Z. Mbaitiga, The control of the electric vehicle speed using pulse-width-modulation (PWM), Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 2, Beppu Oita Japan, pp.411-414, 2003

(250) M. Sugisaka, S. Kuriyama, Run control of the mobile recognition vehicle by information of internal sensor and vision, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 2, Beppu Oita Japan, pp.553-556, 2003

(251) X. Wang, M. Sugisaka, Planning mobile robot with single visual aid, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 2, Beppu Oita Japan, pp.557-560, 2003

(252) X. Wang, M. Sugisaka, and W. Xu, Recognizing static target in video frames taken from moving platform, International Conference on Control, Automation and Systems(ICCAS2003), . October 22-25, 2003, Gyeongju TEMF Hotel, Gyeongju, Korea, pp 673-676, CD Rom

(253) J. Wang and M. Sugisaka, Target detection based on moment invariants, International Conference on Control, Automation and Systems(ICCAS2003), . October 22-25, 2003, Gyeongju TEMF Hotel, Gyeongju, Korea, pp 677-680, CD Rom

(254) M. Sugisaka and X. Fan, Speaker detection and recognition for a welfare robot, International Conference on Control, Automation and Systems(ICCAS2003), October 22-25, 2003, Gyeongju TEMF Hotel, Gyeongju, Korea, pp 835-838, CD Rom

(255) M. Sugisaka, K. Nakanishi and Masayoshi Hara, Experiments of soccer robots system, International Conference on Control, Automation and Systems(ICCAS2003), October 22-25, 2003, Gyeongju TEMF Hotel, Gyeongju, Korea, pp 1105-1108, CR Rom

(256) M. Ito and M. Sugisaka, A study of selection operator using distance information between individuals in genetic algorithm, International Conference on Control, Automation and Systems(ICCAS2003), October 22-25, 2003, Gyeongju TEMF Hotel, Gyeongju, Korea, pp 1521-1524, CD Rom

(257) M. Sugisaka, P. Sapaty, K. Imamura, K. Tokuda, N. Masuda, R. Finkelstein, and J. S. Albus, Generation of walking patterns of a bipedal artificial life body "Jirou", Proceedings of Sixteenth International Conference on Systems Engineering, Vol.2, Coventry University, UK, September 9-11, 2003, pp 664-668 (258) X. Wang, M. Sugisaka, and W. Xu, Active counter model-based tracking analysis, Proceedings of Sixteenth International Conference on Systems Engineering, Vol.2, Coventry University, UK, September 9-11, 2003, pp 730-735

(259) M. Sugisaka, P. Sapaty, K. Imamura1, K. Tokuda1, N. Masuda, R. Finkelstein, and J. S. Albus, Research on biologically inspired bipedal dynamic humanoid robots, Unmanned Systems 2003, AUVSI Proceedings, July 15-17, 2003, Baltimore Convention Center, Baltimore, MD, USA, CD Rom

(260) M. Sugisaka and P. Sapaty, Optimized space search by distributed robotic teams, Unmanned Systems 2003, AUVSI, Proceedings, July 15-17, 2003, Baltimore Convention Center, Baltimore, MD, USA, CD Rom

(261) M. Sugisaka, X.Fan, Speaker detection and recognition for a welfare robot, Proceedings of 2003 International Conference on Control, Automation and System, 2003.10, pp.835-838

(262) M.Ito, M.Sugisaka, Elite correlation selection operator : A new selection operator to improve the diversity in genetic algorithm, Proceedings of the 34th ISCIE International Symposium on Stochastic Systems Theory and Its Applications, pp.142-147, 2003

(263) Y.G.Zhang and M.Sugisaka, A mode to create artificial intelligence, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.1, B-con plaza, Japan, January28-30, 2004, pp. I-28-I-31

(264) R.Kurino, M.Sugisaka and K.Shibata, Growing neural network with hidden neurons, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.1, B-con plaza, Japan, January28-30,2004, pp.144-151

(265) P.Sapaty, V.Klimenko and M.Sugisaka, Dynamic air traffic management using distributed brain concept, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.1, B-con plaza, Japan, January28-30, 2004, pp.156-159

(267) P. Sapaty, K.Kawamura, M. Sugisaka and R.Finkelstein, Towards fully distributed cognitive systems, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.1, B-con plaza, Japan, January28-30, 2004, pp.274 -278

