

Vol. 54, Supplement

(Only Data in English)

**Bulletin of the Graduate School of Engineering
Hiroshima University**

March, 2006

CONTENTS

Published Papers	S 1
Published Books	S 50
Registered Patents	S 51

Contents

Published Papers	1
Mechanical System Engineering	1
Artificial Complex Systems Engineering	8
Information Engineering	13
Chemistry and Chemical Engineering	19
Social and Environmental Systems Engineering	33
Research Center for Nanodevices and Systems	39
Published Books	50
Registered Patents	51

Published Papers

A. Mechanical System Engineering

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A1 A Study on Numerical Analysis of Laser Welding for Estimating Temperature Distribution and Bead Shape	Maher Hassan Mitsuru Kitamura Kenji Shinozaki Motomichi Yamamoto	Transactions of The West-Japan Society of Naval Architects, 109 (2005) pp. 173-184
A2 Study of evaluation method for liquation crack initiaion in the HAZ of laser weldment	Motomichi Yamamoto Atsushi Takata Syota Kamikariya Kenji Shinozaki Makoto Shirai	Welding in the world, 49 , 9/10 (2005) pp. 49-57
A3 Suggestion Prediction Method of Liquation Cracking in HAZ of Laser Weldment of Ni-base Superalloys Using the Three-Dimentional Thermo-Elastic-Plastic Analysis	Kenji Shinozaki Motomichi Yamamoto	Proceedings of Inter-University Research Seminar on Science and Technology of Welding and Joining, (2005) pp. 247-263
A4 Investigation of Precipitation Behavior in a Weld Deposit of 11Cr-2W Ferritic Steel	Dejun Li Kenji Shinozaki Hidemasa Harada Kenji Ohishi	Metallurgical and Materials Transaction A, 36A , 1 (2005) pp. 107-115
A5 Investigation of dissolution and precipitation behaviors of precipitates in welded joints of high Cr ferritic heat resistant steels	D.J.Li K.Shinozaki	Welding in the World, 49 , 7/8 (2005) pp. 7-15
A6 Repair of stress corrosion cracking in overlaying of Inconel 182 by laser surface melting	G.Bao S.Iguro M.Inkyo K.Shinozaki Y.Mahara H.Watanabe	Welding in the World, 49 , 7/8 (2005) pp. 37-44
A7 Simulation of role of precipitate in creep void occurrence in heat affected zone of high Cr ferritic heat resistant steels	Dejun Li K. Shinozaki	Science and Technology of Welding and Joining, 10 , 5 (2005) pp. 544-549
A8 Influence of heat treatments and chemical composition on SCC susceptibility during repairing procedure of overlaying of Inconel 182	G. Bao K. Shinozaki S. Iguro M. Inkyo Y. Mahara H. Watanabe	Science and Technology of Welding and Joining, 10 , 6 (2005) pp. 706-716
A9 Suggestion of Prediction Method of Liquation Cracking in HAZ of Laser Weldment of Ni-base Superalloys Using the Three-Dimensional Thermo-Elastic-Plastic Analysis	Kenji SHINOZAKI Motomichi YAMAMOTO	Inter-University Research Seminar, Tsinghua University, Beijing, China, August 15-16, (2005) pp. 247-263
A10 Microstructure and Mechanical Property of MoSi ₂ Based Composites	S.P. Lee J. K. Lee B. H. Min Y. S. Shin D. S. Bae J. Y. Park Gen Sasaki	Mat. Sci. Forum., 475 , 479 (2005) pp. 707-710
A11 Effect of Ultrasonic Vibration on Infiltration of Nickel Porous Preform with Molten Aluminum Alloys	Y. B. Choi Gen Sasaki Kazuhiro Matsugi Osamu Yanagisawa	Mat. Trans., 146 , 10 (2005) pp. 2156-2158
A12 Anodic Bonding and its Interfacial Reaction between Metals and Ionic Conductor	Gen Sasaki Kazuhiro Matsugi Osamu Yanagisawa	Proc. of 2nd JSME/ASME International Conference on Materials and Processing 2005,paper MMC-03 (CD-ROM)JSME05, 203 (2005) pp. 1-5

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A13 Simulation of Infiltration of Molten Alloy to Porous Preform by Low Pressure	Y.-B. Choi Gen Sasaki Kazuhiro Matsugi N. Sorida S. Kondoh T. Fujii Osamu Yanagisawa	Proc. of 2nd JSME/ASME International Conference on Materials and Processing 2005,paper MMC-06 (CD-ROM), JSME05, 203 (2005) pp. 1-6
A14 Tensile Strength of Aluminum Borate Whisker/AZ91D Magnesium Alloy Composites Prepared by Comp-casting Process	Gen Sasaki T. Shinoda N. Fuyama Kazuhiro Matsugi Osamu Yanagisawa	Proc. of 2nd JSME/ASME International Conference on Materials and Processing 2005,paper MMC-09 (CD-ROM), JSME05, 203 (2005) pp. 1-5
A15 Effect of Fiber Surface Structure on Interfacial Reaction Between Carbon Fiber and Aluminum	Kuang-Chih Chang Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	JSME International Journal. Series A, 148 , 4 (2005) pp. 205-209
A16 Structural evolution of turbostratic carbon nitride after treated by pulse discharge	Y.C.Zhao D.L.Yu Osamu Yanagisawa Kazuhiro Matsugi Y.J.Tian	Diamond and related Materials, 14 , 10 (2005) pp. 1700-1704
A17 Conduction Type Evolution during Eutectoid Decomposition of Mn-Added α -Fe ₂ Si ₅ Alloy	J.X.Jiang Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	Scripta Materialia, 153 , 6 (2005) pp. 707-711
A18 Effect of Mn or Co Addition on Kinetics of Eutectoid Decomposition in Sintered α -Fe ₂ Si ₅ Alloys	J.X.Jiang Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	Materials Trans, JIM, 146 , 6 (2005) pp. 1407-1412
A19 Resistivity Study of Eutectoid Decomposition Kinetics of α -Fe ₂ Si ₅ Alloy	J.X.Jiang Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	Materials Trans, JIM, 146 , 3 (2005) pp. 720-725
A20 Turbotstratic Carbon Nitride Prepared by Pyrosis of Melamine	Y.C. Zhao D.L. Yu H.W. Zhou Y.J. Tian Osamu Yanagisawa	Journal of Materials Science Letters, 140 (2005) pp. 2645-2647
A21 Thermoelectric properties of α -FeSi ₂ with Si dispersoids formed by decomposition of β -Fe ₂ Si ₅ based alloys	J.X.Jiang T. Sasakawa Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	J. Alloys and Compounds, 391 , 1-2 (2005) pp. 115-122
A22 Fabrication of the Aluminum Alloy Matrix Composite by Ultrasonic Vibration Technique	Gen Sasaki J. Adachi Y. -B. Choi J. Pan, T. Fujii Kazuhiro Matsugi Osamu Yanagisawa	Mat. Sci. Forum, , 475 , 479 (2005) pp. 921-924
A23 Fracture at former particle boundaries	Hidegori Kuroki	Proceedings of the International Conference DF PM 2005, Deformation and Fracture in Structural PM Materials , (2005) pp. 191-199
A24 Structures of Former Particle Boundaries	Hidegori Kuroki Hiroyuki Y. Suzuki	Euro PM2005 Proceedings, 1 (2005) pp. 21-26
A25 Mechanical Properties of Sintered Si ₃ N ₄ from Powder Produced by Fluidized-Bed Direct Silicon Nitridation	Hiroyuki Y. Suzuki Shunzo Tashima Shoichi Kimura	J. Ceram. Soc. Japan, 113 , 12 (2005) pp. 774-777
A26 Impurity Effects on the Formation of Grain Boundaries during Solidification of Solar Cell Grade Silicon by in situ HREM Observation	Hiroshi Fukushima Isamu Kuchiwaki Takahiro Hirabayashi	31st IEEE Photovoltaic Specialists Conference 2005, IEEE 05CH37608C (2005) pp. 1245-1248

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A27 In Situ HREM Studies of Grain Boundary Formation during Solidification of B-Doped Silicon	Hiroshi Fukushima Isamu Kuchiwaki Takahiro Hirabayashi	Materials Science Forum, 475-479 (2005) pp. 3875-3878
A28 TEM Studies of Grain Boundary Structure in a Cast Polycrystalline Silicon	Isamu Kuchiwaki Takahiro Hirabayashi Hiroshi Fukushima	Materials Science Forum, 475-479 (2005) pp. 1673-1676
A29 Synthesis of single-wall carbon nanotubes from alcohol using Fe/Co, Mo/Co, Rh/Pd catalysts	Shuhei Inoue Takeshi Nakajima Yoshihiro Kikuchi	Chemical Physics Letters, 406 , 1-3 (2005) pp. 184-187
A30 Diameter control and growth mechanism of single-walled carbon nanotubes	Shuhei Inoue Yoshihiro Kikuchi	Chemical Physics Letters, 410 , 4-6 (2005) pp. 209-212
A31 Hydrothermal Treatment of Cellulose as a Pretreatment for Ethanol Fermentation: Cellulose Hydrolysis Experiments	Takuya Yoshida Hiroshi Nonaka Yukihiko Matsumura	Journal of the Japan Institute of Energy, 84 , 7 (2005) pp. 544-548
A32 Effect of methanol and acetone addition on heat transfer to turbulent flow of super-critical water	Yukihiko Matsumura Nobuyuki Mori Yoshihiro Kikuchi	Thermal Sci. Eng., 13 , 3 (2005) pp. 1-5
A33 Biomass gasification in near- and super-critical water: Status and prospects	Yukihiko Matsumura Tomoaki Minowa Biljana Potic Sascha R.A. Kersten Wolter Prins Willibrordus P.M. van Swaaij Bert van de Beld Douglas C. Elliott Gary G. Neuenschwander Andrea Kruse Michael J. Antal, Jr.	Biomass and Bioenergy, 29 , 4 (2005) pp. 269-292
A34 Current situation and prospect of biomass utilization in Japan	Yukihiko Matsumura Shin-ya Yokoyama	Biomass and Bioenergy, 29 , 5 (2005) pp. 304-309
A35 The scale of biomass production in Japan	Yukihiko Matsumura Takashi Inoue Keiichi Komoto Satoshi Hirata Kenichiro Hada Katsura Fukuda Tomoaki Minowa Hiromi Yamamoto	Biomass and Bioenergy, 29 , 5 (2005) pp. 321-330
A36 Woody biomass resources and conversion in Japan: The current situation and projections to 2010 and 2050	Takuyuki Yoshioka Satoshi Hirata Yukihiko Matsumura Kinya Sakanishi	Biomass and Bioenergy, 29 , 5 (2005) pp. 336-346
A37 Amount, availability, and potential use of rice straw (agricultural residue) biomass as an energy resource in Japan	Yukihiko Matsumura Tomoaki Minowa Hiromi Yamamoto	Biomass and Bioenergy, 29 , 5 (2005) pp. 347-354
A38 Evaluation of supply potential of energy crops in Japan considering cases of improvement of crop productivity	Hiromi Yamamoto Yukihiko Matsumura Shigeki Sawayama	Biomass and Bioenergy, 29 , 5 (2005) pp. 355-359
A39 Flow Field in Swirl-Type Tubular Flame Burner	Yuyin Zhang Daisuke Shimokuri Yoshihisa Mukae Satoru Ishizuka	JSME International Journal, Series B, 48 , 4 (2005) pp. 830-838
A40 PIV Measurements of Highly Turbulent Combustion Turbulent Premixed	Kazuhro Yamamoto Satoshi Inoue Hiroshi Yamashita Daisuke Shimokuri Satoru Ishizuka Yoshiaki Onuma	Proc. Fifth Asia-Pacific Conference on Combustion,, (2005) pp. 389-392

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A41 Enhancement of Stratified Charge for DISI Engines through Split Injection (Effect and Its Mechanism)	Tie Li Keiya Nishida Yuyin Zhang Tuyoshi Onoe Hiroyuki Hiroyasu	JSME International Journal, Series B, 48 , 4 (2005) pp. 687-694
A42 Breakup Process of Pre-Swirl Spray in D.I. Gasoline Injector by LIF Imaging Technique	Jeekeun Lee Byungjoon Rho Keiya Nishida	Proceedings of International Conference for Mechanical and Automotive Technologies 2005, (2005) pp. 127-133
A43 An Analysis of Initial Spray Breakup Process of D.I. Gasoline Spray by LIF Image Processing	Jeekeun Lee Keiya Nishida Byungjoon Rho	CD-ROM Proceedings of the Sixth KSME-JSME Thermal and Fluids Engineering Conference, (2005) pp. 1-8
A44 Effect of Hole Geometry on Spray and Mixture Properties of Hole Type Injector for DISI Engine	Jun Kanzaki Kiyotaka Sato Masahisa Yamakawa Keiya Nishida	Proceedings of ILASS-Asia 2005: the 10th Annual Conference on Liquid Atomization and Spray Systems - Asia, (2005) pp. 48-55
A45 A Consideration of Depth of Field Effects in Droplet Sizing of Pre-Swirl Spray by Laser Sheet Imaging	Jeekeun Lee Keiya Nishida Byungjoon Rho	Proceedings of ILASS-Asia 2005: the 10th Annual Conference on Liquid Atomization and Spray Systems - Asia, (2005) pp. 87-95
A46 Combustion and Emission Characteristics of D.I. Diesel Engine under Split Injection Strategy	Sadahiro Akiba Keiya Nishida Xinyun Zi	CD-ROM Proceedings of ISME Tokyo 2005: the Seventh International Symposium on Marine Engineering Tokyo 2005, (2005) pp. 1-5
A47 Total In-Cylinder Gas Sampling Experiment on Emission Formation Processes in a D.I. Diesel Engine	Kazunori Hirabayashi Katsuya Marushita Keiya Nishida	CD-ROM Proceedings of the 18th Internal Combustion Engine Symposium (International) in Jeju, Korea, 12 (2005) pp. 1-5
A48 Simultaneous Measurement Technique for Droplet Size and Velocity and Its Application to Liquid Blob Breakup Process of Pre-Swirl Spray	Jeekeun Lee Keiya Nishida Byungjoon Rho Kyukeun Song	CD-ROM Proceedings of the 18th Internal Combustion Engine Symposium (International) in Jeju, Korea, 72 (2005) pp. 1-6
A49 Effect of Split Injection on Flow Fields of D.I. Gasoline Spray and Entrained Ambient Air	Tsuyoshi Onoe Tadashi Tadokoro Keiya Nishida Jeekuen Lee	CD-ROM Proceedings of the 18th Internal Combustion Engine Symposium (International) in Jeju, Korea, 73 (2005) pp. 1-6
A50 Possible application of carbon nanotubes to the field emission electron source for portable betatrons	Takeshi Ohnishi Ichita Endo Kenji Hayashi Akitsugu Kohara Takuo Yoshida Gennady Lukyanovich Chakhlov Fumitaka Nishiyama	Nucl. Instr. and Meth. in Phys. Res., A539 (2005) pp. 16-24
A51 Fast Numerical Calculation for a Set of Nonlinear Rate Equations: Application to Rapid Ionization Phase in a Plasma	T. Oda S. Namba K. Takiyama U. Furukane	Jpn. J. Appl. Phys., 44 , 11 (2005) pp. 8118-8124
A52 Role of L-Histidine in Conferring Tolerance to Ni ²⁺ in <i>Saccharomyces cerevisiae</i> Cells	Ileana Cornelius Farcasanu Masaki Mizunuma Fumitaka Nishiyama Tokichi Miyakawa	Biosci. Biotechnol. Biochem., 69 , 12 (2005) pp. 2343-2348

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A53 Atmospheric Observation of OH Radical Reactions with Atomic Hydrogen Produced in Plasmas by Laser-Induced Fluorescence Spectroscopy	K. Takiyama S. Namba T. Yamasaki J. H. KWON2 R. E. Park H. Nnijima	Proceedings of the 7th Conference on Atmospheric Spectroscopy Applications, (2005) pp. 245-250
A54 Spectroscopic Investigation of Atomic Hydrogen Generation in Atmospheric Pressure Plasma Device	H. Nojima R.E. Park J.H. Kwon S. Namba K.Takiyama	Proceedings of 2nd International Workshop on Cold Atmospheric Pressure Plasmas: Source and Applications, (2005) pp. 110-113
A55 Proton-neutron configurations in $^{236g,m}\text{Am}$ and its EC-decay daughter ^{236}Pu	M. Asai M. Sakama K. Tsukada S. Ichikawa H. Haba I. Nishinaka Y. Nagame S. Goto Y. Kojima Y. Oura H. Nakahara M. Shibata K. Kawade	Eur. Phys. J. A, 23 (2005) pp. 395-400
A56 β -decay half-lives of new neutron-rich rare-earth isotopes ^{159}Pm , ^{162}Sm and ^{166}Gd	S.Ichikawa M. Asai K. Tsukada H. Haba Y. Nagame M. Shibata M. Sakama Y. Kojima	Phys. Rev. C, 71 (2005) pp. 067302
A57 Finite-Element Stress Analysis and Strength Evaluation of Super High Pressure Mercury Lamp Bulbs under Internal Pressure	Masahiko Kase Iwama Yuichirou Toshiyuki Sawa	J. Light & Vis, 29 (2005) pp. 11-18
A58 Design and Development of Spring-Link Mechanism with the Constant Repulsive Force Characteristics	Kazuki Kaneoka Noritoshi Nakagawa Yasuhiba Sekiguchi	Proc. of the First International Conference on Design Engineering and Science 2005, (2005) pp. 305-310
A59 Acoustic Cavitation in the Cylinder Piston Ultasonic Radiation Field	Noritoshi Nakagawa Chaoqun Wu Masaya Fujihara	Proc. of the Asia-Pacific Vibration Conference, (2005) pp. 318-323
A60 Removal of the Fouling inside a Pipe Using Ultrasonic Waves	Noritoshi Nakagawa Masaya Fujiwara Chaoqun Wu Jun Satonobu	Proc. of the First International Symposium on Advanced Technology of Vibration and Sound, (2005) pp. 190-195
A61 Study on Phase Lag on Movement of Permanent Magnets	Shinichiro Maeda Etsunori Fujita Maki Tanaka Yoshimi Enoki Noritoshi Nakagawa	Proc. of the First International Symposium on Advanced Technology of Vibration and Sound, (2005) pp. 293-297
A62 An Experimental Study on the Effect of the Vibration Energy Flow by the Welding Characteristics	Young-Hun Yu Noritoshi Nakagawa	Proc. of the First International Symposium on Advanced Technology of Vibration and Sound, (2005) pp. 337-342
A63 Rolling Bearing Diagnostics Based on Wavelet Analysis	Yugo Itakura Yasuhiba Sekiguchi Noritoshi Nakagawa	Proc. of the First International Conference on Design Engineering and Science 2005, (2005) pp. 157-162
A64 Effect of Biodegradable Oil on Surface Failure of Spur Gears	Kazuteru Nagamura Kiyotaka Ikejo Koki Takeda	Proceeding of ICMDT2005 Seoul The International Confrence on Manufacturing, Machine Design and Tribology (Seoul, KOREA), (2005)