(268) X.Fan, M.Rizon, M.Sugisaka, and H.Kimura, A genetic algorithm for multiple face detection, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.1, B-con plaza, Japan, January 28-30, 2004, pp.287 - 290

(269) M.Sugisaka, H.Zhao and N.Mokhtar, The artificial muscle and its application in robot, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.392 -395

(270) J.Wang, H.Kimura and M.Sugisaka, Obstacle avoidance strategy for a mobile robot in the guideline, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.419 -424 (271) M.Sugisaka and R.Chen, Fuzzy obstacle avoidance and navigation for mobile robot, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.425-428

(272) K.Yuki, M.Sugisaka and K.shibata, Learning of reaching a colored object based on direct-vision-based reinforcement learning and acquired internal representation, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.486-489

(273) T.Kubik and M.Sugisaka, Optical flow as a tool for optical speed sensor, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.490 -493

(274) M.Sugisaka and M.Zacharie, Speed control of a stepping motor of the electric vehicle based on speed parameters estimation via PWM Inverter, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.511 -514

(275) T.Kubik and M.Sugisaka, Gene expression modelling with the use of Boolean network, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.567 -570

(276) X.Wang, M.Sugisaka and W.Xu, Model based recognition for artificial brain, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.605-609

(277) M.Nakanisi, M.Sugisaka and K.Shibata, Occurrence of state confusion in the learning of communication, Proceedings of the 9th International Symposium on Artificial Life and Robotics(AROB 9th '04), Vol.2, B-con plaza, Japan, January28-30, 2004, pp.663-666

(278) M.Ito, M.Sugisaka, A study of crossover operator in real coded genetic algorithm, Abstracts of the 35th ISCIE International Symposium on Stochastic Systems Theory and Its Applications, pp.6-7, 2003

(279) M. Sugisaka and J. Wang, Research on Alife robot, The Fourth International Conference on the Advanced Mechatronics (ICAM '04), CD Rom, October 3-5, Asahikawa, Japan, pp.367-371, 2004 (280) M. Sugisaka and F. Dai, Fuzzy rule exraction for a mobile vehicle to tracking guidelines, The Fourth International Conference on the Advanced Mechatronics (ICAM '04), CD Rom, October 3-5, Asahikawa, Japan, pp.362-366, 2004

(281) M. Sugisaka and X. Fan, PSO search for fast face detection with neural networks, The Fourth International Conference on the Advanced Mechatronics (ICAM '04), CD Rom, October 3-5, Asahikawa, Japan, pp.358-361, 2004

(282) X. Wang, M. Sugisaka, and W. Xu, Image energy pilot, FA soil-saly recognition approach, The Fourth International Conference on the Advanced Mechatronics (ICAM '04), CD Rom, October 3-5, Asahikawa, Japan, pp.372-376, 2004

(283) D. Orski and M. Sugisaka, Application of uncertain variables in an adaptive decision system for a

complex operation, International Conference on Systems Science, The XV International Conference on Systems Science(ICSS XV), September 7-10, 2004, Wroclaw, Poland

(284) M. Sugisaka, Remote control for autonomous robots via Internet, The XV International Conference on Systems Science(ICSS XV), September 7-10, 2004, Wroclaw, Poland

(285) M. Sugisaka and M. R. M. Johari, Remote control of autonomous robots via Internet, International Conference on Control, Automation and Systems(ICCAS 2004), CD Rom, August 25-27, The Shangri-La Hotel, Bangkok, Thailand, pp.24-27, 2004

(286) M. Sugisaka and X. Fan, Speed up neural network-based face detection using swarm search, International Conference on Control, Automation and Systems(ICCAS 2004), CD Rom, August 25-27, The Shangri-La Hotel, Bangkok, Thailand, pp.1331-1334, 2004

(287) M. Sugisaka and X. Fan, An effective search method for NN-based face detection using PSO, Proceedings of SICE Annual Conference 2004 in Sapporo, Hokkaido Institute of Technology, CD Rom, August 4-6, pp. 2742-2745, 2004