Published Papers

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A65 Friction Loss of Non-Involute Tooth Profile Helical Gears	Kiyotaka Ikejo Kazuteru Nagamura Ryo Nakatsukasa Florin Gabriel Tutulan	Proceedings of International Conference on Gears, VDI-Berichte (Garching near Munich, Germany), 1904 (2005) pp. 1487-1503
A66 Friction Loss of Non-Involute Tooth Profile Gears	Kiyotaka Ikejo Kazuteru Nagamura Florin Gabriel Tutulan	Proceedings of IDETC/CIE 2005 ASME 2005 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference (Long Beach, California USA), ASME Paper No. DETC2005-84148, (2005)
A67 Design and Performance of Trochoid Gear Pumps	Kazuteru Nagamura Kiyotaka Ikejo Yo Morotomi	Proceedings of The 1st International Conference on Design Engineering and Science (ICDES2005) (Vienna, AUSTRIA), (2005) pp. 133-138
A68 Designing a Low-Noise Gearbox by Using Vibration and Sound-Radiation Analysis of a Gear System	Eiichiro Tanaka Haruo Houjoh	Proceedings of the First International Symposium on Advanced Technology of Vibration and Sound (VSTech2005), (2005) pp. 35-40
A69 Study on Dynamic Balance and Prolonged Walk for Development of Active Auxiliary Walk-Implement	Tadaaki Ikehara Eiichiro Tanaka Takanobu Tamiya Naoki Fukaya Ryozo Nemoto	Proceedings of ICMDT2005 Seoul The International Conference on Manufacturing, Machine Design and Tribology (Seoul, KOREA), (2005)
A70 Contact Stress State on Tooth Surfaces of Crossed Helical Gears	Ema Tamura Ryozo Nemoto Eiichiro Tanaka Hideo Takahashi	Proceedings of ICMDT2005 Seoul The International Conference on Manufacturing, Machine Design and Tribology (Seoul, KOREA), (2005)
A71 Supersonic Plane Jet at High Convective Mach Number	Daisuke Watanabe Hirosi Maekawa Yuichi Matsuo	Proc. of International Conference on Jets, Wakes and Separated Flows (ICJWS-2005), (2005) pp. 189-194
A72 Acoustic Wave Generation in a Compressible Wake	Hirosi Maekawa Takashi Takiguchi Daisuke Watanabe	Proc. of International Conference on Jets, Wakes and Separated Flows (ICJWS-2005), (2005) pp. 783-788
A73 Acoustic wave radiation due to coherent vortex motions in a supersonic wake (Invited lecture)	Hirosi Maekawa	Proc. of 19th-Symposium of computational fluid dynamics., (2005)
A74 Self-improving System for Assembly Sequence Planning	Takeshi Murayama Toru Eguchi Fuminori Oba	SICE2005 Proceedings, (2005) pp. 884-889
A75 Production Planning and Simulation for Reverse Supply Chain	Takeshi Murayama Mitsunobu Yoda Toru Eguchi Fuminori Oba	Proceedings of The 3rd International Conference on Leading Edge Manufacturing in the 21st Century(LEM21), 05-204 (2005) pp. 385-390
A76 Adaptive Production Planning by Information Sharing for Reverse Supply Chain	Takeshi Murayama Mitsunobu Yoda Toru Eguchi Fuminori Oba	Proceedings of 4th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign2005), (2005)

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A77 Immobilization Quaternary Ammonium Chloride on the Surface of Titan and Its Effects on Microbial Biofilm Formation in Vitro	Hiroki Nikawa Kazuhiro Ishida Taizo Hamada Takahiro Satoda Takeshi Murayama Toshinobu Takemoto Mistuhiro Tamamoto Hideaki Tajima Saiji Shimoe Hitomi Fujimoto Seicho Makihira	Dental Materials Journal, 24 , 4 (2005) pp. 570-582
A78 Dynamic Job Shop Scheduling Using the Mixture of a Genetic Algorithm and a Priority Rule	Toru Eguchi Masashi Dougakiuchi Fuminori Oba Takeshi Murayama	Proceedings of the 18th International Conference on Production Research, (2005)
A79 Dynamic Scheduling with Processing Time Uncertainty Using the Mixture of Real-time Scheduling and Periodic Optimization	Toru Eguchi Fuminori Oba Shintarou Kozaki Takeshi Murayama	Proceedings of SICE Annual Conference 2005, (2005)
A80 Matrix Inequality Conditions for Dissipativity of Continuous-Time Descriptor Systems and Its Application to Synthesis of Control Gains	Izumi Masubuchi	Proceedings of the 16th IFAC World Congress, (2005)
A81 H-infinity Control of Descriptor Systems Based on Realization-Independent LMIs	Izumi Masubuchi	Proceedings of the SICE Annual Conference 2005, (2005) pp. 2996-3000
A82 Synthesis of Output Feedback Controllers for Descriptor Systems Satisfying Closed-Loop Dissipativity	Izumi Masubuchi	Proceedings of the 44th IEEE Conference on Decision and Control and European Control Conference 2005, (2005) pp. 5012-5017
A83 Optimal Design of a Feedback Controller that Achieves Output Regulation in the Presence of Actuator Saturation	Nobutaka Wada Daisuke Sugiyama Masami Saeki	Proceedings of the 44th IEEE Conference on Decision and Control and European Control Conference 2005, (2005) pp. 7576-7580
A84 l_∞ Performance Analysis of Feedback Systems with Saturation Nonlinearities: An Approach Based on Polytopic Representation	Nobutaka Wada Tomonori Oomoto Masami Saeki	Proceedings of the American Control Conference, (2005) pp. 3403-3408
A85 Local Output Regulation of Feedback Systems with Saturation Nonlinearities	Nobutaka Wada Daisuke Sugiyama Masami Saeki	Proceedings of the SICE Annual Conference 2005, (2005) pp. 683-688
A86 Fixed structured PID controller design for standard H_∞ control problem	Masami Saeki	Proceedings of the 16th IFAC World Congress, (2005)
A87 Parameter space PID design based on simulation and its application	Masami Saeki Akihisa Takahashi	Proceedings of the 44th IEEE Conference on Decision and Control, and the European Control Conference, (2005) pp. 7241-7246
A88 Temperature Measurement in Laser Forming of Sheet Metal	Takashi Ueda Eisuke Sentoku Keiji Yamada Akira Hosokawa	Annals of the CIRP, 54 , 1 (2005) pp. 179-182
A89 Hardmilling with CBN and Coated Tools	Akira Hosokawa M Okada Ryutaro Tanaka Keiji Yamada Takashi Ueda	Proc. of third Int. Conf. of Leading Edge Manufacturing in 21st. Century, (2005) pp. 497-500
A90 Tool Life Detecting System using Damage Sensor-integrated Insert	Katsuhiro Sekiya Yasuo Yamane Ayumu Torimoto	Proc. of the LEM21 Int. Conf. on Leading Edge Manufacturing in 21st Century, 3 (2005) pp. 915-920

Paper Title	Author Name	Journal, Vol., No. (Year) Page
A91 Influence of cyclic deformation on shape memory characteristics of Ti-Ni-Cu alloys fabricated by pulse-current pressure sintered method	H. Kyogoku T. Kadomura S. Komatsu F. Yoshida T. Sakuma	Materials Science Forum, 475-479 (2005) pp. 1961-1964
A92 Identification of viscoplasticity properties of individual phases in lead-free solder alloy by depth-sensing microindentation	Hiroshi Hamasaki Kazuhiro Shinbata Fusahito Yoshida	Materials Transactions, 46 , 12 (2005) pp. 3073-3076
A93 Identification of Plasticity Parameters of Metallic Coatings by means of Depth-Sensing Micro-Indentation	H. Hamasaki F. Yoshida	Proceedings of International Conference on Advanced Manufacture (ICAM2005) (CD-ROM), (2005)
A94 A model of viscoplasticity describing yield-point phenomena and its numerical simulation applications	Fusahito Yoshida	Proc. 11th Int. Symp. on Plasticity and Its Current Applications, (2005) pp. 529-530
A95 Optimum drawbead setting for spring-back control in sheet metal forming	S. Abe R. Hino F. Yoshida	Proc. 8th Int. Conf. on Technology of Plasticity (CD-ROM), (2005)
A96 Optimization of blank design for sheet metal forming process using high and low fidelity simulation	R. Hino Y. Asano F. Yoshida V.V. Toropov	Proc. 8th Int. Conf. on Technology of Plasticity (CD-ROM), (2005)
A97 Influence of Ultraviolet Light Irradiation on Corrosion Behavior of Weathering Steel with and without TiO ₂ -Coating in 3 mass% NaCl Solution	Manal Gomaa Mahmoud Rongguang Wang Masahiko Kato Keijiro Nakasa	Scripta Materialia, 51 (2005) pp. 1303-1308
A98 Observation by Atomic Force Microscope of Corrosion Product during Pitting Corrosion on SUS304 Stainless Steel	Qinglian Zhang Rongguang Wang Masahiko Kato Keijiro Nakasa	Scripta Materialia, 52 (2005) pp. 227-230
A99 Analysis of Cracking and Delamination of Sputtered Thin Films during Wear Process	Keijiro Nakasa Taufiq Arif Setyanto Bo Zhang Jin-hua Zheng Masahiko Kato	Key Engineering Materials, 297-300 (2005) pp. 1718-1723

B. Artificial Complex Systems Engineering

Paper Title	Author Name	Journal, Vol., No. (Year) Page
B1 An interactive fuzzy satisficing method for multiobjective stochastic integer programming problems through a probability maximization model	Cahit Perkgoz Masatoshi Sakawa Kosuke Kato Hideki Katagiri	Asia Pacific Management Review: An International Journal, 10 , 1 (2005) pp. 29-35
B2 Interactive fuzzy programming for two-level nonlinear integer programming problems through genetic algorithms	Md. Abul Kalam Azad Masatoshi Sakawa Kosuke Kato Hideki Katagiri	Asia Pacific Management Review: An International Journal, 10 , 1 (2005) pp. 70-77
B3 A study on the effect of agent's utility based on Hogg-Huberman model in multi-agent systems	Junko Shibata Masatoshi Sakawa Kosuke Kato Hideki Katagiri	Asia Pacific Management Review: An International Journal, 10 , 2 (2005) pp. 107-111
B4 A genetic algorithm approach for the time-cost trade-off in PERT networks	Amir Azaron Cahit Perkgoz Masatoshi Sakawa	Applied Mathematics and Computation, 168 , 2 (2005) pp. 1317-1339
B5 A genetic algorithm with double string for nonlinear integer programming problems	Masatoshi Sakawa Kosuke Kato Md. Abul Kalam Azad Rei Watanabe	Proceedings of 2005 IEEE International Conference on Systems, Man and Cybernetics, (2005) pp. 3281-3286

Paper Title	Author Name	Journal, Vol., No. (Year) Page
B6 An application of genetic algorithm for multi-dimensional competitive facility location problem	Takeshi Uno Masatoshi Sakawa	Proceedings of 2005 IEEE International Conference on Systems, Man and Cybernetics, (2005) pp. 3276-3280
B7 A genetic algorithm with decomposition procedures for block-angular nonlinear integer programming problems	Kosuke Kato Masatoshi Sakawa Md. Abul Kalam Azad Kenji Morihara	Proceedings of 2005 IEEE International Conference on Systems, Man and Cybernetics, (2005) pp. 3287-3292
B8 Numerical simulation of multi dimensional reflecting geometrical Brownian motion and its application to mathematical finance	Shuya Kanagawa Akio Arimoto Yasumasa Saisho	Nonlinear Analysis, 63 , 5-7 (2005) pp. e2209-e2222
B9 Mean square approximation of multi dimensional reflecting fractional Brownian motion via penalty method	Shuya Kanagawa Koichi Inoue Akio Arimoto Yasumasa Saisho	Discrete and Continuous Dynamical Systems, 2005 , Special (2005) pp. 463-475
B10 Computational methods through genetic algorithms for obtaining Stackelberg solutions to two-level integer programming problems	Ichiro Nishizaki Masatoshi Sakawa	Cybernetics and Systems: An International Journal, 36 , 6 (2005) pp. 565-579
B11 Lotteries as a means of financing for preservation of the global commons and agent-based simulation analysis	Ichiro Nishizaki Yoshifumi Ueda Tomohiko Sasaki	Applied Artificial Intelligence: An International Journal, 19 , 8 (2005) pp. 721-741
B12 Agent-based simulations for stability and efficiency on partnership structures	Ichiro Nishizaki Yoshifumi Uno	IEEE SMC 2005, Conference Proceedings, IEEE Systems, Man, and Cybernetics Society, (2005)
B13 A simulation model on an artificial society with multiple adaptive agents for financing public goods with lotteries	Ichiro Nishizaki Tomohiko Sasaki	Proceedings of The First World Congress of the International Federation for Systems Research, (2005)
B14 Network structures in a society composed of individuals with utilities depending on their reputation	Tomohiro Hayashida Ichiro Nishizaki Hideki Katagiri	Proceedings of The First World Congress of the International Federation for Systems Research, (2005)
B15 A study on fuzzy random portfolio selection problems using possibility and necessity measures	Hideki Katagiri Masatoshi Sakawa Hiroaki Ishii	Scientiae Mathematicae Japonocae, 61 , 2 (2005) pp. 361-369
B16 A possibilistic and stochastic programming approach to fuzzy random MST problems	Hideki Katagiri El Bekkaye Mermri Masatoshi Sakawa Kosuke Kato Ichiro Nishizaki	IEICE Transaction on Information and Systems, E88-D , 8 (2005) pp. 1912-1919
B17 Interactive fuzzy random multiobjective programming based on M-alpha-Pareto optimality and stochastic programming models	Hideki Katagiri Masatoshi Sakawa Kosuke Kato Ichiro Nishizaki Hiroki Danjyo	IEEE SMC 2005, Conference Proceedings, IEEE Systems, Man, and Cybernetics Society, (2005) pp. 3293-3298
B18 Reliability evaluation and optimization of dissimilar-component cold-standby redundant systems	Amir Azaron Hideki Katagiri Kosuke Kato Masatoshi Sakawa	Journal of the Operations Research Society of Japan, 48 , 1 (2005) pp. 71-88
B19 Reliability function of a class of time-dependent systems with standby redundancy	Amir Azaron Hideki Katagiri Masatoshi Sakawa Mohammad Modarres	European Journal of Operational Research, 164 , 2 (2005) pp. 378-386
B20 Algorithm for generating all spanning trees of complete undirected graphs	El Bekkaye Mermri Hideki Katagiri Masatoshi Sakawa Kosuke Kato	Proceeding of the World Congress of the International Federation for Systems Research IFSR2005, (2005)
B21 Pilot tone design with low peak-to-average power ratio in OFDM	Shinji Hosokawa Kok Ann Donny Teo Shuichi Ohno Takao Hinamoto	IEICE Transactions on Fundamentals, E88-A , 8 (2005) pp. 2117-2123

Paper Title	Author Name	Journal, Vol., No. (Year) Page
B22 Recursive channel estimation based on finite parameter model using reduced-complexity maximum likelihood equalizer for OFDM over doubly-selective channels	Kok Ann Donny Teo Shuichi Ohno Takao Hinamoto	IEICE Transactions on Fundamentals, E88-A , 11 (2005) pp. 3085-3091
B23 Maximum likelihood inter-carrier interference suppression for wireless OFDM with null subcarriers	Shuichi Ohno	Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing, 3 (2005) pp. 849-852
B24 Pilot tone design for peak-to-average power ratio reduction in OFDM	Shinji Hosokawa Shuichi Ohno Kok Ann Donny Teo Takao Hinamoto	Proc. of IEEE International Symposium on Circuits and Systems, (2005) pp. 6014-6017
B25 Kalman channel estimation based on oversampled polynomial model for OFDM over doubly-selective channels	Kok Ann Donny Teo Shuichi Ohno Takao Hinamoto	Proc. of IEEE Workshop on Signal Proc. Advances in Wireless Comm., (2005) pp. 134-138
B26 Computationally efficient antenna selection in MISO-STBC-OFDM	Kok Ann Donny Teo Shuichi Ohno Kenichi Yamaguchi Takao Hinamoto	Proc. of IEEE 2005 International Symposium on Microwave, Antenna, Propagation and EMC Technologies For Wireless Communications, (2005)
B27 Subcarrier allocation for multi-user OFDM system	Yoshiyuki Otani Shuichi Ohno Kok Ann Donny Teo Takao Hinamoto	Proc. of IEEE Asia-Pacific Conference on Communications, (2005) pp. 1073-1077
B28 Performance of single-carrier block transmissions over multipath fading channels with MMSE equalization	Shuichi Ohno Kok Ann Donny Teo	Proc. of IEEE Global Telecommunications Conference, (2005)
B29 Performance of single-carrier block transmissions over multipath fading channels with MMSE equalization	Kok Ann Donny Teo Shuichi Ohno	Proc. of IEEE Global Telecommunications Conference, (2005)
B30 A new structure of error feedbackin 2-D separable-denominator digital filters	M. Nakamoto T. Hinamoto	IEICE Trans. on Fundamentals, E88-A , 7 (2005) pp. 1936-1945
B31 Discrete optimization for error feedback network using lower bound estimation	M. Nakamoto Y. Maejima T. Hinamoto	Proc. 2005 IEEE Int. Symp. on Circuits and Systems, 1 (2005) pp. 508-511
B32 Noise Reduction for 3-D IIR digital filters with Discrete Error Feedback Coefficients	M.Nakamoto T.Yoshiya T.Hinamoto	Proc. 2005 IEEE International Midwest Symposium on Circuits and Systems, (2005)
B33 State-space digital filters with minimum L2-sensitivity subject to L2-scaling constraints	Takao Hinamoto Ken-ichi Iwata Wu-Sheng Lu	Proc. IEEE Int. Conf. on Acoustics, Speech and Signal Processing, 4 (2005) pp. 265-268
B34 An active noise control system based on simultaneous equations method without auxiliary filters	Mitsuji Muneyasu Osamu Hisayasu Kensaku Fujii Takao Hinamoto	Proc. IEEE Int. Symp. on Circuits and Systems, (2005) pp. 256-259
B35 A new minimax design for 2-D FIR filters with low group delay	Wu-Sheng Lu Takao Hinamoto	Proc. IEEE Int. Symp. on Circuits and Systems, (2005) pp. 2028-2031
B36 Adaptive IIR notch filters: state-space approach	Aloys Mvuma Shotaro Nishimura Takao Hinamoto	Proc. IEEE Int. Symp. on Circuits and Systems, (2005) pp. 2287-2290
B37 Minimization of L2-sensitivity for a class of 2-D state-space digital filters subject to L2-scaling constraints	Takao Hinamoto Ken-ichi Iwata Wu-Sheng Lu	Proc. IEEE Int. Symp. on Circuits and Systems, (2005) pp. 2401-2404
B38 Jointly optimized error-feedback and realizationfor roundoff noise minimization in state-space digital filters	Wu-Sheng Lu Takao Hinamoto	IEEE Trans. on Signal Proceeding, 53 , 6 (2005) pp. 2135-2145

Paper Title	Author Name	Journal, Vol., No. (Year) Page
B39 Performance improvement for distributed active noise control systems based on simultaneous equations method	Mitsuji Muneyasu Ken-ichi Kagawa Kensaku Fujii Takao Hinamoto	IEICE Trans. on Fundamentals, E88-A , 7 (2005) pp. 1760-1764
B40 Design and experimental evaluation of a data-based self-tuning PID controller	Kenji Takao Toru Yamamoto Takao Hinamoto	Proc. 16th IFAC World Congress, (2005)
B41 Minimization of L2-sensitivity for state-space digital filters subject to L2-dynamic-range scaling constraints	Takao Hinamoto Hiroaki Ohnishi Wu-Sheng Lu	IEEE Trans. on Circuits and Systems II, 52 , 10 (2005) pp. 641-645
B42 L2-sensitivity minimization for a class of 2-D digital filters using a quasi-Newton method	Takao Hinamoto Ken-ichi Iwata Wu-Sheng Lu	Proc. 2005 48th IEEE Int. Midwest Symp. on Circuits and Systems, (2005)
B43 Comparing CONWIP, synchronized CONWIP, and Kanban in complex supply chain	Katsuhiko Takahashi Myreshka Daisuke Hirotani	International Journal of Production Economics, 93-94 (2005) pp. 25-40
B44 Influence of time to walk back and comparing for the self-balancing production line	Daisuke Hirotani Myreshka Katsumi Morikawa Katsuhiko Takahashi	Industrial Engineering and Management Systems, 4 , 1 (2005) pp. 36-46
B45 Alternative buffering strategies for two-stage material requirements planning system under demand uncertainty	Chao Rong Katsuhiko Takahashi Katsumi Morikawa	Proc. of the Sixth Asia-Pacific IE and MS Conference, (2005)
B46 Analysis of the self-balancing production line with various processing rates	Daisuke Hirotani Katsumi Morikawa Katsuhiko Takahashi	Proc. of the Sixth Asia-Pacific IE and MS Conference, (2005)
B47 Comparing the performance of KCS and DBR via Markov analysis	Ying-Chuan Chen Katsumi Morikawa Katsuhiko Takahashi	Proc. of the 18th ICPR, (2005)
B48 Branch and bound based makespan minimization in job shops guided by search history	Katsumi Morikawa Katsuhiko Takahashi Koichi Tabata	Proc. of the 18th ICPR, (2005)
B49 Evaluating costs and environmental impacts of production policies in recycling system	Akihiko Mizuno Katsuhiko Takahashi Katsumi Morikawa	Proc. of 4th Int. Sympo. on Environmentally Conscious Design and Inverse Manufacturing, (2005)
B50 Precise asymptotic properties of solutions to two-parameter elliptic eigenvalue problems in a ball	Tetsutaro Shibata	Advanced Nonlinear Studies, 5 (2005) pp. 33-56
B51 Asymptotic shapes of solutions to nonlinear eigenvalue problems	Tetsutaro Shibata	Electronic Journal of Differential Equations, 2005 (2005) pp. 1-16
B52 Asymptotic expansion of solutions to nonlinear elliptic eigenvalue problems	Tetsutaro Shibata	Proceedings of the American Mathematical Society, 133 (2005) pp. 2597-2564
B53 Mapping model of chaotic phase synchronization	Hirokazu Fujisaka Satoki Uchiyama Takehiko Horita	Progress of Theoretical Physics, 114 , 2 (2005) pp. 289-299
B54 A Study on Distribution Network Planning with Considering Ancillary Service Costs of Distributed Generators	Kazuhiko Koeda Yoshifumi Zoka Teppei Ueyama Naoto Yorino Hiroshi Sasaki	Proc. of the International Conference on Electrical Engineering, SP1-03 , ICEE-F0241 (2005)
B55 A Proposal of a New Method for Outage Work Planning Treated as a System Combination Problem Pursuing High Supply Reliability	Harumi Asahara Hiroaki Sugihara Hiroshi Sasaki Koji Kawahara Yoshifumi Zoka Naoto Yorino	Proc. of the International Conference on Electrical Engineering, SP1-05 , ICEE-F0256 (2005)
B56 Optimal Procurement of VAR Ancillary Service in the Electricity Market Considering Voltage Security	E. E. El-Araby Naoto Yorino Yoshifumi Zoka	Proc. of the International Symposium on Circuits and Systems, (2005) pp. 5290-5293

Paper Title	Author Name	Journal, Vol., No. (Year) Page
B57 A Study on Distribution Network Planning with Considering Customer's Utilization of Distributed Generators	Kazuhiko Koeda Hirosi Sasaki Teppei Ueyama Yoshifumi Zoka Naoto Yorino	Proc. of the International Symposium on Circuits and Systems, (2005) pp. 4729-4732
B58 An Approach for Allocating VAR Service in the Electricity Market against Voltage Collapse	E. E. El-Araby Naoto Yorino	Proc. of the International Power Engineering Conference, TN-1.4 (2005)
B59 An Economic Evaluation for an Autonomous Independent Network of Distributed Generators	Yoshifumi Zoka Kazuhiro Koeda Akihiro Sugimoto Naoto Yorino, Koji Kawahara	Proc. of the International Power Engineering Conference, TA-4.1 (2005)
B60 A new method for transient stability assessment based on critical trajectory	Naoto Yorino Yoshifumi Kamei Yoshifumi Zoka	Proc. of the 15th Power Systems Computation Conference, (2005)
B61 A Particle Swarm Optimization-Based Approach for Pricing VAR Providers in the Electricity Market with the Consideration of Voltage Security	E. El-Araby Naoto Yorino	Proc. of the International Conference on Future Power Systems, P13-02 (2005)
B62 Modulations of Input-output Properties of Corticospinal tract neurons by repetitive dynamic index finger abductions	Susumu Yahagi Yusaku Takeda Zhen Ni Makoto Takahashi Toshio Tsuji	Experimental Brain Research, 161 (2005) pp. 255-264
B63 A Wearable Pointing Device using EMG Signals	Hirotaka Ogino Jun Arita Toshio Tsuji	Journal of Robotics and Mechatronics, 17 , 2 (2005) pp. 173-180
B64 A Dynamic Body Model of the Nematode <i>C. elegans</i> with Neural Oscillators	Michiyo Suzuki Takeshi Goto Toshio Tsuji Hisao Otake	Journal of Robotics and Mechatronics, 17 , 3 (2005) pp. 318-326
B65 A model of motor control of the nematode <i>C. elegans</i> with neuronal circuits	Michiyo Suzuki Toshio Tsuji Hisao Otake	Artificial Intelligence in Medicine, 35 (2005) pp. 75-86
B66 Tracking Control Properties of Human-robotic Systems Based on Impedance Control	Toshio Tsuji Yoshiyuki Tanaka	IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans, 35 , 4 (2005) pp. 523-535
B67 On-line Learning of Robot Arm Impedance Using Neural Networks	Toshio Tsuji Yoshiyuki Tanaka	Robotics and Autonomous Systems, 52 , 4 (2005) pp. 257-271
B68 LMI Based Neurocontroller for State-Feedback Guaranteed Cost Control of Discrete-Time Uncertain System	Hiroaki Mukaidani Yasuhsisa Ishii Nan Bu Yoshiyuki Tanaka Toshio Tsuji	IEICE Transactions on Information and Systems, E88-D , 8 (2005) pp. 1903-1911
B69 Bio-mimetic Trajectory Generation using a Neural Time-Base Generator	Yasuyuki Tanaka Toshio Tsuji V.Sanguineti P.G.Morasso	Journal of Robotic Systems, 22 , 11 (2005) pp. 625-637
B70 Motion dependence of impedance perception ability in human movements	Yoshiyuki Tanaka Tatsuya Abe Toshio Tsuji Hideki Miyaguchi	Proceedings of the First International Conference on Complex Medical Engineering, (2005) pp. 472-477
B71 A Neuromuscular Model of <i>C.elegans</i> with directional control	Michiyo Suzuki Toshio Tsuji Hisao Otake	Proceedings of the First International Conference on Complex Medical Engineering, (2005) pp. .167-172

Paper Title	Author Name	Journal, Vol., No. (Year) Page
B72 Non-invasive monitoring of arterial wall impedance	Akira Sakane Kenji Shiba Toshio Tsuji Noboru Saeki Makoto Kawamoto	Proceedings of the First International Conference on Complex Medical Engineering, (2005) pp. 984-989
B73 LMI-Based Neurocontroller for Guaranteed Cost Control of Uncertain Time-Delay Systems	Hiroaki Mukaidani Seishiro Sakaguchi Toshio Tsuji	IEEE International Symposium on Circuits and Systems, (2005) pp. 3047-3050
B74 BMI-Based Neurocontroller for State-Feedback Guaranteed Cost Control of Discrete-Time Uncertain System	Hiroaki Mukaidani Seishiro Sakaguchi Yasuhisa Ishii Toshio Tsuji	IEEE International Symposium on Circuits and Systems, (2005) pp. 3055-3058
B75 A Dynamic Body Model of the Nematode C.elegans with a Touch-response Circuit	Michiyo Suzuki Toshio Tsuji Hisao Otake	Proceedings of the 2005 IEEE International Conference on Robotics and Biomimetics, (2005) pp. 538-543
B76 Analysis of human perception ability for robot impedance	Yoshiyuki Tanaka Toshio Tsuji Hideki Miyaguchi	Preprints of the 16th IFAC World Congress, We-M10-TO/4 (2005)
B77 Decentralized Guaranteed Cost Control for Discrete-Time Uncertain Large-Scale Systems Using Neural Networks	Hiroaki Mukaidani Yasuhisa Ishii Toshio Tsuji	Preprints of the 16th IFAC World Congress, Th-A01-TP/4 (2005)
B78 A Novel Pattern Classification Method for Multivariate EMG Signals using Neural Network	Nan Bu Jun Arita Toshio Tsuji	Proceedings of the First International Conference on Natural Computation, Part II (2005) pp. 165-174
B79 Manipulability Analysis of Human Arm Movements during the Operation of a Variable-Impedance Controlled Robot	Yoshiyuki Tanaka Naoki Yamada Kazuo Nishikawa Ichiro Masamori Toshio Tsuji	Proceedings of the 2005 IEEE/RSJ International Conference on Intelligent Robotics and Systems, (2005) pp. 3543-3548
B80 A Universal Interface for Video Game Machines using Biological Signals	Keisuke Shima Nan Bu Masaru Okamoto Toshio Tsuji	Proceedings of 4th International Conference on Entertainment Computing - ICEC 2005, (2005) pp. 88-98
B81 Phoneme Classification for Speech Synthesiser using Differential EMG Signals between Muscles	Nan Bu Toshio Tsuji Jun Arita Makoto Ohga	Proceedings of the 2005 IEEE Engineering in Medicine and Biology 27th Annual Conference, Paper-ID 788 (2005)
B82 CHRIS: Cybernetic Human-Robot Interface Systems	Keisuke Shima Ryota Eguchi Kenji Shiba Toshio Tsuji	Proceedings of 36th International Symposium on Robotics, WE1C3 (2005)

C. Information Engineering

Paper Title	Author Name	Journal, Vol., No. (Year) Page
C1 FM Screening by the Local Exhaustive Search with Hardware Acceleration	Yasuaki Ito Koji Nakano	International Journal on Foundations of Computer Science, 16 , 1 (2005) pp. 89-104
C2 Hardware n Choose k Counters with Applications to the Partial Exhaustive Search	Koji Nakano Youhei Yamagishi	IEICE Trans. on Information & Systems, E88-D , 7 (2005) pp. 1350-1359
C3 Active Carrier Sensing and Packet Sending – An Alternative to Boost the Performance in Directional Communications	Jacir L. Bordim T. Hunziker Koji Nakano	Proc. of Parallel and Distributed Computing, Applications and Technologies, (2005) pp. 274-278

Paper Title	Author Name	Journal, Vol., No. (Year) Page
C4 CHQ: A Multi-Agent Reinforcement Learning Scheme for Partially Observable Markov Decision Processes	Hiroshi Osada Satoshi Fujita	IEICE Trans. Information and Systems, E88-D , 5 (2005) pp. 1004-1011
C5 A Tight Bound on the Number of Mobile Servers to Guarantee the Mutual Transferability among Dominating Configurations	Satoshi Fujita	Proc. Algorithms and Computation, 16th International Symposium (ISAAC2005), (2005) pp. 563-572
C6 Extended Skip Graphs for Efficient Key Search in P2P Environment	Satoshi Fujita Akira Ohtsubo Masaya Mito	Proc. the 8th International Symposium on Parallel Architectures, Algorithms, and Networks (I-SPAN 2005), (2005)
C7 On Linkage Identification in EC for Solving Combinatorial Optimization Problems	Shin'ichiro Umezane Satoshi Fujita	Proc. The International Conference on Systems, Man and Cybernetics (SMC2005), IEEE , (2005)
C8 A Fault-Tolerant Content Addressable Network	Daisuke Takemoto Shigeaki Tagashira Satoshi Fujita	Proc. Third International Symposium on Parallel and Distributed Processing and Applications (ISPA'2005), (2005) pp. 792-803
C9 Towards Generic Solver of Combinatorial Optimization Problems with Autonomous Agents in P2P Networks	Shigeaki Tagashira Masaya Mito Satoshi Fujita	Proc. The Sixth International Symposium on High Performance Computing (ISHPC2005), (2005)
C10 On the relation between average and maximum cuts in linear arrangements of graphs	Satoshi Fujita	2005 Korea-Japan Joint Workshop on Algorithms and Computation, (2005) pp. 191-198
C11 A Localization Scheme for Sensor Networks Based on Wireless Communication with Anchor Groups	Hiroyuki Ochi Shigeaki Tagashira Satoshi Fujita	Proc. The 11th International Conference on Parallel and Distributed Systems (ICPADS 2005), (2005) pp. 299-305
C12 LQ-Routing Protocol for Mobile Ad-Hoc Networks	Tao Tang Shigeaki Tagashira Satoshi Fujita	Proc. 4th Annual ACIS International Conference on Computer and Information Science (ICIS 2005), (2005) pp. 441-446
C13 Distributed Branch-and-Bound Scheme for Solving the Winner Determination Problem in Combinatorial Auctions	Satoshi Fujita Shigeaki Tagashira Chen Qiao Masaya Mito	Proc. the IEEE 19th International Conference on Advanced Information Networking and Applications (AINA 2005), (2005) pp. 661-666
C14 A Note on Efficient Key Location in Pure P2P Systems under an Environment with Dynamic Key Modifications	Satoshi Fujita	Proc. the IASTED International Conference on Parallel and Distributed Computing and Networks (PDCN 2005), (2005) pp. 669-673
C15 A Linear Time Algorithm for Bi-Connectivity Augmentation of Graphs with Upper Bounds on Vertex-Degree Increase	Takanori Fukuoka Toshiya Mashima Satoshi Taoka Toshimasa Watanabe	IEICE Trans. Fundamentals, E88-A , 4 (2005) pp. 954-963
C16 Siphon-Trap-based Algorithms for Efficiently Computing Petri Net Invariants	Akihiro Taguchi Atsushi Iriboshi Satoshi Taoka Toshimasa Watanabe	IEICE Trans. Fundamentals, E88-A , 4 (2005) pp. 964-971
C17 A 2-Approximation Algorithm to $(k+1)$ -Edge-Connect a Specified Set of Vertices in a k -Edge-Connected Graph	Toshiya Mashima Satoshi Taoka Toshimasa Watanabe	IEICE Trans. Fundamentals, E88-A , 5 (2005) pp. 1290-1300
C18 Improved Heuristic Algorithms for Minimizing Initial Markings of Petri Nets	Satoshi Taoka Masahiro Yamauchi Toshimasa Watanabe	IEICE Trans. Fundamentals, E88-A , 11 (2005) pp. 3051-3061
C19 Minimum Augmentation to Bi-Connect Specified Vertices of a Graph with Upper Bounds on Vertex-Degree	Toshiya Mashima Takanori Fukuoka Satoshi Taoka Toshimasa Watanabe	Proc. 2005 IEEE International Symposium on Circuit and Systems (ISCAS 2005), (2005) pp. 752-755

Paper Title	Author Name	Journal, Vol., No. (Year) Page
C20 Maximum Weight Matching-Based Algorithms for k-Edge-Connectivity Augmentation of a Graph	Satoshi Taoka Toshimasa Watanabe Toshiya Mashima	Proc. 2005 IEEE International Symposium on Circuit and Systems (ISCAS 2005), (2005) pp. 2231-2234
C21 Approximation Algorithms for the Rectilinear Steiner Tree Problem with Obstacles	Makoto Fujimoto Daisuke Takafuji Toshimasa Watanabe	Proc. 2005 IEEE International Symposium on Circuit and Systems (ISCAS 2005), (2005) pp. 1362-1365
C22 Hierarchical Extraction of a Spanning Planar Subgraph Maintaining Clockwise Directedness of Cycles	Daisuke Takafuji Toshimasa Watanabe	Proc. 2005 IEEE International Symposium on Circuit and Systems (ISCAS 2005), (2005) pp. 172-175
C23 Performance Evaluation of PC Cluster-based Parallel Branch-and-Bound Algorithms for the Graph Coloring Problem	Yoshitaka Shimoda Satoshi Taoka Daisuke Takafuji Toshimasa Watanabe	Proc. the 18th Workshop on Circuits and Systems in Karuizawa, (2005) pp. 253-258
C24 Edge-Connectivity Augmentation for Specified Vertices of a Graph with Upper Bounds on Vertex-Degree Increase	Toshiya Mashima Satoshi Taoka Toshimasa Watanabe	Proc. the 18th Workshop on Circuits and Systems in Karuizawa, (2005) pp. 637-642
C25 Experimental Evaluation of Maximum-Supply Partitioning Algorithms for Demand-Supply Graphs	Kazuya Watanabe Satoshi Taoka Toshimasa Watanabe	Proc. the 18th Workshop on Circuits and Systems in Karuizawa, (2005) pp. 643-648
C26 Improving Performance Ratios by Repeatedly Executing Approximation Algorithms for Several Graph Connectivity Related Problems	Makoto Tamura Satoshi Taoka Toshimasa Watanabe	Proc. 4th Japanese-Hungarian Symposium on Discrete Mathematics and Its Applications, (2005) pp. 385-397
C27 Circularizable domains on Riemann surfaces	Makoto Masumoto Masakazu Shiba	Kodai Math. J., 28 , 2 (2005) pp. 280-291
C28 Ideal fluid flows on a Riemann surface	Masakazu Shiba	Transactions of the Institute of Mathematics of the National Academy of Sciences of Ukraine, 2004-1 , 3 (2005) pp. 192-201
C29 An Optimal Design Method for High-Frequency Dielectric Heating Device	Tomoyuki Miyamoto Shinya Matsutomo Kazufumi Kaneda Hideo Yamashita So Noguchi	Proceedings of 12th International Symposium on Interdisciplinary Electromagnetic, Mechanic & Biomedical Problems, (2005) pp. 204-205
C30 A New Analysis Method for Accurate Supercurrent Distribution inside HTS Bulk	Tomohiro Yanagawa Kazufumi Kaneda So Noguchi Hideo Yamashita	Proceedings of 4th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for magnetic, Superconducting and Nano Materials, (2005) pp. 25-26
C31 Illumination Morphing: Smooth Transition of Luminance Distributions between Tow Images	Tomohisa Manabe Takashi Betsumiya Kazufumi Kaneda	Proceedings of 9th International Conference on Computer Aided Design and Computer Graphics, (2005) pp. 517-524
C32 Unified Approach to Image Distortion: D-U and U-D models	Toru Tamaki	IEICE Transactions on Information & Systems, E88-D , 5 (2005) pp. 1086-1090
C33 A Method to Extract Various Vascular Features from Liver Images of Computed Tomography	Masahiro Ishikawa Hidaka Uchida Toru Tamaki Masanobu Yamamoto Takeshi Suda Masato Igarashi Yutaka Aoyagi	Proc. of The First International Conference on Complex Medical Engineering, (2005)