(288) J. Wang and M. Sugisaka, Study on robust traget detection technique, Proceedings of SICE Annual Conference 2004 in Sapporo, Hokkaido Institute of Technology, CD Rom, August 4-6, pp. 772-775, 2004 (289) M. Sugisaka, K. Akizuki, J. S. Albus, and R. Finkelstein, Proceedings of AUVSI's Unmanned Systems North America 2004, Poster Session, CD Rom, August 3-5, Anaheim, Anaheim Convention Center, CA, 2004

(290) M. Sugisaka, Artificial life robot as next generation robot, Proceedings of 2004 Sino-Japan Symposium on KANSEI & Artificial Life, July 3-4, Beijing, China , pp.54-55 , 2004

(291) M. Sugisaka and K. Akizuki, Development of autonomous sensing and navigation using mobile wireless networking, Technical Paper 3-5, CD Rom 304, Homeland Security Conference & Expo, February 25-26, The Hilton at the WDW Resort, Lake Buena Vista, Florida, USA, 2004

(293) Y. G. Zhang, M. Sugisaka, Machinery cognition and artificial intelligent, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.5-8, 2005

(294) P. Sapaty, M. Sugisaka, N. Mirenkov, M. Osano, R. Finkelstein, Grasping the distributed entirety, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.266 -270, 2005

(295) K. Umezaki, M. Sugisaka, Motion control of biped robot bending the knees, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.271-274, 2005,

(296) X. Fan, M. Sugisaka, Swarm search for fast face detection with neural networks, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.432-435, 2005

(297) M. Sugisaka, F. Dai, Y. Fujiwara, T. Kamoika, Development of the fuzzy control for a GPS-located airship, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.436-439, 2005

(298) M. Sugisaka, M. Zacharie, Design of a fuzzy expert system for electric vehicle speed control, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.448-452, 2005

(299) M. Sugisaka, H. Desa, Issues and applications of robot Contrl using internet, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.528-531, 2005

(300) T. Kubik and M. Sugisaka, Nanoparticles as biosensors components—a brief review, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.555-557, 2005

(301) K. Tokuda, M. Sugisaka, M. Zacharie, Automatic control of an electric vehicle using visual information, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.575 -578, 2005

(302) J. Wang, M. Sugisaka, How to make a mobile robot move more reliably, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.591-594, 2005

(303) K. Imamura, M. Sugisaka, Research about ZMP of biped walking robot, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.659-662, 2005

(304) N. Masuda, M. Sugisaka, Verification of trajectory generation of bipedal walking robot, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.663 -666, 2005

(305) T. Hashizume, M. Sugisaka, Run control of the mobile robot using visual information, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.667-670, 2005

(306) H. Zhao, M. Sugisaka, D. Yu, Modeling of pneumatic artificial muscle actuator, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.675 -678, 2005

X. Wang, M. Sugisaka, J. Wang, Auto-correlation probabilistic relaxation matching method, Proceedings of The Tenth International Symposium on Artificial Life and Robotics (AROB 10th '05), CD Rom, February 4-6, B-con plaza, Japan, pp.731 -734, 2005

(307) M.Sugisaka, Deigning hybrid bio-mechanical bipedal humanoid robots, Proceedings of the 20t h Korean AutomaticControl Conference(KACC 2005), Invited Talk, pp.xx-xxiii, 2005.

(308) M. Sugisaka, Control for bending and stretching action of bipedal robot with artificial muscles,

Proceedings of The 2005 Electrical Engineering/Electronics, Computer, Telecommunications, and

Information Technology(ECTI) International Conference, May 12-13, 2005, Thailand, 2005, pp.590-592

(309) M. Sugisaka, Development of hybrid bio-mechanical bipedal robot systems, 1st International

Workshop on Artificial Life and Robotics in Malaysia/Thailand, 14-15, May, 2005, pp.9

(310) M. Sugisaka, M. Zacharie, Design of PID Fuzzy Controller Based on Parallel Operation of PI Fuzzy

and PD Fuzzy for Electric Vehicle Brake Control System, International Conference on Control, Automation and Systems(ICCAS2005), June2-5, 2005, KINTEX, The province of Gyeonggi, Korea, pp, CD Rom (311) H. Desa, M. Sugisaka, User interface in web based communication for internet robot control, International Conference on Control, Automation and Systems(ICCAS2005), June2-5, 2005, KINTEX, The province of Gyeonggi, Korea, pp 49-51, CD Rom