Paper Title	Author Name	Journal, Vol., No. (Year) Page
C34 The Development of the Instant Tournament Charts Drawing System on the Internet	Yukihiko Ushiyama Hidaka Uchida Toru Tamaki Akemi Suto Hisato Igarashi Osamu Hashimoto	The 9th International Table Tennis Federation Sports Science Congress, (2005)
C35 Realizing Adaptive Questions and Answers for ICALL Systems	Hiidenobu Kunichika Minoru Urushima Tsukasa Hirashima Akira Takeuchi	Proceedings of Artificial Intelligence in Education 2005(AIED2005), (2005) pp. 854-856
C36 Graph of Microworld	Tomoya Horiguchi Tsukasa Hirashima	Proceedings of Artificial Intelligence in Education 2005(AIED2005), (2005) pp. 651-658
C37 Design Method for Learning Games Based on Key Structure and Behavior	Takanobu Umetsu Tsukasa Hirashima	International Conference on Computer in Education 2005, (2005) pp. 516-523
C38 Conceptual Changes in Learning Mechanics by Error-based Simulation	Tomoya Horiguchi Tsukasa Hirashima Masahiko Okamoto	International Conference on Computer in Education 2005, (2005)
C39 Implementation and Effectiveness of a Feedback Feature in Underlining to Promote Reading Comprehension of e-Learning Instructional Materials	Yoshihiro Fukunaga Tsukasa Hirashima Akira Takeuchi	International Conference on Computer in Education 2005, (2005) pp. 99-106
C40 Error Visualization to Scaffold Metacognitive Activity	Tsukasa Hirashima Tomoya Horiguchi	The 2nd Joint Workshop of Cognition and Learning through Media-Communication for Advanced e-Learning, (2005) pp. 1-6
C41 Development and Evaluation of Concept Mapping Software with Bookmarking Function for Supporting Reflection and Dialogue	Akiko Deguchi Etsushi Yamaguchi Hideo Funaoi Shigenori Inagaki	Proceedings of World Conference on Educational Multimedia, Hypermedia & Telecommunications 2005, (2005) pp. 3547-3654
C42 Video Summarization based on Film Grammar	Atsuo Yoshitaka Yoshiki Deguchi	Proc. of the IEEE International Workshop on Multimedia Signal Processing 2005, (2005) pp. 333-336
C43 Nondegenerate 2-state 3-symbol reversible logic elements are all universal	Tsuyoshi Ogiro Atsuyuki Kanno Keiji Tanaka Hiroko Kato Kenichi Morita	Int. Journ. of Unconventional Computing, 1, 1 (2005) pp. 47-67
C44 Classification and universality of reversible logic elements with one-bit memory	Kenichi Morita Tsuyoshi Ogiro Keiji Tanaka Hiroko Kato	Lecture Notes in Computer Science, Springer-Verlag, 3354 (2005) pp. 245-256
C45 Translational Lemmas for Alternating TMs and PRAMs	Chuzo Iwamoto Yoshiaki Nakashiba Kenichi Morita Katsunobu Imai	Lecture Notes in Computer Science, Springer-Verlag, 3623 (2005) pp. 126-137
C46 Hierarchies of DLOGTIME-Uniform Circuits	Chuzo Iwamoto Naoki Hatayama Kenichi Morita Katsunobu Imai Daisuke Wakamatsu	Lecture Notes in Computer Science, Springer-Verlag, 3354 (2005) pp. 211-222
C47 Optimal design of unreliable production/inventory systems with variable production rate	Bibhas C. Giri Won Young Yun Tadashi Dohi	European Journal of Operational Research, 162 (2005) pp. 372-386
C48 Optimal lot sizing in an unreliable two-stage serial production/inventory system	Bibhas C. Giri Won Young Yun Tadashi Dohi	International Transactions in Operational Research, 12 (2005) pp. 63-82

Paper Title	Author Name	Journal, Vol., No. (Year) Page
C49 Exact formulation of stochastic EMQ model for an unreliable production system	Bibhas C. Giri Tadashi Dohi	Journal of the Operational Research Society, 56 (2005) pp. 563-575
C50 Computational aspects of an extended EMQ model with variable production rate	Bibhas C. Giri Tadashi Dohi	Computers & Operations Research, 32 (2005) pp. 3143-3161
C51 An architecture-based software reliability model with finite number of faults	Hiroyuki Okamura Kei Tsuruta Tadashi Dohi	Proceedings of 9th IASTED International Conference on Software Engineering, (2005) pp. 20-25
C52 Effect of preventive rejuvenation in communication network system with burst arrival	Hiroyuki Okamura Satoshi Miyahara Tadashi Dohi	Proceedings of The 7th International Symposium on Autonomous Decentralized Systems (ISADS 2005), (2005) pp. 151-158
C53 Behavioral analysis of a fault-tolerant software system with rejuvenation	Koichiro Rinsaka Tadashi Dohi	Proceedings of The 7th International Symposium on Autonomous Decentralized Systems (ISADS 2005), (2005) pp. 159-166
C54 Optimality of control-limit type of software rejuvenation policy	Hiroyuki Eto Tadashi Dohi	Proceedings of IEEE 11th International Conference on Parallel and Distributed Systems (ICPDS-2005), II (2005) pp. 483-487
C55 A dynamic programming algorithm for software rejuvenation scheduling under distributed computation circumstance	Hiroyuki Okamura Kazuki Iwamoto Tadashi Dohi	Proceedings of IEEE 11th International Conference on Parallel and Distributed Systems (ICPDS-2005), II (2005) pp. 493-497
C56 Gompertz software reliability model and its application	Koji Ohishi Hiroyuki Okamura Tadashi Dohi	Proceedings of 29th Annual International Computer Software and Application Conference (COMPSAC 2005), (2005) pp. 405-410
C57 A DP-based optimal checkpointing algorithm for a real time system	Hiroyuki Okamura Kazuki Iwamoto Tadashi Dohi	Proceedings of 11th International Conference on Reliability and Quality in Design (ISSAT 2005), (2005) pp. 22-26
C58 EM algorithms for fitting Markovian arrival processes to time-interval sampling data	Hiroyuki Okamura Hiroki Goto Tadashi Dohi	Proceedings of International Workshop on Recent Advances in Stochastic Operations Research (RASOR 2005), (2005) pp. 179-186
C59 Estimating age replacement policies with a small sample data	Koichiro Rinsaka Tadashi Dohi	Proceedings of International Workshop on Recent Advances in Stochastic Operations Research (RASOR 2005), (2005) pp. 203-210
C60 Discrete-time opportunistic replacement policies and their application	Tadashi Dohi Naoto Kaio Shunji Osaki	Proceedings of International Workshop on Recent Advances in Stochastic Operations Research (RASOR 2005), (2005) pp. 18-25
C61 Determination of optimal warranty period in a software development project	Koichiro Rinsaka Tadashi Dohi	International Journal of Quality and Reliability Management, 22 , 7 (2005) pp. 715-730
C62 Discrete-time spare ordering policy with lead time and discounting	Bibhas C. Giri Tadashi Dohi Naoto Kaio	Journal of Quality in Maintenance Engineering, 11 , 3 (2005) pp. 191-205

Paper Title	Author Name	Journal, Vol., No. (Year) Page
C63 Determining the discrete warranty period in a software development project	Koichiro Rinsaka Tadashi Dohi	Asia Pacific Management Review, 10 , 4 (2005) pp. 225-232
C64 Behavioral analysis of fault-tolerant software systems with rejuvenation	Koichiro Rinsaka Tadashi Dohi	IEICE Transactions on Information and Systems (D), E88-D , 12 (2005) pp. 2681-2690
C65 Rejuvenating communication network system with burst arrival	Hiroyuki Okamura Satoshi Miyahara Tadashi Dohi	IEICE Transactions on Communications (B), E88-B , 12 (2005) pp. 4498-4506
C66 Bayesian perspective of optimal checkpoint placement	Naoki Kobayashi Tadashi Dohi	Proceedings of 9th IEEE International Symposium on High Assurance Systems Engineering (HASE 2005), (2005) pp. 143-159
C67 Markovian modeling and analysis of Internet worm propagation	Hiroyuki Okamura Hisashi Kobayashi Tadashi Dohi	Proceedings of 16th International Symposium on Software Reliability Engineering (ISSRE'05), (2005) pp. 149-158
C68 Monitoring the health condition of ubiquitous systems: rejuvenation v.s. recovery	Kazuki Iwamoto Tadashi Dohi Naoto Kaio	Embedded and Ubiquitous Computing: International Conference EUC 2005 Workshops: UISW, NCUS, SecUbiq, USN, and TAUES (T. Enokido, L. Yan, B. Xiao, D. Kim, Y. Dai and L. T. Yang, eds.), Lecture Notes in Computer Science, 3823 (2005) pp. 1283-1292
C69 Performance evaluation of power-aware communication network devices	Hiroyuki Okamura Tadashi Dohi	Embedded and Ubiquitous Computing: International Conference EUC 2005 (L. T. Yang, M. Amamiya, Z. Liu, M. Guo and F. J. Rammig, eds.), Lecture Notes in Computer Science, 3824 (2005) pp. 245-254
C70 Transient cost analysis of non-Markovian software systems with rejuvenation	Tadashi Dohi Hiroaki Suzuki Shunji Osaki	Proceedings of International Conference on Reliability and Safety Engineering (ICNCRESE 2005), 351 , 362 (2005)
C71 A subordinated Markov chain model for assessing software safety	Hiroyuki Okamura Masaki Ito Tadashi Dohi	Proceedings of International Conference on Reliability and Safety Engineering (ICNCRESE 2005), (2005) pp. 363-373
C72 Balance algorithm for point-feature label placement problem	Zheng He Koichi Harada	Proc. ICANN2005, (2005) pp. 179-184
C73 Improving the self-organizing feature map algorithm for interpolating scattered data	Zhong-Zong Chen Ying-Hong Wang Koichi Harada	Bull. Grad. Sc. Eng. Hiroshima Univ., 54 , 1 (2005) pp. 19-23
C74 Watermarking method for 3D triangular mesh models	Md. Mahfuzur Rahman Kazufumi Kaneda Koichi Harada	Proc. Int. Inf. Tech. Conf. 2005, (2005) pp. 1-7
C75 Optimization by parallel Hopfield neural network	Zhong He Koichi Harada	Proc. Int. Inf. Tech. Conf. 2005, (2005) pp. 236-243
C76 An experimental study of the hybridization of logistic discriminant analysis and multilayer neural network for image identification	Akira Asano Chie Muraki Asano Koji Hotta Megu Ohtaki Mitsuji Muneyasu Takao Hinamoto	Proc. 4th International Conference on Hybrid Intelligent Systems (HIS'04), (2005) pp. 358-363

Paper Title	Author Name	Journal, Vol., No. (Year) Page
C77 Intersize correlation of grain occurrences in textures and its application to texture regeneration	Akira Asano Yasushi Kobayashi Chie Muraki	Mathematical Morphology: 40 years On; Proc. 7th International Symposium on Mathematical Morphology (ISMM'05), (2005) pp. 357-366
C78 Application of Fourier sectrum for describing 'formal' of cloths	Chie Muraki Asano Mitsuji Muneyasu Takahito Ozeki Akira Asano Takako Fujimoto	Proc. 2005 IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing (NSIP 2005), (2005) pp. 19AM2D-02
C79 Computer-aided system for measuring the mandibular cortical width on panoramic radiographs in osteoporosis diagnosis	Agus Zainal Arifin Akira Asano Akira Taguchi Takashi Nakamoto Masahiko Ohtsuka Keiji Tanimoto	Proc. SPIE Medical Imaging 2005 - Image Processing Conference; Proc. SPIE , 5747 (2005) pp. 813-821
C80 Mathematical morphology and its applications	Akira Asano	Proc. Information and Communication Technology Seminar 2005, (2005) pp. 1-9
C81 Image thresholding by measuring the fuzzy sets similarity	Agus Zainal Arifin Akira Asano	Proc. Information and Communication Technology Seminar 2005, (2005) pp. 189-194
C82 Dewarping of document image by global optimization	Hiroki Ezaki Seiichi Uchida Akira Asano Hiroaki Sakoe	Proc. 8th International Conference on Document Analysis and Recognition (ICDAR 2005), (2005) pp. 302-306
C83 A design of window shapes and weights in weighted median filters for texture images	Atsushi Fujiki Tomoaki Hashimoto Mitsuji Muneyasu Akira Asano	Proc. 2005 International Symposium on Intelligent Signal Processing and Communications Systems (ISPACS 2005), (2005) pp. 665-668
C84 Optimized Transitive Association Rule: Mining Significant Stopover between Events	Yasuhiko Morimoto	Proc. of ACM Symposium on Applied Computing, (2005) pp. 547-548
C85 Optimized Sequential Pattern Mining from Point Of Sales Data	Kazumitsu Yagi Mai Soramoto Miho Mokuda Yasuhiko Morimoto	Proc. of IEEE International Special Workshop on Databases for Next Generation Researchers, (2005) pp. 12-15

D. Chemistry and Chemical Engineering

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D1 Novel Processing for Softly-Agglomerated Luminescent Y ₂ O ₃ :Eu ³⁺ Nanoparticles using Polymeric Precursors	M. Abdullah Wuled Lenggoro B. Xia Kikuo Okuyama	Journal of the Ceramic Society of Japan (Special Issue: Innovative Ceramics II), 113 , 1 (2005) pp. 97-100
D2 Development of an LDMA-FCE System for the Measurement of Submicron Aerosol Particles	Manabu Shimada H. M. Lee C. S. Kim H. Koyama T. Myojo Kikuo Okuyama	Journal of Chemical Engineering of Japan, 38 , 1 (2005) pp. 34-44
D3 A New Observation on the Phase Transformation of TiO ₂ Nanoparticles Produced by a CVD Method	C. S. Kim K. Nakaso B. Xia Kikuo Okuyama Manabu Shimada	Aerosol Science and Technology , 39 , 2 (2005) pp. 104-112

Published Papers

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D4 Modeling of and Experiments on Dust Particle Levitation in the Sheath of a Radio Frequency Plasma Reactor	H. Setyawan Manabu Shimada Y. Hayashi Kikuo Okuyama S. Winardi	Journal of Applied Physics, 97 , 4 (2005) pp. 043306-1-043306-6
D5 Removal of Particles during Plasma Processes Using a Collector based on the Properties of Particles Suspended in the Plasma	H. Setyawan Manabu Shimada Y. Hayashi Kikuo Okuyama	Journal of Vacuum Science and Technology A, 23 , 3 (2005) pp. 388-393
D6 Direct Synthesis of Barium Magnesium Aluminate Blue Phosphor Particles via a Flame Route	H. K. Chang Wuled Lenggoro T. Ogi Kikuo Okuyama	Materials Letters, 59 , 10 (2005) pp. 1183-1187
D7 Quartz Crystal Microbalance for Silicon Surface Organic Contamination	H. Habuka K. Suzuki S. Okamura Manabu Shimada Kikuo Okuyama	Journal of the Electrochemical Society, 152 , 4 (2005) pp. G241-G245
D8 Incorporation of Dust Particles into a Growing Film during Silicon Dioxide Deposition from a TEOS/O ₂ Plasma	Manabu Shimada H. Setyawan Y. Hayashi N. Kashihara Kikuo Okuyama	Aerosol Science and Technology , 39 , 5 (2005) pp. 408-414
D9 Coagulation of Bipolarly Charged Ultrafine Aerosol Particles	S. H. Park K. W. Lee Manabu Shimada Kikuo Okuyama	Journal of Aerosol Science, 36 , 7 (2005) pp. 830-845
D10 Bipolar Diffusion Charging for Aerosol Nanoparticle Measurement Using a Soft X-ray Charger	H. M. Lee C. S. Kim Manabu Shimada Kikuo Okuyama	Journal of Aerosol Science, 36 , 7 (2005) pp. 813-829
D11 Highly Charging of Nanoparticles through Electrospray of Nanoparticle	J. Suh B. Han Kikuo Okuyama M. Choi	Journal of Colloid and Interface Science, 287 , 1 (2005) pp. 135-140
D12 A Polymer Solution Process for Synthesis of (Y,Gd)Al ₅ O ₁₂ :Ce Phosphor Particles	M. Abdullah Kikuo Okuyama Wuled Lenggoro S. Taya	Journal of Non-Crystalline Solids, 351 , 8-9 (2005) pp. 697-704
D13 Dispersion and Aggregation of Nanoparticle Derived from Colloidal Droplets under Low-Pressure Conditions	W. N. Wang Wuled Lenggoro Kikuo Okuyama	Journal of Colloid and Interface Science, 288 , 2 (2005) pp. 423-431
D14 An Experimental Study of Ion-induced Nucleation using a Drift Tube Ion Mobility Spectrometer/Mass Spectrometer and A Cluster Differential Mobility Analyzer/Faraday Cup Electrometer	K. Nagato C. S. Kim M. Adachi Kikuo Okuyama	Journal of Aerosol Science, 36 , 8 (2005) pp. 1036-1049
D15 Fabrication and photoluminescence of highly crystalline GaN and GaN:Mg nanoparticles	T. Ogi Y. Ito M. Abdullah F. Iskandar Y. Azuma Kikuo Okuyama	Journal of Crystal Growth, 281 , 2-4 (2005) pp. 234-241
D16 Influence of the Synthetic Conditions of Chemical Vapor Synthesis on the Size of Gallium Nitride Nanoparticles	Y. Azuma Manabu Shimada Kikuo Okuyama	Journal of Chemical Engineering of Japan, 38 , 7 (2005) pp. 516-519
D17 Preparation of ordered macroporous FePt film via colloidal templates	F. Iskandar T. Iwaki T. Toda Kikuo Okuyama	Nano Letters, 5 , 7 (2005) pp. 1525-1528