(312) X. Fan, M. Sugisaka, An improved genetic algorithm for fast face detection using neural network as classifier, International Conference on Control, Automation and Systems(ICCAS2005), June2-5, 2005, KINTEX, The province of Gyeonggi, Korea, pp 1034-1038, CD Rom

(313) J. Wang, M. Sugisaka, Study on the effective solution of obstacle avoidance strategy for mobile robot in the guideline navigation, International Conference on Control, Automation and

Systems(ICCAS2005), June2-5, 2005, KINTEX, The province of Gyeonggi, Korea, pp 2015-2018, CD Rom (314) J. Wang, M.Sugisaka, Study on the Reliable Navigation of a Mobile Robot Working under Complex Environments, SICE Annual Conference 2005 in Okayama, August 8-10, 2005 Okayama University, Japan, pp 2901-2903, CD Rom

(315) X. Fan, M. Sugisaka, Particle Swarm Optimization versus Genetic Algorithms for Face Search Problem, SICE Annual Conference 2005 in Okayama, August 8-10, 2005 Okayama University, Japan, pp 2908-2912, CD Rom

(316) M. Sugisaka, Control for hybrid bio-mechanical bipedal humanoid robot with artificial muscles, Proceedings of 2005 International Symposium on Humanized Systems (ISIH'05), Oct.29-30, 2005, Wuhan, P. R. China, pp.138-141

(317) X. Wang, M. Sugisaka, J. Wang, Locating static targets by maching image frames, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp.25-28, 2006

(318) K. Umezaki, M. Sugisaka, Walking orbit of biped robot by using the simulation, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp. 71-74, 2006

(319) E. Goubaru, M. Sugisaka, Motion trace through head control, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp. 75-78, 2006,

(320) S. Ichikawa, M. Sugisaka, Characteristic measurement of artificial muscle, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp.79-82, 2006

(321) K. Kabata, M. Sugisaka, Motion control of biped robot, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp.83-86, 2006

(322) D. Hazry, M. Sugisaka, Optimal parameter turning in proportional control for the unicycle mobile robot: An experimental study, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp.241-243, 2006

(323) H.Zhao, M. Sugisaka, D. Yu, A model of Mckibben muscle actuator based on experiment, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp. 248-251, 2006

(324) N. Mokhtar, M. Sugisaka, Automatic motion detection for surveillance, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp. 288-2, 2006

(325) M. Sugisaka, K. Ahmad, A stepping motor control for electric vehicle, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp.418-420, 2006

(326) M. Rizon, H. Yazid, P. Saad, A. Y. M. Shakaff, A. R. Saad, M. Sugisaka, S. Yaacob, M. R. Mamat, M. Karthigayan, D, Hazry and M. F.Hashim, Detecting method of coconuts location using circular Hough transform, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp. 496-499, 2006

(327) P. Sapaty, M. Sugisaka, R. Finkelstein, J. Delgado-Frias, N. Mirenkov, Emergent societies: An advance IT support of crsis relief missions, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp. 532-537, 2006

(328) Y. G. Zhang, M. Sugisaka, L. Tang, A free-scale model of knowledge growth, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp. 606-610, 2006

(329) T. Kubik, M. Sugisaka, Remark on texture synthesis and texture segmentation with the aid of multi-level logistic model of Markov random field, Proceedings of The Eleventh International Symposium on Artificial Life and Robotics(AROB 11th '06), CD Rom, Jan. 23-Jan.25, Beppu, Oita, Japan, pp.699-702, 2006

(330) M. Sugisaka, Sitting Down and Standing Up Movement of Lower Limbs of an Artificial Life Body, Proceedings of The 2nd Regional Conference on Artificial Life and Robotics, July 14-15, 2006, Prince of Songkla University, Hatyai, Songkhla, Thailand

(331) M. Sugisaka, A control Method for Soft Robots Based on Artificial Musles, Proceedings of The 7th Asia-Pacific Conference on Control & Measurement(APCCM' 2006), 10-18, August, 2006, Tibet, China, pp.240-243

(332) M. Sugisaka, Intelligent Artificial Life Body with Air Muscle as Next Generation Robot, Proceedings of International Conference on Man-Machine Systems(ICoMMS 2006), Sept.15-16, 2006, City BayView Hotel, Langkawi, Malaysia

(333) D. Hazry and M. Sugisaka, Predictive Nonlinear Control for a Mobile Robot with Nonholonomic Constraints, Proceedings of the International Conference on Man Machine Systems (ICoMMS) 2006, Langkawi, Malaysia, 15-16 Sept 2006.