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D18 Effects of Mobility Change and Distribution of Bipolar Ions on Aerosol Nanoparticle Diffusion Charging	H. M. Lee C. S. Kim Manabu Shimada Kikuo Okuyama	Journal of Chemical Engineering of Japan, 38 , 7 (2005) pp. 486-496
D19 Polymer-supported Solution Synthesis of Blue Luminescent BaMgAl ₁₀ O ₁₇ :Eu ²⁺ Particles	C. Panatarani Wuled Lenggoro N. Ito H. Yoden Kikuo Okuyama	Materials Science and Engineering: B, 122 , 3 (2005) pp. 188-195
D20 Direct Synthesis of Barium Titanate Nanoparticles via a Low Pressure Spray Pyrolysis Method	W. N. Wang Wuled Lenggoro Y. Terashi Y. C. Wang Kikuo Okuyama	Journal of Materials Research, 20 , 10 (2005) pp. 2873-2882
D21 One-step Synthesis of Titanium Oxide Nanoparticles by Spray Pyrolysis of Organic Precursors	W. N. Wang Wuled Lenggoro Y. Terashi T. O. Kim Kikuo Okuyama	Materials Science and Engineering: B, 123 , 3 (2005) pp. 194-302
D22 Changes in the Shape and Mobility of Colloidal Gold Nanorods with Electrospray and Differential Mobility Analyzer Methods	D. K. Song Wuled Lenggoro Kikuo Okuyama S. S. Kim	Langmuir (ACS Journal of Surfaces and Colloids), 21 , 23 (2005) pp. 10375-10382
D23 Particle Reduction and Control in Plasma Etching Equipment	T. Moriya H. Nakayama H. Nagaike Y. Kobayashi Manabu Shimada Kikuo Okuyama	IEEE Transactions on Semiconductor Manufacturing, 18 , 4 (2005) pp. 477-486
D24 Observation of Heat-Induced Particle Re-suspension and Transport in a Vacuum Chamber	T. Moriya Manabu Shimada Kikuo Okuyama H. Setyawan	Japanese Journal of Applied Physics, 44 , 7A (2005) pp. 4871-4877
D25 An improved prediction result of entropic-FV model for vapor-liquid equilibria of solvent-polymer systems	Gede Wibawa Shigeki Takishima Yoshiyuki Sato Hirokatsu Masuoka	Journal of Applied Polymer Science, 97 , 3 (2005) pp. 1145-1153
D26 Solubility of HFC-134a, HCFC-142b, butane and isobutane in low-density polyethylene at temperatures from 383.15 K to 473.15 K and at pressures up to 3.4 MPa	Ming Wang Yoshiyuki Sato Toru Iketani Shigeki Takishima Hirokatsu Masuoka	Fluid Phase Equilibria, 232 (2005) pp. 1-8
D27 Liquid-liquid equilibria of solvent+polymer solutions with a chain-referenced perturbed hard-sphere-chain equation of state	Xiaoning Chen Yoshiyuki Sato Shigeki Takishima Hirokatsu Masuoka	Fluid Phase Equilibria, 237 (2005) pp. 162-169
D28 Synthesis of Thermosensitive Poly(N-alkylacrylamide) Gel and Core-Shell Type Gel	Takashi Iizawa Yoshinobu Matsuura Yukio Onohara	Polymer, 46 (2005) pp. 8098-8106
D29 Acetylation of Poly(2-hydroxyethyl acrylate) Gel Beads obtained from Sedimentation Polymerization	Takashi Iizawa Kaoru Nakao Takayoshi Yamaguchi Makoto Maruta	Polymer, 46 (2005) pp. 1834-1840
D30 Equilibrium and kinetics for temperature swing adsorption of a target metal on molecular imprinted thermosensitive gel adsorbents	Hideaki Tokuyama Ryoichi Kanazawa Shuji Sakohara	Separation and Purification Technology, 44 (2005) pp. 152-159
D31 Development and Performance of a Novel Molecular Imprinted Thermosensitive Gel with a Cross-linked Chelating Group for the Temperature Swing Adsorption of a Target Metal	Hideaki Tokuyama Msaru Fujioka Shuji Sakohara	Journal of Chemical Engineering of Japan, 38 , 8 (2005) pp. 633-640

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D32 Stability of H ₂ -permeselective Ni-doped silica membranes in steam at high temperature	Masakoto Kanezashi Masashi Asaeda	Journal of Chemical Engineering of Japan, 38 , 11 (2005) pp. 908-912
D33 A study on vapor permeation and pervaporation of acetic acid/water mixtures by porous silica membranes	Michio Ishida Yasufumi Tasaka Masashi Asaeda	Journal of Chemical Engineering of Japan, 38 , 11 (2005) pp. 903-907
D34 Pervaporation of aqueous organic acid solutions by porous ceramic membranes	Masashi Asaeda Michio Ishida Toshinori Waki	Journal of Chemical Engineering of Japan, 38 , 5 (2005) pp. 336-343
D35 Pervaporation characteristics of silica-zirconia membranes for separation of aqueous organic solutions	Masashi Asaeda Michio Ishida Yasufumi Tasaka	Separation Science and Technology, 40 (2005) pp. 239-254
D36 Nickel-doped silica membranes for separation of helium from organic gas mixtures	Masakoto Kanezashi Toshio Fujita Masashi Asaeda	Separation Science and Technology, 40 (2005) pp. 225-238
D37 The Effect of a New Method of Fluid Flow Control on Submicron Particle Classification in Gas-cyclones	Hideyo Yoshida Kouichiro Ono Kunihiro Fukui	Powder Technology, 149 (2005) pp. 139-147
D38 Selective Synthesis of Phillipsite from Fly Ash and Rice Husk Ash Prepared by Hydrothermal Treatment	Kunihiro Fukui Hideyo Yoshida Mayumi Takiguchi Tatsunori Noriyasu	Proceeding of 7th World Congress of Chemical Engineering, C32 , 002 (2005)
D39 Molecular-Scale Observation of the Surface of Polystyrene Particles by AFM	Tetsuya Yamamoto Tomohiro Fukushima Yoichi Kanda Ko Higashitani	Journal of Colloid and Interface Science, 292 (2005) pp. 392-396
D40 A New Method for the	Hideyo Yoshida Tantular Nurtono Kunihiro Fukui	Powder Technology, 150 (2005) pp. 9-19
D41 Classification of Silica Fine Particles Using a Hydro-cyclone	P.Wongsarivej W.Tanthapanichakoon H. Yoshida	Science and Tech. of Advanced Materials, 6 (2005) pp. 364-369
D42 Fly-Ash Classification with Revised Cyclone	Hideyo Yoshida Kunihiro Fukui S. Taniguchi K. Ono	The 6th International Symposium of Hot Gas Cleaning, (2005) pp. 137-143
D43 Round Robin Test Results by Laser Diffraction Method for Reference Glass Particles Distributed from APPIE	Yasuo Mori Hideyo Yoshida Hiroaki Masuda	PSA-2005, (2005) pp. 1-5
D44 Effect of Blade Rotation on Particle Classification Performance of Hydro-cyclon	Hideyo Yoshida Kunihiro Fukui Yoshimi Norimoto	The 43th Symposium of Powder Technology, (2005) pp. 11-17
D45 Fine Particle Classification by Water Sieve with Electro-potential Applied to Flow	Hideyo Yoshida Kunihiro Fukui Ayumi Hashida H. Michitani	Filtration and Separation Symposium 2005, (2005) pp. 26-30
D46 Particle Size Distribution of APPIE Reference Glass Particles Measured by Laser Diffraction Method	Yasuo Mori Hideyo Yoshida Hiroaki Masuda	The 43th Symposium of Powder Technology, (2005) pp. 401-405
D47 Nucleation and growth process in soap-free polymerization of styrene investigated by atomic force microscopy	Ko Higashitani Yoichi Kanda Tetsuya Yamamoto	Proceeding of 7th World Congress of Chemical Engineering, O164 , 002 (2005)
D48 Damage Behaviour of Metallic Materials Caused by Subsonic to Hypervelocity Particle Impact	Yoshinori Isomoto Oka Kazuo Nagahashi Yukimasa Ishii Yasuo Kobayashi Toshinori Tsumura	Wear, 258 (2005) pp. 100-106
D49 Mechanical Properties and Adhesion of Oxide Films Examined by a Solid Particle Impact Method at High Temperature Corrosive Environments	Yoshinori Isomoto Oka Yasuhiro Mukai Toshinori Tsumura	Wear, 258 (2005) pp. 92-99

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D50 Practical Estimation of Erosion Damage Caused by Solid Particle Impact Part 1: Effects of Impact Parameters on a Predictive Equation of Erosion Damage	Yoshinori Isomoto Oka Kenji Okamura Toki Yoshida	Wear, 259 (2005) pp. 95-101
D51 Practical Estimation of Erosion Damage Caused by Solid Particle Impact Part 2: Mechanical Properties of Material Directly Associated with Erosion Damage	Yoshinori Isomoto Oka Toki Yoshida	Wear, 259 (2005) pp. 102-109
D52 2,6-Diarylnaphtho[1,8-bc:5,4-b'c']dithiophenes as New High-Performance Semiconductors for Organic Field-Effect Transistors	Kazuo Takimiya Yoshihito Kunugi Yuta Toyoshima Tetsuo Otsubo	J. Am. Chem. Soc., 127 , 10 (2005) pp. 3605-3612
D53 Superconductivity Competing with the Incommensurate Antiferromagnetic Insulating State in the Organic Conductor (MDT-ST)(AuI ₂) _{0.441}	Tadashi Kawamoto Yoshimasa Bando Takehiko Mori Kazuo Takimiya Tetsuo Otsubo	Phys. Rev. B, 71 (2005) pp. 052501/1-052501/4
D54 Control of Photoinduced Energy- and Electron-Transfer Steps in Zinc Porphyrin-Oligothiophene-Fullerene Linked Triads with Solvent Polarity	Takumi Nakamura Junya Ikemoto Mamoru Fujitsuka Yasuyuki Araki Osamu Ito Kazuo Takimiya Yoshio Aso Tetsuo Otsubo	J. Phys. Chem. B, 109 (2005) pp. 14365-14374
D55 Structural and Transport Properties of the Incommensurate Organic Superconductor (MDT-ST)(I ₃) _{0.417}	Tadashi Kawamoto Takehiko Mori Shinya Uji Jun-ichi Yamamura Hiroshi Kitagawa Ayumi Takamori Kazuo Takimiya Tetsuo Otsubo	Phys. Rev. B, 71 (2005) pp. 172503/1-172503/4
D56 Selenium-Containing p-Conjugated Compounds for Electronic Molecular Materials	Kazuo Takimiya Tetsuo Otsubo	Phos. Sul. Sil., 180 , 3-4 (2005) pp. 873-881
D57 Syntheses, Structures, Spectroscopic Properties, and p-Dimeric Interactions of [n,n]Quinque thiophenophanes	Toyofumi Sakai Teizi Satou Takeshi Kaikawa Kazuo Takimiya Tetsuo Otsubo Yoshio Aso	J. Am. Chem. Soc., 127 , 22 (2005) pp. 8082-8089
D58 Extensive Quinoidal Oligothiophenes with Dicyanomethylene Groups at Terminal Positions as Highly Amphoteric Redox Molecules	Toshiaki Takahashi Ken-ichi Matsuoka Kazuo Takimiya Tetsuo Otsubo Yoshio Aso	J. Am. Chem. Soc., 127 , 25 (2005) pp. 8928-8929
D59 Syntheses of 2-(Pentafluorophenyl)thiophene Derivatives via the Palladium-Catalyzed Suzuki reaction	Kazuo Takimiya Naoto Niihara Tetsuo Otsubo	Synthesis, 10 (2005) pp. 1589-1592
D60 Anisotropic Three-dimensional Superconductivity of the Incommensurate Organic Superconductor (MDT-ST)(I ₃) _{0.417}	Tadashi Kawamoto Takehiko Mori T. Terashima Shinya Uji A. Takamori Kazuo Takimiya Tetsuo Otsubo	J. Phys. Soc. Jpn, 74 , 5 (2005) pp. 1529-1533
D61 Oligothiophene-Multifullerene Linkage Molecules as High Performance Photovoltaic Materials	Nobuo Negishi Kazuo Takimiya Tetsuo Otsubo Yutaka Harima Yoshio Aso	Synth. Met., 152 (2005) pp. 125-128

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D62 Molecular Conductors Based on peri-Ditellurium-Bridged Donors, 2,3-DMTTeA and TMTTeN	Emiko Fujiwara Hideki Fujiwara Bakhyt Zh. Narymbetov Hayao Kobayashi Masahiro Nakata Hajime Torii Akiko Kobayashi Kazuo Takimiya Tetsuo Otsubo Fumio Ogura	Eur. J. Inorg. Chem, (2005) pp. 3435-3449
D63 Polyether-Bridged Sexithiophene as a Complexation-Gated Molecular Wire for Intramolecular Photoinduced Electron Transfer	Takuro Oike Tomoyuki Kurata Kazuo Takimiya Tetsuo Otsubo Yoshio Aso Humin Zhang Yasuyuki Araki Osamu Ito	J. Am. Chem. Soc., 127 , 44 (2005) pp. 15372-15373
D64 Synthesis and Spectral Properties of a Highly Soluble Push-Pull Type of Quinoidal Thiophenes	Toshiaki Takahashi Kazuo Takimiya Tetsuo Otsubo Yoshio Aso	Org. Lett., 7 , 20 (2005) pp. 4313-4316
D65 A Practical Two-Step Synthesis of Tetraselenafulvalene (TSF)	Kazuo Takimiya Hyung Joon Jeon Tetsuo Otsubo	Synthesis, 16 (2005) pp. 2810-2813
D66 Facile Synthesis, Structure, and Properties of Benzo[1,2-b:4,5-b']dichalcogenophenes	Kazuo Takimiya Yasushi Konda Hideaki Ebata Naoto Niihara Tetsuo Otsubo	J. Org. Chem., 70 , 25 (2005) pp. 10569-10571
D67 Single-Crystal Field-Effect Transistors Based on Organic Selenium-containing Semiconductors	R. Zeis C. Kloc Kazuo Takimiya Yoshihito Kunugi Yasushi Konda Naoto Niihara Tetsuo Otsubo	Jpn. J. Appl. Phys. Pt. 1, 44 (2005) pp. 3712-3714
D68 Fullerene-tethered Oligothiophenes as Advanced Molecular Electronics Materials	Tetsuo Otsubo Yoshio Aso Kazuo Takimiya	Pure & Appl. Chem., 77 , 12 (2005) pp. 2003-2010
D69 Influences of self-assembled structure on mobilities of charge carriers in pi-conjugated polymers	X. Jiang R. Patil Y. Harima J. Ohshita A. Kunai	J. Phys. Chem., 109 (2005) pp. 221-229
D70 Synthesis of oligomers having a pendant dithienosilole unit and their applications to EL device materials	K.-H. Lee J. Ohshita K. Kimura Y. Kunugi A. Kunai	J. Organomet. Chem., 690 (2005) pp. 333-337
D71 Preparation of Poly(silylene-p-phenylene)s Containing a Pendant Fluorophor and Their Applications to PL Imaging	J. Ohshita T. Uemura D.-H. Kim A. Kunai Y. Kunugi M. Kakimoto	Macromolecules, 38 (2005) pp. 730-735
D72 Preparation of polymers containing Fe(0)-coordinated 2,5-diethynylsilole units	J. Ohshita H. Arase T. Sumida N. Mimura K. Yoshimoto Y. Tada Y. Kunugi Y. Harima A. Kunai	Inorg. Chim. Acta, 358 (2005) pp. 4156-4162

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D73 Site-Specific Fragmentation Caused by Si:1s Core-Level Photoionization of F ₃ SiCH ₂ CH ₂ Si(CH ₃) ₃ Vapor	S. Nagaoka Y. Tanemori M. Hino T. Kakiuchi J. Ohshita K. Okada T. Ibuki I.H. Suzuki	Chem. Phys. Lett., 412 (2005) pp. 459-463
D74 Synthesis of Silicon-Bridged Benzcrown Ethers and Their Ionochromism in the Emission Spectra Arising from Intramolecular π - π Stacking	J. Ohshita T. Uemura T. Inoue T. Iida A. Kunai	Organometallics, 24 (2005) pp. 2570-2576
D75 Anodic Polymerization of Dithienosilole and Electroluminescent Properties of the Resulting Polymer	J. Ohshita D. Hamamoto Y. Kimura A. Kunai	J. Organomet. Chem., 690 (2005) pp. 3027-3032
D76 Sonogashira-Type Coupling of Diethynylsilane and Dibromoarene in Wet Solvent for the Formation of Poly[(ethynylenearylene)-co-(diethynylenearylene)]	J. Ohshita D. Nada Y. Tada Y. Kimura H. Yoshida A. Kunai Y. Kunugi	J. Organomet. Chem., 690 (2005) pp. 3951-3956
D77 Synthesis of Organosilanylene-Oligothiylene Alternate Polymers and Their Applications to EL Device and FET Materials	J. Ohshita D.-H. Kim Y. Kunugi A. Kunai	Organometallics, 24 (2005) pp. 4494-4496
D78 Cyclic Voltammetry and Theoretical Calculations of Silyl-substituted 1,4-Benzooquinones	S. Tsutsui K. Sakamoto H. Yoshida A. Kunai	J. Organomet. Chem., 690 (2005) pp. 1324-1331
D79 Addition of Silicon-Silicon σ -Bonds to Arynes or Bisarynes Catalyzed by a Palladium Complex	H. Yoshida J. Ikadai M. Shudo J. Ohshita A. Kunai	Organometallics, 24 (2005) pp. 156-162
D80 Facile Synthesis of Polycyclic Aromatic Hydrocarbons via a Trisaryne Equivalent	J. Ikadai H. Yoshida J. Ohshita A. Kunai	Chem. Lett. , 34 (2005) pp. 56-57
D81 Aminosilylation of Arynes with Aminosilanes: Synthesis of 2-Silylaniline Derivatives	H. Yoshida T. Minabe J. Ohshita A. Kunai	Chem. Commun. , (2005) pp. 3454-3456
D82 Facile Insertion Reaction of Arynes into Carbon-Carbon σ -Bonds	H. Yoshida M. Watanabe J. Ohshita A. Kunai	Chem. Commun. , (2005) pp. 3292-3294
D83 Aryne Insertion into α -Cyanocarbonyl Compounds: Direct Introduction of Carbonyl and Cyanomethyl Moieties into the Aromatic Skeletons	H. Yoshida M. Watanabe J. Ohshita A. Kunai	Tetrahedron Lett. , 46 (2005) pp. 6729-6731
D84 Carbophosphinylation of Arynes with Cyanomethylidiphenylphosphine Oxide	H. Yoshida M. Watanabe J. Ohshita A. Kunai	Chem. Lett. , 34 (2005) pp. 1538-1539
D85 Palladium-Catalysed Dimerisation-Distannylation of Arynes: Synthesis and Reaction of 2,2'-Distannylbiaryls	H. Yoshida K. Tanino J. Ohshita A. Kunai	Chem. Commun. , (2005) pp. 5678-5680

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D86 Site-specific fragmentation caused by core-level photoexcitation: Comparison between Si:1s and 2p photoexcitations in F3SiCH ₂ CH ₂ Si(CH ₃) ₃ vapor	S. Nagaoka A. Tamura A. Fujii J. Ohshita K. Okada T. Ibuki I. H. Suzuki H. Ohhashi Y. Tamenori	International Journal of Mass Spectrometry, 257 (2005) pp. 101-105
D87 Silicon-carbon Unsaturated Compounds. 70. Thermolysis and Photolysis of Acylpolysilanes with Mesitylacetylene	A. Naka H. Ohnishi J. Ohshita J. Ikadai A. Kunai M. Ishikawa	Organometallics, 24 (2005) pp. 5356-5363
D88 Random copolymerization of propene and norbornene with <i>ansa</i> -fluorenylaminodimethyltitanium-MAO catalyst	T. Hasan T. Ikeda T. Shiono	Macromolecules, 38 , 4 (2005) pp. 1071-1074
D89 Polymerization of propylene with [<i>t</i> -BuNSiMe ₂ Ind]TiMe ₂ -MAO catalyst systems	K. Nishii T. Ikeda M. Akita T. Shiono	J. Mol. Catal. A, 231 , 1-2 (2005) pp. 241-246
D90 Hydrogenated 1,4-insertion of butadiene in the copolymerization with propylene using an isospecific zirconocene catalyst	T. Ishihara T. Shiono	J. Am. Chem. Soc., 127 , 16 (2005) pp. 5774-5775
D91 Substituent effects of <i>tert</i> -butyl groups on fluorenyl ligand in syndiospecific living polymerization of propylene with <i>ansa</i> -fluorenylaminodimethyltitanium complex	Z. Cai T. Ikeda M. Akita T. Shiono	Macromolecules, 38 , 20 (2005) pp. 8135-8139
D92 Stereospecific sequential block copolymerizations of styrene and 1,3-butadiene with a C ₅ Me ₅ TiMe ₃ /B(C ₆ F ₅) ₃ /Al(oct) ₃ catalyst	H. T. Ban Y. Tsunogae T. Shiono	J. Polym. Sci., PART A, Polym. Chem., 43 , 6 (2005) pp. 1188-1195
D93 Impact of diene addition on properties for ethylene-propylene copolymerization with <i>rac</i> -Et[Ind] ₂ ZrCl ₂ /MAO catalyst	B. Jongsomjit S. Phoowakeereeewiwat S. Thongyai T. Shiono P. Praserthdam	Mater. Lett., 59 , 28 (2005) pp. 3771-3774
D94 Highly birefringent liquid-crystalline polymers for photonic applications: synthesis of liquid-crystalline polymers with side-chain azo-tolane mesogens and their holographic properties	K. Okano A. Shishido O. Tsutsumi T. Shiono T. Ikeda	J. Mater. Chem., 15 , 33 (2005) pp. 3395-3401
D95 Effect of ester moieties in dye structures on photoinduced reorientation of dye-doped liquid crystals	M. Yaegashi A. Shishido T. Shiono T. Ikeda	Chem. Mater., 17 , 17 (2005) pp. 4304-4309
D96 Photoinduced change in birefringence and optical switching at near-infrared region based on photochemical phase transition of azobenzene liquid crystals	H. Kurihara A. Shishido O. Tsutsumi T. Shiono T. Ikeda	Mol. Cryst. Liq. Cryst., 441 (2005) pp. 173-184
D97 Novel liquid-crystalline phenylene-thienylene co-oligomers for photoinduced reorientation of liquid crystals	M. Yaegashi A. Shishido T. Shiono T. Ikeda	Mol. Cryst. Liq. Cryst., 441 (2005) pp. 201-210
D98 Synthesis and properties of highly birefringent azo-tolane liquid-crystalline polymers: effect of the position of the tolane moiety in the side chain	K. Okano A. Shishido T. Ikeda T. Shiono	Mol. Cryst. Liq. Cryst., 441 (2005) pp. 275-285

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D99 Preparation and characterization of azobenzene liquid-crystalline elastomer films with homeotropic alignment	M. Kondo T. Maeda A. Shishido T. Ikeda Y. Yu M. Nakano T. Shiono	Mol. Cryst. Liq. Cryst., 441 (2005) pp. 297-305
D100 Synthesis and electroluminescent properties of liquid-crystalline polymers containing oxazole and carbazole moieties in the same side chain	Y. M. Nam M. Kawamoto M. Kinoshita T. Shiono T. Ikeda	Mol. Cryst. Liq. Cryst., 443 (2005) pp. 95-104
D101 Photoinduced alignment behavior of poly(alkyl methacrylates) containing azobenzene moiety in the side chain	H.-B. Cha A. Shishido T. Shiono T. Ikeda	Mol. Cryst. Liq. Cryst., 443 (2005) pp. 201-209
D102 Effect of intensity of actinic light and temperature on photochemical phase transition of azobenzene liquid crystals probed by a near-infrared laser beam	H. Kurihara A. Shishido O. Tsutsumi T. Shiono T. Ikeda	Mol. Cryst. Liq. Cryst., 443 (2005) pp. 229-238
D103 Unique catalytic behavior of chromium complexes having halogenated bis(imino)pyridine ligands for ethylene polymerization	Y. Nakayama K. Sogo H. Yasuda T. Shiono	J. Polym. Sci.: Part A: Polym. Chem., 43 , 15 (2005) pp. 3368-3375
D104 Mesoporous activated carbon as electrode for electric double layer capacitor	H. Tamai M. Kunihiro M. Morita H. Yasuda	J. Mater. Sci., 40 , 14 (2005) pp. 3703-3707
D105 Synthesis of pentavalent imidovanadium complexes and their catalyses for the polymerization of ethylene and propylene	Y. Sato Y. Nakayama H. Yasuda	J. Appl. Polym. Sci., 97 , 3 (2005) pp. 1008-1015
D106 Characteristics of the biodegradability and physical properties of stereocomplexes between poly(L-lactide) and poly(D-lactide) copolymers	H. Shirahama A. Ichimaru C. Tsutsumi Y. Nakayama H. Yasuda	J. Polym. Sci.: Part A: Polym. Chem., 43 , 2 (2005) pp. 438-454
D107 Comparison of Sm complexes with Sn compounds for syntheses of copolymers composed of lactide and cyclic carbonates and their biodegradabilities	Y. Nakayama H. Yasuda K. Yamamoto C. Tsutsumi R. Jerome P. Lecomte	React. Funct. Polym., 63 , 2 (2005) pp. 95-105
D108 Developments of chiral metallocenes as polymerization catalysts	Y. Nakayama T. Shiono	Molecules, 10 , 6 (2005) pp. 620-633
D109 Impact of reservoir potentials on the analyte behavior in microchip electrophoresis estimated by computer simulation and experimental validation for DNA fragments	Zhongqi Xu Y. Nakamura Takeshi Hirokawa	Electrophoresis, 26 (2005) pp. 383-390
D110 Simultaneous determination of metal ions, amino acids, and other small biogenic molecules in human serum by capillary zone electrophoresis with transient isotachophoretic preconcentration	Hikaru Okamoto Andrei R. Timerbaev Takeshi Hirokawa	Journal of Separation Science, 28 (2005) pp. 522-528
D111 Ion chromatography for determination of nitrite and nitrate in seawater using monolithic ODS columns	Kazuaki Ito Yohichi Takayama Nobuyuki Makabe Ryo Mitsui Takeshi Hirokawa	J. Chromatogr. A, 1083 (2005) pp. 63-67

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D112 Sensitive monitoring of iodine species in sea water using capillary electrophoresis: vertical profiles of dissolved iodine in the Pacific Ocean	Zhuo Huang Kazuaki Ito Isamu Morita Kuriko Yokota Keiichi Fukushi Andrei R. Timerbaev Shuichi Watanabe Takeshi Hirokawa	J. Environ. Monit, 7 , 8 (2005) pp. 804-808
D113 Investigation of Individual Micrometer-Size Kosa Particle with On-Site Combination of Electron Microscope and Synchrotron X-Ray Microscope	Y. Tanaka Y. Taniguchi D. Tanaka M. Toyoda H. Ishii T. Tanabe Y. Terada S. Hayakawa J. Kawai	Anal. Sci., 21 (2005) pp. 839-843
D114 Influences of self-assembled structure on mobilities of charge carriers in pi-conjugated polymers	X. Jiang R. Patil Y. Harima J. Ohshita A. Kunai	J. Phys. Chem. B, 109 (2005) pp. 221-229
D115 Synergism of electrochemical and mechanical factors in porous silicon growth	V. Parkhutik M. Udagawa Y. Harima	phys. stat. sol. (a), 202 (2005) pp. 1374-1379
D116 Quantification of cross-sectional morphology of porous silicon using stochastic signal spectroscopy	V. Parkhutik Y. Makusok K. Inumaru Y. Harima	phys. stat. sol. (a), 202 (2005) pp. 1407-1410
D117 Oligothiophene-multifullerene linkage molecules as high performance photovoltaic materials	N. Negishi K. Takimiya T. Otsubo Y. Harima Y. Aso	Synth. Metals, 152 (2005) pp. 125-128
D118 Preparation of polymers containing Fe(0)-coordinated 2,5-diethynylsilole units	J. Ohshita H. Arase T. Sumida N. Mimura K. Yoshimoto Y. Tada Y. Kunugi Y. Harima A. Kunai	Inorg. Chim. Acta., 358 (2005) pp. 4156-4162
D119 Conductivity Enhancement in Poly(N-alkylaniline) Obtained from Several Polymerizing Solutions Containing Different Organic Solvents	Jun Yano Tomomi Mukai Sumio Yamasaki Akira Kitani	Electrochemistry, 73 , 4 (2005) pp. 269-271
D120 Direct ESR evidence for SH ₂ type reaction of methyl radical with methylsilane and methylgermane in a low temperature solid: a deuterium labeling study	Kenji Komaguchi Daniel Norberg Naoko Nakazawa Masaru Shiotani Petter Persson Sten Lunell	Chem. Phys. Lett., 410 (2005) pp. 1-5
D121 Copper-phthalocyanine encapsulated into zeolite-Y with high Si/Al: An EPR study	Hidegori Yahiro Kunihiro Kimoto Hiroyuki Yamaura Kenji Komaguchi Anders Lund	Chem. Phys. Lett., 415 (2005) pp. 126-130
D122 High-pressure synthesis and transport properties of a new binary germanides, SrGe _{6-d} (d = ~ 0.5), with a cage-like structure	Hiroshi Fukuoka Shoji Yamanaka Eiichi Matsuoka Toshiro Takabatake	Inorganic chemistry, 44 (2005) pp. 1460-1465

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D123 Structural, transport, and thermal properties of single crystalline type-VIII clathrate Ba ₈ Ga ₁₆ Sn ₃₀	Dexuan Huo Takeaki Sakata Testuya Sasakawa Marcos A. Avila Masami Tsubota Fumitoshi Iga Hiroshi Fukuoka Shoji Yamanaka Shinobu Aoyagi Toshiro Takabatake	Physical Review B, 71 (2005) pp. 075113/1-6
D124 High-pressure Raman study of the Ba-doped silicon clathrate Ba ₂₄ Si ₁₀₀ up to 27 GPa	H. Shimizu T. Kume T. Kuroda S. Sasaki H. Fukuoka S. Yamanaka	Physical Review B, 71 (2005) pp. 094108/1-5
D125 Compton scattering study of the silicon clathrate Ba ₈ Si ₄₆ : Experiment and theory	M. Ito Y. Sakurai M. Usuda C. Cros H. Fukuoka S. Yamanaka	Physical Review, 71 (2005) pp. 125125/1-4
D126 Synthesis and Characterization of Superconducting β -Mo ₂ N Crystalline Phase on Si Substrate: An Application of Pulsed Laser Deposition to Nitride Chemistry	K. Inumaru K. Baba S. Yamanaka	Chemistry of Materials, 17 (2005) pp. 5935-5940
D127 Direct Nanocomposite of TiO ₂ Particles and Mesoporous Silica as a Molecular Selective and Highly Active Photocatalyst	K. Inumaru T. Kasahara M. Yasui S. Yamanaka	Chemical Communications, 2005 (2005) pp. 2131-2133
D128 Pressure induced homothetic volume collapse in silicon clathrates	A. San Miguel A. Merlen P. Toulemonde T. Kume S. Le Floch A. Aouizerat S. Pasquarelli G. Aquilanti O. Mathon S. Yamanaka	Europhysics Lett., 69 (2005) pp. 556-562
D129 Superconductivity and physical properties of Ba ₂₄ Si ₁₀₀ determined from electric transport, specific-heat capacity, and magnetic susceptibility measurements	T. Rachi H. Yoshino R. Kumashiro M. Kitajima K. Kobayashi K. Yokogawa K. Murata N. Kimura H. Aoki H. Fukuoka S. Yamanaka H. Shimotani T. Takenobu Y. Iwasa T. Sasaki N. Kobayashi Y. Miyazaki K. Saito F. Guo K. Kobayashi K. Osaka K. Kato M. Takata K. Tanigaki	Physical Review B, 72 (2005) pp. 144504/1-6

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D130 Role of Ag doping in silicon clathrate compounds	N. Kamakura T. Nakano Y. Ikemoto M. Usada H. Fukuoka S. Yamanaka S. Shin K. Kobayashi	Physical Review B, 72 (2005) pp. 4511/1-6
D131 Tunneling Spectroscopy of Deintercalated Layered Nitride Superconductor ZrNCl0.7	T. Takasaki T. Ekino H. Fujii S. Yamanaka	J. Phys. Soc. Jpn., 74 (2005) pp. 2586-2591
D132 Upper critical field in the electron-doped layered superconductor ZrNCl0.7: Magnetoresistance studies	H. Tou Y. J. Tanaka M. Sera Y. Taguchi T. Sasaki Y. Iwasa L. Zhu S. Yamanaka	Physical Review B, 72 (2005) pp. 501/1-4
D133 Anomalously large electron-phonon coupling constant in layered nitride superconductors as revealed by high-pressure experiments	M. Hisakabe Y. Taguchi Y. Ohishi S. Yamanaka Y. Iwasa	Physica C, 426 (2005) pp. 482-486
D134 Electronic structure and vibrational properties of Ba8Si46, Ba8AgnSi46-n, and Ba8AunSi46-n	J. S. Tse T. Iitaka K. Kume H. Shimizu K. Parlinski H. Fukuoka S. Yamanaka	Physical Review B, 72 (2005) pp. 155441/1-9
D135 Angle-resolved-photoemission study of layer-structured nitride β -HfNCl	A. Ino K. Yamazaki T. Yamasaki M. Higashiguchi K. Shimada H. Namatame M. Taniguchi T. Oguchi X. Chen S. Yamanaka	J. Electron Spectroscopy and Related Phenomena, 144 (2005) pp. 667-669
D136 Rare-earth silylamine-catalyzed mono-coupling reaction of isocyanides with terminal alkynes.	Kimihiro Komeyama Daisuke Sasayama Tomonori Kawabata Katsuomi Takehira Ken Takaki	Journal of Organic Chemistry, 70 , 26 (2005) pp. 10679-10687
D137 Rare-earth silylamine-catalyzed selective dimerization of terminal alkynes and subsequent hydrophosphination in one pot.	Kimihiro Komeyama Tomonori Kawabata Katsuomi Takehira Ken Takaki	Journal of Organic Chemistry, 70 , 17 (2005) pp. 7260-7266
D138 Iron-containing MCM-41 catalysts for Baeyer-Villiger oxidation of ketones using molecular oxygen and benzaldehyde.	Tomonori Kawabata Yoshihiko Ohishi Satoko Itsuki Naoko Fujisaki Tetsuya Shishido Ken Takaki Qinghong Zhang Ye Wang Katsuomi Takehira	Journal of Molecular Catalysis A: Chemical, 236 , 1-2 (2005) pp. 99-106
D139 Nickel containing Mg-Al hydrotalcite-type anionic clay catalyst for the oxidation of alcohols with molecular oxygen.	Tomonori Kawabata Yuriko Shinozuka Yoshihiko Ohishi Tetsuya Shishido Ken Takaki Katsuomi Takehira	Journal of Molecular Catalysis A: Chemical, 236 , 1-2 (2005) pp. 206-215