(334) M. Sugisaksa, Material and Structure of bipedal robots based on artificial muscles, Proceedings of 2006 International Symposium on Humanized Systems, Busan, Korea,pp.31-32, Oct.16-19, 2006

(335) K. Kabata and M. Sugisaka, Motion control of bipped robot by using artificial muscle, Proceedings of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp.4721-4724, 18-21 Oct 2006.
(336) S. Ichikawa and M. Sugisaka, Motion generation of artificial muscular robot, Proceedings of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp. 4725-4728, 18-21 Oct 2006.
(337) M. Sugisaka, T. Watanabe and M. Hara, Motion control of arm using artificial muscles, Proceedings

of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp. 4729-4732, 18-21 Oct 2006. (338) H. Desa and M. Sugisaka, Proportional control for trajectory tracking of a wheeled mobile robot, Proceedings of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp. 5283-5285, 18-21 Oct 2006.

(339) T. Kawano, M. Hara and M. Sugisaka, Generating target path for tracing a line before missing the traced line of dead angle of camera, Proceedings of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp. 5286-5289, 18-21 Oct 2006.

(340) M. Sugisaka and E. Rahayu, Computer simulator for training operators of infrared camera, Proceedings of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp. 5290-5295, 18-21 Oct 2006.

(341) E. Goubaru and M. Sugisaka, Visual tracking in real-time processing, Proceedings of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp. 5296-5299, 18-21 Oct 2006.

(342) M. Sugisaka, H. Tanaka and M. Hara, A control method of accelerator of an electric vehicle, Proceedings of the SICE-ICASE International Joint Conference 2006, Busan, Korea, pp. 5300-5303, 18-21 Oct 2006.

(343) M.Sugisaka, Messages, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), pp. B-Con Plaza, Beppu, Oita, pp.P-4, 25-27 Jan. 2007

(344) P. Sapaty, A. Morozov, R. Finkelstein, M. Sugisaka, and D. Lambert, A New Concept of Flexible Organization for Distributed Robotized Systems, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.171-178, 25-27 Jan. 2007

(345) M. Sugisaka, H. Tanaka and M. Hara, A control method of an electric vehicle, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), Con Plaza, Beppu, Oita, pp.204-205, 25-27 Jan. 2007

(346) M. Sugisaka, E. R. M. Faizal, Real-Time Target Detection Using Infrared Camera, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.356-359, 25-27 Jan. 2007

(347) M. Hariharan, Paulraj M P, S. Yaacob, M. Rizon, M. Sugisaka and D. Hazry, Iterative Denoising Using Nonlinear Filter in Wavelet Domain, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.384-389, 25-27 Jan. 2007

(348) T. Kubik, M. Sugisaka, Segmentation and tracking of cells in the image sequences, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.394-397, 25-27 Jan. 2007

(349) X. Wang, M. Sugisaka, J. Wang, Level Set Methods and Auto-Relation for Detection of Objects,

Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.398-401, 25-27 Jan. 2007

(350) E. Goubaru, M. Sugisaka, Motion trace in real-time processing, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.402-405, 25-27 Jan. 2007

(351) M. Karthigayan, M. Rizon, S. Yaacob, R. Nagarajan, M. Sugisaka, M. Rozailan and D. Hazry, On the Application of Lip Features in Classifying Human Emotions, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.406-409, 25-27 Jan. 2007

(352) S. Ichikawa, M. Hara, M.Sugisaka, Motion generation of pneumatic artificial muscle, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.577-580, 25-27 Jan. 2007

(353) K. Kabata, M. Hara, M. Sugisaka, Motion control of biped robot by using simulation, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.593-596, 25-27 Jan. 2007

(354) H. Zhao, M. Sugisaka, F. Dai, The Characteristics of Mckibben Muscle Based on The Pneumatic Experiment System, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.643-646, 25-27 Jan. 2007

(355) P. Sapaty, M. Sugisaka, J. Delgado-Frias, J. Filipe, N. Mirenkov, Intelligent Management of Distributed Dynamic Sensor Networks, Proceedings of The Twelfth International Symposium on Artificial Life and Robotics(AROB 12th '07), B-Con Plaza, Beppu, Oita, pp.709-714, 25-27 Jan. 2007

(356) M. Sugisaka, A control method for soft robots based on artificial muscles, Proceedings of 4 th IEEE International Conference on Mechatronics, Kumamoto, Japan, May 8-10, 2007, CD Rom, TuA1-C-1.

(357) M.Sugisaka, Invited talk, Action control for lower limb of humanoid type robot with artificial muscles, Proceedings of the First European Workshop on Artificial Life and Robotics, Edited by M. Oswald, J.L. Casti, and M. Sugisaka, Wien, Austria, July 11-12, 2007, pp.21-29.

(358) Masanori Sugisaka and Jiwu Wang, Study on the effective control system for a mobile robot,
 Proceedings of International Symposium on Humanized Systems 2007, Muroran Institute of Technology,
 Muroran, Japan, September 13-15, 2007, pp.63-66.

(359) M. Karthigayan, M. Rizon, Sazali Yaacob, R. Nagarajan, M. Sugisaka, M. Rozailan Mamat, Hazry Desa, Fuzzy Clustering for Genetic Algorithm Based on Optimized Ellipse Data in Classifying Face Emotion, Proceedings of International Conference on Control, Automation and Systems, TA01-1, 2007, Oct. 17-20, Seoul, Korea

(360) M. Sugisaka, H.Tsumura, M. Kataoka, Development of ankle foot orthosis (AFO) using artificial muscle, Proceedings of International Conference on Control, Automation and Systems, TA01-5, 2007, Oct. 17-20, Seoul, Korea

(361) Masanori Sugisaka, Control of artificial muscles of lower limb of artificial life body, Results The 33rd Annual Conference of the IEEE Industrial Electronics Society November 5-8, 2007, The Grand Hotel, Taipei, Taiwan

(362) D. Hazry, M. Sugisaka, J. J. Lee, M. Rizon, Development of a Stable Target Trajectory Tracking Control for a Nonholonomic Mobile Robot, he 33rd Annual Conference of the IEEE Industrial Electronics Society November 5-8, 2007, The Grand Hotel, Taipei, Taiwan

(363) T. Kubik and M. Sugisaka, Image segmentation using detection trees method, Proceedings of The Thirteenth International Symposium on Artificial Life and Robotics (AROB 13h '07), B-Con Plaza, Beppu, Oita, pp., Jan.31-Feb.2, 2008

(364) X. Wang and M. Sugisaka, Automation techniques in MIAS-PKA system, Proceedings of The Thirteenth International Symposium on Artificial Life and Robotics (AROB 13h '07), B-Con Plaza, Beppu, Oita, pp., Jan.31-Feb.2, 2008

(365) H. Zhao and M. Sugisaka, Simulation of CMAC control over a robot joint actuated by McKibben muscles, Proceedings of The Thirteenth International Symposium on Artificial Life and Robotics (AROB 13h '07), B-Con Plaza, Beppu, Oita, pp., Jan.31-Feb.2, 2008

(366) M. Sugisaka, Message, Proceedings of The Thirteenth International Symposium on Artificial Life and Robotics (AROB 13h '07), B-Con Plaza, Beppu, Oita, pp., Jan.31-Feb.2, 2008

\_\_\_\_\_

\_\_\_\_\_

(367) See website Journal in Springer

(368)M, Sugisaka, Preface introducing the journal, *Journal of Robotics, Networking and Artificial Life*, Vol.1, No. 1, June 2014, pp. 1-1 \_\_\_\_\_

(369) Jiwu Wang, Xianwen Zhang, Weining Zhang, Sugisaka Masanori, Study on the Improvement of Flexibility for an Industrial Robot Based on Machine Vision, *Journal of Robotics, Networking and Artificial Life*, Volume 1, Issue 1, June 2014, Pages 45–48

(370) Jiwu Wang, Xianwen Zhang, Huazhe Dou, Masanori Sugisaka, Study on the Target Recognition and Location Technology of industrial Sorting Robot based on Machine Vision, *Journal of Robotics, Networking and Artificial Life*, Volume 1, Issue 2, September 2014, Pages 108 – 110