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D140 Mg-Fe-Al mixed oxides with mesoporous properties prepared from hydrotalcite as precursors: Catalytic behavior in ethylbenzene dehydrogenation.	Yoshihiko Ohishi Tomonori Kawabata Tetsuya Shishido Ken Takaki Qinghong Zhang Ye Wang Kiyoshi Nomura Katsuomi Takehira	Applied Catalysis, A: General, 288 , 1-2 (2005) pp. 220-231
D141 Mechanism of reconstitution of hydro-talcite leading to egg-shell type Ni loading on MgAl mixed oxide.	Katsuomi Takehira Tomonori Kawabata Tetsuya Shishido Kazuhiro Murakami Takenori Ohi Daisuke Shoro Masahide Honda Ken Takaki	Journal of Catalysis, 231 , 1 (2005) pp. 92-104
D142 Catalytic growth of carbon fibers from methane and ethylene on carbon-supported Ni catalysts.	Katsuomi Takehira Takenori Ohi Tetsuya Shishido Ken Takaki	Applied Catalysis, A: General , 283 , 1-2 (2005) pp. 137-145
D143 Dehydrogenation of ethylbenzene with CO ₂ over Cr-MCM-41 catalyst.	Yoshihiko Ohishi Tomonori Kawabata Tetsuya Shishido Ken Takaki Qinghong Zhang Ye Wang Katsuomi Takehira	Journal of Molecular Catalysis A: Chemical, 230 , 1-2 (2005) pp. 49-58
D144 Novel and effective surface enrichment of active species in Ni-loaded catalyst prepared from Mg-Al hydrotalcite-type anionic clay.	Katsuomi Takehira Tetsuya Shishido Daisuke Shouro Kazuhiro Murakami Masahide Honda Tomonori Kawabata Ken Takaki	Applied Catalysis, A: General, 279 , 1-2 (2005) pp. 41-51
D145 Direct mono-insertion of isocyanides into terminal alkynes catalyzed by rare-earth silylamides.	Kimihiko Komeyama Daisuke Sasayama Tomonori Kawabata Katsuomi Takehira Ken Takaki	Chemical Communications , 5 (2005) pp. 634-636
D146 Partial oxidation of CH ₄ to synthesis gas using Ni-catalyst/Au—YSZ—Ag electrochemical membrane reactor.	Katsuomi Takehira Junpei Shimomura Satoshi Hamakawa Tetsuya Shishido Tomonori Kawabata Ken Takaki	Applied Catalysis, B: Environmental, 55 , 2 (2005) pp. 93-103
D147 Standardization of catalyst preparation using reference catalyst: ion exchange of mordenite type zeolite 1: Remarkable dealumination accompanying ion exchange	Naonobu Katada Tatsuya Takeguchi Tatsuya Suzuki Toshihisa Fukushima Kinya Inagaki Setsuo Tokunaga Hiromichi Shimada koichi Sato Yasunori Oumi Tsuneji Sano	Applied Catalysis, A: General, 283 (2005) pp. 63-74
D148 Standardization of catalyst preparation using reference catalyst : ion exchange of mordenite type zeolite 2: Origin of dealumination and recommended standard conditions	Naonobu Katada Tatsuya Takeguchi Tatsuya Suzuki Toshihisa Fukushima Kinya Inagaki Setsuo Tokunaga Hiromichi Shimada koichi Sato Yasunori Oumi Tsuneji Sano	Applied Catalysis, A: General, 283 (2005) pp. 75-84

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D149 Synthesis of aluminophosphate molecular sieves with AFI topology substituted by alkaline earth metal and their application to solid acid catalysis	Shyamal Kumar Saha Suresh Waghmode Hiroyoshi Maekawa kenichi Komura Yoshihiro Kubota Yoshihiro Sugi Yasunori Oumi Tsuneji Sano	Microporous and Mesoporous Materials, 81 (2005) pp. 289-303
D150 Effect of ammonium salts on hydrothermal synthesis of high-silica mordenite	Baowang Lu Yasunori Oumi Keiji Itabashi Tsuneji Sano	Microporous and Mesoporous Materials, 81 (2005) pp. 365-374
D151 Stabilization of bioethanol recovery with silicon rubber-coated ethanol-permselective silicalite membranes by controlling the pH of acidic feed solution	Toru Ikegami Hideyuki Negishi Dai Kitamoto Keiji Sakaki Tomohiro Imura Masayoshi Okamoto Nobuyuki Koura Tsuneji Sano Kenji Haraya Hiroshi Yanagishita	Journal of Chemical Technology and Biotechnology, 80 (2005) pp. 381-387
D152 Dealumination behavior of ZSM-5 type zeolite containing alkaline earth metal	Suguru Fujita Takahide Kanai Yasunori Oumi Tsuneji Sano	Studies in Surface Science and Catalysis, 158 (2005) pp. 191-198
D153 Novel high-silica zeolite CDS-1 converted from layered silicate PLS-1 by dehydration-condensation	Takuji Ikeda Yasunori Oumi Eiji Hida Toshiro Yokoyama Tsuneji Sano Fujio Mizukami	Studies in Surface Science and Catalysis, 158 (2005) pp. 223-230
D154 Characterization of high-silica mordenites synthesized by various direct hydrothermal synthesis methods	Baowang Lu Takahide Kanai Yasunori Oumi Hideyuki Itou Keiji Itabashi Tsuneji Sano	Studies in Surface Science and Catalysis, 158 (2005) pp. 725-732
D155 Propylene polymerization behavior of Ti-containing mesoporous silicas	Yasunori Oumi Shuya Takashima Ayako Hanai Hiroyoshi Nakajima Katsuhiro Yamada Satoru Hosoda Tsuneji Sano	Studies in Surface Science and Catalysis, 158 (2005) pp. 1437-1444
D156 Biological solubilization and mineralization as novel approach for the pre-treatment of food waste	Hazel B. Gonzales Kazunori Takyu Hideki Sakashita Yoichi Nakano Wataru Nishijima Mitsumasa Okada	Chemosphere, 58 , 1 (2005) pp. 57-63
D157 Effect of metal ions on decomposition of chlorinated organic substances by ozonation in acetic acid	Kiyokazu Okawa Tsung-Yueh Tsai Yoichi Nakano Wataru Nishijima Mitsumasa Okada	Chemosphere, 58 , 4 (2005) pp. 523-527
D158 Enhancement of the catalytic hydrodechlorination of tetrachloroethylene in methanol at mild conditions by water addition	Neil C. Concibido Tetsuji Okuda Yoichi Nakano Wataru Nishijima Mitsumasa Okada	Tetrahedron Letters, 46 , 21 (2005) pp. 3613-3617
D159 TCE removal from porous media using an ozone-saturated solvent	Martha Elena Alcantara-Garduno Tetsuji Okuda Wataru Nishijima Okada Mitsumasa	Chemistry letters, 34 , 11 (2005) pp. 1504-1505

Paper Title	Author Name	Journal, Vol., No. (Year) Page
D160 Chemical extraction of organic carbon to reduce the leaching potential from MSWI bottom ash	A.L. Guimaraes Tetsuji Okuda Wataru Nishijima Mitsumasa Okada	Journal of Hazardous Materials, 125, 17 (2005) pp. 141-146

E. Social and Environmental Systems Engineering

Paper Title	Author Name	Journal, Vol., No. (Year) Page
E1 Autogenous Shrinkage of High Strength Concrete Containing Silica Fume under Drying at Early Age	Yang Yang Ryoichi Sato Kenji Kawai	Cement and Concrete Research, 35, 3 (2005) pp. 449-456
E2 The Effect of Autogenous Shrinkage on Flexural Cracking Behavior of Reinforced HSC Beams and Improvement by Using Low-Shrinkage HSC	Masahiro Suzuki Makoto Tanimura Ryoichi Sato	Proceedings of 4th International Research Seminar on Self-Desiccation and Its Importance in Concrete Technology, (2005) pp. 139-152
E3 An Investigation of Prediction Model for Autogenous Shrinkage/Expansion Strain of Low-Shrinkage HSC	Makoto Tanimura Yuji Mitani Ryoichi Sato	Proceedings of 4th International Research Seminar on Self-Desiccation and Its Importance in Concrete Technology, (2005) pp. 245-263
E4 Importance of Autogenous Shrinkage to Serviceability Performance of RC Flexural Members and Improvement by Using Low Shrinkage-High Strength Concrete	Makoto Tanimura Ryoichi Sato	Proceedings of the COE Workshop on Material Science in 21st Century for the Construction Industry - Durability, Repair and Recycling of Concrete Structures (Hokkaido University), (2005) pp. 53-69
E5 A Proposal of Concrete Structure Design Methods Considering Environmental Performance	Kenji Kawai Takafumi Sugiyama Koichi Kobayashi Susumu Sano	Journal of Advanced Concrete Technology, 3, 1 (2005) pp. 41-51
E6 Concrete Deterioration Caused by Sulfuric Acid Attack	Kenji Kawai Shin-ya Yamaji Tatsuo Shinmi	Proceedings of 10th International Conference on Durability of Building Materials and Components (in CD-ROM), (2005)
E7 Consideration of Environmental Aspects of Concrete in Performance-Based Design	Kenji Kawai Takafumi Sugiyama	Proceedings of 6th International Congress on Global Construction: Ultimate Concrete Opportunities - Application of Codes, Design and Regulations, (2005) pp. 465-472
E8 Heavy Metal Leaching Evaluation from Concrete Structures	Kenji Kawai Takeshi Matsumura Shoichi Tano	Proceedings of Third International Conference on Construction Materials: Performance, Innovations and Structural Implications (in CD-ROM), (2005)
E9 Inventory Data and Case Studies for Environmental Performance Evaluation of Concrete Structure Construction	Kenji Kawai Takafumi Sugiyama Koichi Kobayashi Susumu Sano	Journal of Advanced Concrete Technology, 3, 3 (2005) pp. 435-456
E10 A Proposal of Model for Evaluating Environmental Performance of Concrete	Kenji Kawai Takafumi Sugiyama Koichi Kobayashi Susumu Sano	Proceedings of Three-Day CAN-MET/ACI/JCI International Symposium on Sustainable Development of Cement, Concrete, and Concrete Structures, (2005) pp. 351-370

Paper Title	Author Name	Journal, Vol., No. (Year) Page
E11 Properties of Expansive-Ultra High Strength Concrete	Masahiro Suzuki Ippei Maruyama Ryoichi Sato	Proceedings of 7th International Symposium on the Utilization of High Strength/High Performance Concrete, ACI SP-228 (2005) pp. 1159-1174
E12 Prediction of Temperature in Ultra High-Strength Concrete Based on Temperature Dependent Hydration Model	Ippei Maruyama Masahiro Suzuki Ryoichi Sato	Proceedings of 7th International Symposium on the Utilization of High Strength/High Performance Concrete, ACI SP-228 (2005) pp. 1175-1186
E13 Improvement of Time-Dependent Flexural Behavior in RC Members by Using Low Shrinkage-High Strength Concrete	Makoto Tanimura Masahiro Suzuki Ippei Maruyama Ryoichi Sato	Proceedings of 7th International Symposium on the Utilization of High Strength/High Performance Concrete, ACI SP-228 (2005) pp. 1373-1396
E14 Mechanical Properties of High-Strength Concrete with Expansive Additive and Shrinkage Reducing Admixture Under Simulated Completely-Restrained Condition at Early Age	Takafumi Noguchi Songyu Park Ippei Maruyama	Proceedings of 4th International Research Seminar on Self-Desiccation and Its Importance in Concrete Technology, (2005) pp. 67-77
E15 A Trial of Reducing Autogenous Shrinkage by Recycled Aggregate	Ippei Maruyama Ryoichi Sato	Proceedings of 4th International Research Seminar on Self-Desiccation and Its Importance in Concrete Technology, (2005) pp. 264-270
E16 Time-dependent Behavior of Reinforced Recycled Concrete Beams	Ippei Maruyama Yukihide Oka Ryoichi Sato	Proceedings of 7th International Conference on Creep, Shrinkage and Durability of Concrete and Concrete Structures (Hermes Science), (2005) pp. 263-268
E17 Shrinkage Effect on Shear Behavior of Reinforced HSC Beams	Hajime Kawakane Ryota Ushio Ippei Maruyama Ryoichi Sato	Proceedings of 7th International Conference on Creep, Shrinkage and Durability of Concrete and Concrete Structures (Hermes Science), (2005) pp. 597-602
E18 Temperature Effect on Shrinkage Stress in Expansive-ultra High Strength Concrete	Masahiro Suzuki Ippei Maruyama Kenji Kawai Ryoichi Sato	Proceedings of 7th International Conference on Creep, Shrinkage and Durability of Concrete and Concrete Structures (Hermes Science), (2005) pp. 627-632
E19 Effects of Carbon Dioxide Concentration in Gas Phase of Pores on the Decomposition Rate of Friedel's Salt Due to Carbonation	Takeo Ishida Kenji Kawai Ryoichi Sato	Proceedings of Third International Conference on Construction Materials: Performance, Innovations and Structural Implications (in CD-ROM), (2005)
E20 Modeling for Fixation of Chloride Ions in Pore Solution	Takeo Ishida Kenji Kawai Ryoichi Sato	Proceedings of 7th International Conference on Creep, Shrinkage and Durability of Concrete and Concrete Structures (Hermes Science), (2005) pp. 225-230
E21 Twist buckling and the foldable cylinder : an exercise in origami	Giles W. Hunt Ichiro Ario	Int. J. of Nonlinear Mechanics, 40 (2005) pp. 833-843
E22 BUCKLING PATTERNS ANALYSIS OF THE SYMMETRIC STRUCTURES WITH THE FULLERENE	Ichiro Ario	Proceedings of International Conference on Computational and Experimental Engineering and Sciences, (2005) pp. 1446-1451

Paper Title	Author Name	Journal, Vol., No. (Year) Page
E23 Experimental and numerical studies on steel penstock vibrations caused by pressure pulsations	Kosuke Yamamoto Hideharu Nakamura	Structural Eng./Earthquake Eng., JSCE, 22 , 2 (2005) pp. 95s-106s
E24 A Consideration on Slip Test Methods for Perforated Rib Shear Connector Forcusing on Concrete Confinements	Hatsumi Iwasaki Katashi Fujii Kazuhiro Fukada Tadashi Toyota Hideharu Nakamura	Proceedings of First International Conference on Advances in Experimental Structural Engineering, 1 (2005) pp. 871-876
E25 Slip Behavior of Perforated Rib Shear Connector in Composite Girders with Thick Concrete Slab	Kazuhiro Fukada Katashi Fujii Hatsumi Iwasaki Tadashi Toyota	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 81-87
E26 A Simple Estimation Method of Bending Strength for Corroded Plate Girder	Tatsumasa Kaita Kozo Tagaya Katashi Fujii Masashi Miyashita Minoru Uenoya	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 89-97
E27 Fundamental Study on Shear Strength of Corroded Plate Girder Web	Kozo Tagaya Akihito Kariya Tatsumasa Kaita Katashi Fujii Takashi Hara Minoru Uenoya	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 99-104
E28 Mechanical Properties of Corroded Steel Plate under Tensile Force	Akihito Kariya Kozo Tagaya Tatsumasa Kaita Katashi Fujii	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 105-110
E29 Ultimate Behavior of Corrugate Steel Web Bridges with Tapered Cross-Section	Yousuke Nakashima Katashi Fujii Naoto Yoshida Hideharu Nakamura	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 111-117
E30 A Generating Model of Surface Irregularities with Corrosion Progress due to Aging in Steel Structures	Osamu Yamamoto Katashi Fujii	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 445-451
E31 A Method of Reproduction of Corroded Steel surface by Image-Based Measurement and Its Application to the Maintenance	Yozo Matsushita Hideharu Nakamura Katashi Fujii	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 439-444
E32 A Comparative Study on Seismic and wind Resistant Performance of Steel Tower Structures	Takeshi Nakayama Hideharu Nakamura Katashi Fujii	Collaboration and Harmonization in Creative Systems (ISEC-03), 1 (2005) pp. 467-472
E33 Investigations on steel penstock vibrations caused by pressure pulsation	Kosuke Yamamoto Hideharu Nakamura	Waterpower XIV, 1 (2005)
E34 Reproduction of corroded steel surface by image-based measurement and its application to the maintenance	Youzou Matsushita Hideharu Nakamura Katashi Fujii	Proceedings of First International Conference on Advances in Experimental Structural Engineering, 2 (2005) pp. 917-923
E35 Effects of Three Dimensional Response of Dikes on their Local Failures during an Earthquake	Seiji Kano Yasushi Sasaki Yoshiya Hata	Proceedings of the 16th International Conference on Soil Mechanics and Geotechnical Engineering , (2005) pp. 2663-2666
E36 OPTIMAL FARE ARRANGEMENT AND OPERATIONS FOR DEMAND RESPONSIVE BUS SYSTEM IN SUBURBS	Mitsunori Yoshimura Makoto Okumura Akimitsu Isozaki	Journal of the Eastern Asia Society of Transport Studies, 6 (2005) pp. 457-466
E37 RETROSPECTIVE ASSESSMENT OF INTER-REGIONAL TRANSPORTATION SERVICE – NETWORK EXTERNALITY IN LOS IMPROVEMENT –	Makoto Tsukai Makoto Okumura	Journal of the Eastern Asia Society of Transport Studies, 6 (2005) pp. 328-341

Paper Title	Author Name	Journal, Vol., No. (Year) Page
E38 The Effects of a flextime system on arrival and departure times to and from work	Yoriyasu Sugie Junyi Zhang Akimasa Fujiwara Koji Suto	Journal of the Eastern Asia Society for Transportation Studies, 6 (2005) pp. 1956-1970
E39 Fate of ¹⁴ C-labeled microbial products derived from nitrifying bacteria in autotrophic nitrifying biofilms.	Satoshi Okabe Tomonori Kindaichi Tsukasa Ito	Applied and Environmental Microbiology, 71 , 7 (2005) pp. 3987-3994
E40 Developing a model for disinfection by-products based on multiple regression analysis in a water distribution system.	Haruki Shimazu Masamitsu Kouchi Yasuo Sugita Yuji Yonekura Hiroshi Kumano Kenji Hashiwata Tadahiko Hirota Noriatsu Ozaki Takehiko Fukushima	Journal of Water Supply: Research and Technology-AQUA, 54 , 4 (2005) pp. 225-237
E41 Comparison of different methods for measuring dry deposition fluxes of particulate matter and polycyclic aromatic hydrocarbons (PAHs) in the ambient air.	Ardhendu Sekhar Shannigrahi Takehiko Fukushima Noriatsu Ozaki	Atmospheric Environment, 39 , 4 (2005) pp. 653-662
E42 Microbial community analysis in a full-scale wastewater treatment plant determined by fluorescence in situ hybridization.	Tomonori Kindaichi	Proceedings of International Conference on Civil and Environmental Engineering ICCEE-2005, (2005) pp. 231-238
E43 Measurement of dry deposition flux of particulate matter (PM) and polycyclic aromatic hydrocarbons (PAHs) in ambient air with net flux method.	Keisuke Kojima Noriatsu Ozaki Tomonori Kindaichi	Proceedings of International Conference on Civil and Environmental Engineering ICCEE-2005, (2005) pp. 347-352
E44 Large-eddy simulation of straight compound channel flows	Satoshi YOKOJIMA Yoshihisa KAWAHARA	Proceedings of 4th International Symposium on Turbulence and Shear Flow Phenomena, 2 (2005) pp. 565-570
E45 A direct assessment of the cost and benefits of higher order accuracy on the prediction of complex turbulent flows	Satoshi YOKOJIMA	XXXI IAHR Congress Proceedings, (2005) pp. 3015-3024
E46 Experiments and analyses on the deformation of the bed protective works downstream of a weir	Tatsuhiko UCHIDA Shoji FUKUOKA	XXXI IAHR Congress Proceedings, (2005) pp. 3103-3111
E47 Numerical modeling of the confined groundwater in Takamatsu plain	Yoshihisa KAWAHARA Kenichi WATANABE	Proceedings of International Conference on Civil and Environmental Engineering, ICCEE-2005, (2005) pp. 163-170
E48 The hydraulic significance of the local scour downstream of a groundsill and bed protection using a fascine mattress	Tatsuhiko UCHIDA	Proceedings of International Conference on Civil and Environmental Engineering, ICCEE-2005, (2005) pp. 171-180
E49 Critical conditions regarding sliding failure of foot protection works due to bed scouring	Masahiro TSUCHIIZU Tatsuhiko UCHIDA Kyong-bum ROH Akihide WATANABE	Proceedings of International Conference on Civil and Environmental Engineering, ICCEE-2005, (2005) pp. 325-330
E50 The field experiment on reed falling and deformation during floods, and the evaluation of discharge capacity in rivers	Takuma IUCHI Akihide WATANABE	Proceedings of International Conference on Civil and Environmental Engineering, ICCEE-2005, (2005) pp. 331-336
E51 An enhanced level-set simulation of incompressible gas-liquid two-phase flows	Satoshi YOKOJIMA	Proceedings of International Conference on Civil and Environmental Engineering, ICCEE-2005, (2005) pp. 337-346
E52 Measurement of settling velocity of heavy particles in open channel flows using an acoustic doppler velocimeter	Kiyosi Kawanisi Ryohei Shiozaki	Proc. of XXXI IAHR CONGRESS, (2005) pp. 5444-5453