(371) Jiwu Wang, Shunkai Zheng, Fangbo Liao, Masanori Sugisaka, Robot Pose Measurement Based on Sensor Fusion, *Journal of Robotics, Networking and Artificial Life*, Volume 1, Issue 3, December 2014, Pages 216 – 219 \_\_\_\_\_

(372) Jiwu Wang, Huazhe Dou, Shunkai Zheng, Masanori Sugisaka, Target Recognition based on Machine Vision for Industrial Sorting Robot, *Journal of Robotics, Networking and Artificial Life*, Volume 2, Issue 2, August 2015, Pages 100 –102 \_\_\_\_\_

(373) Jiwu Wang, Shunkai Zheng, Yao Du, Sugisaka Masanori, Study on the ORB algorithm in the application of Monocular SLAM, *Journal of Robotics, Networking and Artificial Life*, Volume 2, Issue 3, November 2015, Pages 186 – 189

(374) Xia Zhao, Huailin Zhao, Masanori Sugisaka, Study on the Technology of MPPT of the Solar Photovoltaic Based on the Model Predictive Control, *Journal of Robotics, Networking and Artificial Life*, Volume 3, Issue 2, August 2016, Pages 111 – 115

(375) Jiwu Wang, Zhijing Jian, Yaodong Li, Sugisaka Masanori, Geometric Parameters Measurement of Wheel Tread Based on Line Structured Light, *Journal of Robotics, Networking and Artificial Life*, Volume 3, Issue 2, August 2016, Pages 124 – 127

(376) Jiwu Wang, Yaodong Li, Zhijing Ji<u>an, Masanori Sugisaka, An accurate method for the extrac</u>tion of line structured light stripe, *Journal of Robotics, Networking and Artificial Life,* Volume 4, Issue 1, May 2017, pp. 1-4

(377) Huailin Z<u>hao, Shunzhou Wang, Shifang Xu, Yani Zhang, Masanori</u> Sugisaka, A Method of Detecting Abnormal Crowd Behavior Events Applied in Air Patrol Robot, *Journal of Robotics, Networking and Artificial Life,* Volume 4, Issue 1, May 2017, Pages 77 – 80

(378) Jiwu Wang, Yao Du, Wensheng Xu, Masanori Sugisaka, Study On The Target Positioning For An Omni-Directional 3 DOF Mobile Manipulator Based On Machine Vision, *Journal of Robotics, Networking and Artificial Life,* Volume 4, Issue 3, November 2017, Pages 217 – 220

#### (Invited Talks and Plenary Talks)

(1) M. Sugisaka, Invited Lecture, Design of artificial brain, Faculty of Engineering, The University of Tokyo, 1996, 3.

(2) M. Sugisaka, Invited Talk, Artificial brain in robotics, Proc. of Joint Conf. on Control Automation, and Robotics, March 14-15, 5-10, 1997, KOEX, Seoul, Korea

(3) M. Sugisaka, Invited Talk, Artificial brain in robots, Forum on the future for Science and technology in the twenty first century – Challenge for complexities, Oita-Aist Joint Research Center, Feb. 17, 1997, Oita, Japan

(4) M. Sugisaka, Invited Lecture, Artificial brain in robotics, Seminar / Workshop on Artificial Life and Evolutionary Robots, Editor: Y. G. Zhang, 47-52, Sept. 16-18, Institute of Systems Science, Academia Sinica, Beijing, China, 1997

(5) M. Sugisaka, Invited Lecture, Neurocomputer control in artificial brain for tracking of moving object, Seminar / Workshop on Artificial Life and Evolutionary Robots, Editor: Y. G. Zhang, 53-69, Sept. 16-18, Institute of Systems Science, Academia Sinica, Beijing, China, 1997

(6) Y. G. Zhang, M. Sugisaka, Invited Lecture, Some new look at metabolism – repair system, Seminar / Workshop on Artificial Life and Evolutionary Robots, Editor: Y. G. Zhang, 71-74, Sept. 16-18, Institute of Systems Science, Academia Sinica, Beijing, China, 1997

(7) Y. G. Zhang, M. Sugisaka, X. J. Li, Invited Lecture, Life like artificial trees based on growth IFS,

Seminar / Workshop on Artificial Life and Evolutionary Robots, Editor: Y. G. Zhang, 75-79, Sept. 16-18, Institute of Systems Science, Academia Sinica, Beijing, China, 1997

(8) M. Sugisaka, invited talk, Design of an artificial brain for robotics, Proc. of The Third Int. Symp. on Artificial Life and Robotics (AROB 3rd '98), pp. I/2-I/11, Jan. 19-21, 1998, B-Con Plaza, Beppu, Oita, Japan

(9) M. Sugisaka, Preface, Proc. of The Third Int. Symp. on Artificial Life and Robotics (AROB 3rd '98) VII, Jan. 19-21, 1998, B-Con Plaza, Oita, Japan

(10) M. Sugisaka, Invited Talk, Artificial brains, artificial life and its application, Proceedings of Joint Conference on Control, Automation, and Robotics, pp.2-10, March 27-28, KOEX, Seoul, Korea, 1998

(11) M. Sugisaka, Invited Talk, Cognitive and behavioral intelligent artificial liferobot-New relation with artificial environment in advance multi-media communication society-, Int. Conf. on Control, Automation and Systems, ICASE, Jeju, Korea, Oct.19, 2001

(12) M. Sugisaka, Invited Lecture, Development of artificial liferobots, Intelligent Sweet-Home Consortium, Human-friendly Welfare Robot System Engineering Research Center, Korea Advanced Institute of Science and Technology(KAIST), Taejion, November 1, 2001

(13) M. Sugisaka, Invited Lecture, Development of artificial life robot and its applications, Department of Automation, Tsinghua University, Beijing, P. R. China, April 29, 2002

(14) M. Sugisaka, K. Imamura, K. Tokuda, M. Masuda, Plenary Talk, A new artificial life body -Biologically inspired dynamic bipedal humanoid robot-, Proceedings of The Eighth International Symposium on Artificial Life and Robotics (AROB 8th '03), Vol. 1, Beppu Oita Japan, pp.I-1-I-4, 2003.

(15) M. Sugisaka, Invted Talk, Control of biologically inspired bipedal humanoid robots, September 28, 2003, KUKUM, Malaysia

(16) M. Sugisaka, Invted Talk, Trend of Intelligent Robot in Japan, International Forum on Intelligent Robotics, April 17, 2003, Micro-Robot Design Education Center, KAIST, Korea, pp.79-101

(17) M. Sugisaka, Invited Talk, Romote control of autonomous robots via Internet , September 2, 2004, KUKUM, Malaysia

(18) M. Sugisaka, Plenary Talk, Development of hybrid bio-mechanical bipedal robot systems, 1st International workshop on Artificial Life and Robotics in Malaysia/Thailand, 14-15, May, 2005

(19) M.Sugisaka, Plenary Talk, Deigning hybrid bio-mechanical bipedal humanoid robots, Proceeding s of the 20th KoreanAutomatic Control Conference (KACC 2005), pp.xx-xxiii, 2005.

(20) M. Sugisaka, Invited Talk, Soft robot based on artificial muscles, Zhengzhou University of Light Industry, China, April 28, 2006

(21) M. Sugisaka, Keynote Speech, Sitting Down and Standing Up Movement of Lower Limbs of an Artificial Life Body, The 2nd Regional Conference on Artificial Life and Robotics, July 14-15, 2006, Prince of Songkla University, Hatyai, Songkha, Thailand

(23) M. Sugisaka, Keynote Speech, Intelligent Artificial Life Body with Air Muscle as Next Generation

Robot, International Conference on Man-Machine Systems(ICoMMS 2006), Sept.15-16, 2006, City
BayView Hotel, Langkawi, Malaysia
(24) M. Sugisaka, Invited Talk, Control of artificial muscles of lower part of human body by comparison of human muscles activities, Kyungnam University, Korea, January 30, 2007
(25) M. Sugisaka, Invited Talk, Control of artificial muscles of lower part of humanized body, Hunan
University, China, April 26, 2007

 M. Sugisaka, Invited Talk, Action Control for Lower Limb of Humanoid Type Robot with Artificial Muscles, 1st European Workshop on Artificial Life and Robotics, Vienna, University of Technology, Austria, July 12-13, 2007,

#### Masanori Sugisaka's research works | Oita University, Ōita, Japan

Masanori Sugisaka's 184 research works with 891 citations and 664 reads, including: Study On The Target Positioning For An Omni-Directional 3 DOF Mobile Manipulator Based On Machine Vision