Paper Title	Author Name	Journal, Vol., No. (Year) Page
E53 Effects of turbulence on settling velocity of suspended particle in open channel flow	Ryohei Shiozaki Kiyosi Kawanisi	Proc. of ICCEE-2005, (2005) pp. 319-324
E54 Pore Water Movement in the Consolidated Sediment at the Sea Bottom	Tadashi Hibino Kazuo Murakami Hideo Matsumoto	Asian and Pacific Coasts 2005, (2005)
E55 Study on the Transportation of Organic Mud in the Ohtagawa Estuary	Hiroki Nagato Tadashi Hibino Hideo Matsumoto	Asian and Pacific Coasts 2005, (2005)
E56 Estimation of Current with Considering the Density and Sea Level Pressure Distribution in the Seto Inland Sea	Tadashi Hibino Tatsuro Ochi Hideo Matsumoto	Asian and Pacific Coasts 2005, (2005)
E57 Seasonal Variation Characteristics of Current structure and Quantitative Analysis of Seawater Exchange in Ohfunato Bay	Tadashi Hibino Hiroyuki Tsuruya	Coastal Engineering Journal, 47 , 2-3 (2005) pp. 109-130
E58 Swelling Sediment by Pore Water Movement at the Bottom of the Sea	Kazufumi Tada Tadashi Hibino	ICCEE- 2005, (2005) pp. 239-248
E59 Numerical analysis of generation and propagation of storm surges in the Seto Inland Sea	Katsuaki Komai	ICCEE-2005, (2005) pp. 201-211
E60 Effect of the Kuroshio meandering on sea levels along the Pacific coast	Katsuaki Komai Tadashi Hibino Shiro Kawashima	COASTAL ENGINEERING 2004, 2 (2005) pp. 1650-1661
E61 Numerical Study on Breaking Phenomena of Ships' Waves in Narrow and Shallow Waterways	C. B. Hong Y. Doi H. Mutsuda	J. of Marine Science and Technology, (2005) pp. 11-21
E62 Numerical Simulation for Large Deformation Fluid-Structure Interaction Using CIP-EDEM method	Mutsuda, H. K. Shimizu Y. Doi	Proc of 5th Int. Sympo. on Ocean Wave Measurement and Analysis, CD-ROM (2005)
E63 Data Assimilation of Coastal Circulation Model with Coastal Acoustic Tomography in Hiroshima-Bay	Mutsuda, H. R. Izawa, Y. Doi K. Yamaguchi A. Kaneko	Proc of 13 th International Marine Science Symposium on the Physical, Biological, Chemical and Geological Processes in the Pacific Ocean and Asian Marginal Seas, CD-ROM (2005)
E64 Estimation of joint probability distribution of wave height and wave period in Indonesian sea using satellite wave height data	Yuji Sakuno Mikio Takaki Yousuke Iijima Kuniyuki Tsushima Shun Kidoji	Proceedings of the Indonesia Ocean Forum 2005 and the 13th PAMS/JECSS workshop, CD-ROM (2005)
E65 Monitoring red tide bloom using MODIS data in Lake Nakaumi, Japan	Yuji Sakuno Ryo Ehara Hidenobu Kunii	Proceedings of Asian and Pacific Coasts 2005, (2005) pp. 571-574
E66 A continuous mapping of tidal current structures in the Kanmon Strait	Keisuke Yamaguchi Ju Lin Arata Kaneko Tokuo Yamamoto Noriaki Gohda Hong Quang Nguyen Hong Zheng	Journal of Oceanography, 61 (2005) pp. 283-294
E67 A coastal acoustic tomography experiment in Tokyo Bay	Arata Kaneko Keisuke Yamaguchi Tokuo Yamamoto Noriaki Gohda Hong Zheng Fadli Syamsudin Ju Lin	Acta Oceanologica Sinica, 24 , 1 (2005) pp. 86-94
E68 Accurate imaging and prediction of Kanmon Strait tidal current structures by the coastal acoustic tomography data	Ju Lin Arata Kaneko Noriaki Gohda Keisuke Yamaguchi	Geophysical Research Letters, 32 , L14607, doi:10.1029/2005GL022914 (2005)

Paper Title	Author Name	Journal, Vol., No. (Year) Page
E69 Recent Progress in the Coastal Acoustic Tomography (CAT)	Arata Kaneko Keisuke Yamaguchi Noriaki Gohda Hong Zheng	Proc. of 1st International Conference on Underwater Acoustic Measurement, Crete, Greece (2005) pp. 209-216
E70 Numerical study of a Kyucho and a bottom intrusion in the Bungo Channel, Japan: Disturbances generated by the Kuroshio small meanders	Masazumi Arai	Journal of Oceanography, 61 , 5 (2005) pp. 953-971
E71 Estimation of Buckling and Ultimate Strength of a Stiffened Web Plating with Cutout	Minoru Harada Masahiko Fujikubo	The Proceedings of the 15th International Offshore and Polar Engineering Conference, 4 (2005) pp. 745-751
E72 Application of Idealized Structural Unit Method to Progressive Collapse Analysis of Ship's Hull Girder under Longitudinal Bending	Zhiyong Pei Masahiko Fujikubo	The Proceedings of the 15th International Offshore and Polar Engineering Conference, 4 (2005) pp. 766-773
E73 Eulerian Finite Element Method for Large Deformation Solid Analysis	Shigenobu Okazawa Yasuhide Kaneko Kazuo Kashiyama	Book of Abstracts of Thirteenth Conference on Finite Elements for Flow Problems, Swansea/United Kingdom, (2005) pp. 114
E74 Analysis of Bentonite Swelling Behavior with an Eulerian Hydrocode	S. Okazawa D. Ashikaga H. Nakashima T. Ishii H. Sakurai	8th U.S. National Congress on Computational Mechanics, Austin, /USA, Conference proceedings, (2005)
E75 Ultimate Longitudinal Strength Analyses of Ships Using Idealized Structural Unit Method	Z. Pei J. Tanabe M. Fujikubo S. Okazawa D. Yanagihara	Proceedings of 19th Asian Technical Exchange and Advisory Meeting on Marine Structures, (2005) pp. 136-145
E76 Structural Analysis for the Design of VLFS	Masahiko Fujikubo	Marine Structures, 18 , Issue 2 (2005) pp. 201-226
E77 Idealized Structural Unit Method for Collapse Analysis of Stiffened Plate Structures	Masahiko Fujikubo Patrick Kaeding Zhiyong Pei	Proc. Int. Conf. on Computational Methods in Marine Engineering (MARINE2005), Oslo, (2005) pp. 385-394
E78 A Study on Numerical Analysis of Laser Type Welding for Estimating Temperature Distribution and HAZ Shape	Maher Hassan Mitsuru Kitamura Kenji Shinozaki Motomichi Yamamoto	Transactions of The West-Japan Society of Naval Architects, 109 (2005) pp. 173-184
E79 Multi Objective Optimization for the Master Plan of Cooperative Assembling with Several Shipyards including Planning Risk as ObjectiveMulti Objective Optimization for the Master Plan of Cooperative Assembling with Several Shipyards including Planning Risk as Objective	Marcos Bentin Kunihiro Hamada Mitsuru Kitamura	Proceedings of the 4th International Conference on Computer Applications and Information Technology in the Maritime Industries, (2005) pp. 166-180
E80 Flow Performance of High-Fluidity concrete	Zhuguo Li Taka-aki Ohkubo Yasuo Tanigawa	JOURNAL OF MATERIALS IN CIVIL ENGINEERING, November/December 2004 (2005) pp. 588-596
E81 Study on dynamic characteristics of timber frame structure by microtremor measurements	Naoya Shojo Yoshinobu Fujitani Shinya Matsumoto Yoshiaki Ohno Yoshimitsu Ohashi	Archives of Civil and Mechanical Engineering, Vol.V , No.3 (2005) pp. 59-67
E82 Design and evaluation of sustainable concrete production	Zhuguo Li Yamamoto Yasuhiko Taka-aki Ohkubo	roceedings of 6th international congress on global construction: ultimate concrete opportunities (Scotland), (2005) pp. 99-110

Paper Title	Author Name	Journal, Vol., No. (Year) Page
E83 A study on hysteretic plastic energy input into single and multi degree of freedom systems subjected to earthquakes	Kiichiro Sawada Akira Matsuo Ujiie Koichi	Earthquake Resistant Engineering Structures V, (2005) pp. 269-280
E84 Effects of strength degradations on seismic performance of RC buildings	Hideo Araki Kenji Kabayama	Proceedings of the International Conference on Concrete Repair, Rehabilitation and Retrofitting, Cape Town, South Africa, (2005) pp. 609-615
E85 Seismic performance and damage level of RC buildings in urban area close to epicenter	Kenji Kabayama Hideo Araki	Proceedings of the International Conference on Concrete Repair, Rehabilitation and Retrofitting, Cape Town, South Africa, (2005) pp. 617-623
E86 A Study on the Evaluation Method for the Quality of Cleaning in Government Office Buildings Part1. Summary of investigation and consideration of evaluation standard	Takayoshi Sato Hiroshi Sugita Saburo Murakawa Makoto Hiraga	Proceedings of 9th PAQS Congress, (2005) pp. 282-293
E87 A Study on the Evaluation Method for the Quality of Cleaning in Government Office Buildings Part2. Examination of evaluation by workers	Hiroshi Sugita Takayoshi Sato Saburo Murakawa Makoto Hiraga	Proceedings of 9th PAQS Congress, (2005) pp. 294-303
E88 A Study on the Evaluation for the Quality of Cleaning by Visitors in the Government Office Building	Makoto Hiraga Hiroshi Sugita Takayoshi Sato Saburo Murakawa	Proceedings of 9th PAQS Congress, (2005) pp. 304-313
E89 An Analysis on the Loads of Hot Water Consumption of the Guest rooms in a Hotel	Hiroshi Takata Saburo Murakawa Daisaku Nishina Atsushi Tanaka	Proceedings of the CIB-W62 International Symposium on Water Supply and Drainage for Buildings, (2005) pp. 1-9
E90 An Analysis on the Loads of Hot Water Consumption in the Restaurants	Saburo Murakawa Daisaku Nishina Hiroshi Takata Atsushi Tanaka	Proceedings of the CIB-W62 International Symposium on Water Supply and Drainage for Buildings, (2005) pp. 1-10
E91 Idea of Environment and Architectural Form in India by Le Corbusier - On the Creation of Villa Shodhan at Ahmedabad ?	Shoichiro Sendai	Journal of Asian Architecture and Building Engineering, Vol.4, No.1 (2005) pp. 37-42
E92 On the Sequence and the Landscape of Tourism through the Explanation Forms of the Sightseeing Bus Tours in Hiroshima City	Shoichiro Sendai Hisa Yokoyama	The 11th APTA Conference Proceedings, (2005) pp. 628-637
E93 Peace and Panorama in the Landscape of Tourism	Shoichiro Sendai Hisa Yokoyama	Proceedings of the 3rd Global Summit on Peace through Tourism, (2005) pp. 168-176

F. Research Center for Nanodevices and Systems

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F1 Ultrawideband characteristics of fractal dipole antennas integrated on Si for ULSI wireless interconnects	T. Kikkawa K. Kimoto S. Watanabe	Electron Device Letters, IEEE, 26, 10 (2005) pp. 767-769
F2 Transmission Characteristics of Gaussian Monocycle Pulses for Inter-Chip Wireless Interconnections Using Integrated Antennas	Kentaro Kimoto Takamaro Kikkawa	Japanese Journal of Applied Physics, 44, 4B (2005) pp. 2761-2765

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F3 Efficient Design of Integrated Antennas on Si for On-Chip Wireless Interconnects in Multi-Layer Metal Process	A. B. M. H. Rashid Nasrin Sultana M. Rezwan Khan T. Kikkawa	Japanese Journal of Applied Physics, 44 , 4B (2005) pp. 2756-2760
F4 A CMOS Monocycle Pulse Generation Circuit in a Ultra-Wideband Transmitter for Intra/Inter Chip Wireless Interconnection	Pran Kanai Saha Nobuo Sasaki Takamaro Kikkawa	Japanese Journal of Applied Physics, 44 , 4B (2005) pp. 2104-2108
F5 Theoretical Investigation of Dielectric Constant and Elastic Modulus of Three-Dimensional Isotropic Porous Silica Films with Cubic and Disordered Pore Arrangements	H. Miyoshi K. Yamada K. Kohmura N. Fujii H. Matsuo H. Tanaka Y. Oku Y. Seino N. Hata T. Kikkawa	Japanese Journal of Applied Physics, 44 , 8 (2005) pp. 5982-5986
F6 Skeletal silica characterization in porous-silica low-dielectric-constant films by infrared spectroscopic ellipsometry	S. Takada N. Hata Y. Seino N. Fujii T. Kikkawa	Journal of Applied Physics, 97 (2005) pp. 113504-113508
F7 Characterization of Photosensitive Low-k Films Using Electron-Beam Lithography	Shin-Ichiro Kuroki Takamaro Kikkawa	J. Electrochem. Soc, 152 , 4 (2005) pp. G281-G285
F8 Influence of Slurry Chemistry on Frictional Force in Copper Chemical Mechanical Polishing	Akira Ishikawa Hisanori Matsuo Takamaro Kikkawa	J. Electrochem. Soc., 152 , 9 (2005) pp. G695-G697
F9 Influence of Humidity on Electrical Characteristics of Self-Assembled Porous Silica Low-k Films	T. Kikkawa S. Kuroki S. Sakamoto K. Kohmura H. Tanaka N. Hata	Journal of The Electrochemical Society – 2005 – , 152 , 7 (2005) pp. G560-G566
F10 Theoretical Investigation into Effects of Pore Size and Pore Position Distributions on Dielectric Constant and Elastic Modulus of Two-Dimensional Periodic Porous Silica Films	Hidegori Miyoshi Nobuhiro Hata Takamaro Kikkawa	Japanese Journal of Applied Physics, 44 , 3 (2005) pp. 1166-1168
F11 Theoretical Investigation of Dielectric Constant and Elastic Modulus of Two-Dimensional Periodic Porous Silica Films with Elliptical Cylindrical Pores	Hidegori Miyoshi Hisanori Matsuo Hiroyuki Tanaka Kazuhiro Yamada Yoshiaki Oku Syozo Takada Nobuhiro Hata Takamaro Kikkawa	Japanese Journal of Applied Physics, 44 , 3 (2005) pp. 1161-1165
F12 Data Transmission Characteristics of Integrated Linear Dipole Antennas for UWB Communication in Si ULSI	K. Kimoto T. Kikkawa	Proc. of IEEE AP-S International Symposium and USNC/URSI National Radio Science Meeting, Washington DC, 1B (2005) pp. 678-681
F13 Interference of Digital Noise with Integrated Dipole Antenna for Inter-chip Signal Transmission in ULSI	M. Nitta T. Kikkawa	Proc. of IEEE AP-S International Symposium and USNC/URSI National Radio Science Meeting, Washington DC, 3B (2005) pp. 264-267
F14 Analysis of Transmission Characteristics of Gaussian Monocycle Pulse for Silicon Integrated Antennas	K. Kimoto N. Sasaki P. K. Saha M. Nitta T. Kikkawa M. Sasaki	Ext. Abst. of the 2005 International Conference on Solid State Devices and Materials, (2005) pp. 308-309

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F15 A 2.5 GHz Differential Wavelet Generator in 0.18 μ m CMOS for 1.4 Gbps UWB Impulse Radio in Wireless Inter/Intra-Chip Data Communication	P. K. Saha N. Sasaki T. Kikkawa	Ext. abst. of the 2005 International Conference on Solid State Devices and Materials, (2005) pp. 310-311
F16 A Single Chip UWB Receiver based on 0.18- μ m CMOS Technology	N. Sasaki P. K. Saha T. Kikkawa	Proc. of 2005 International Workshop on UWB Technologies, (2005) pp. 46-50
F17 Effect of plasma treatment and TM-CTS vapor annealing on the reinforcement of porous low-k films	K. Kohmura S. Ohike M. Muramkami H. Tanaka T. Ono Y. Seino T. Kikkawa	Proc. 2005 MRS Spring Meeting, B3, 10 (2005) pp. 55
F18 A Novel Organic Low-k Film Deposited by Plasma-Enhanced Co-Polymerization	N. Kunimi A. Nakano K. Kinoshita M. Komatsu T. Kikkawa	Proc. 2005 MRS Spring Meeting, B8.1,863 (2005) pp. 103-108
F19 Mechanical Strength Enhancement in Porous Silica Film by TMCTS Treatment	N. Fujii T. Nakayama N. Hata Y. Seino Y. Takasu T. Kikkawa	Proc. 2005 MRS Spring Meeting, B8.17,812 (2005) pp. 43-48
F20 Recovery of Plasma Process Induced Damage in Porous Silica Low-k Films by Organosiloxane Vapor Post Annealing	T. Ono K. Kinoshita H. Takahashi N. Fujii K. Kohmura Y. Sonoda R. Yagi M. Shimoyama N. Hata T. Kikkawa	Proc. International Conference on IC Design & Technology, (2005) pp. 107-110
F21 Development of Porous Low-k Interlayer Dielectrics for 45 nm Technology Node	T. Kikkawa Y. Oku N. Fujii K. Kohmura N. Hata Y. Seino H. Miyoshi H. Tanaka A. Nakano T. Gotoh A. Ishikawa H. Matsuo Y. Sonoda K. Kinoshita	Abst. 207th Meeting of The Electrochemical Society, Inc., 723 (2005)

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F22 Hybrid Low-k / Cu Dual Damascene Process for 45-32 nm Technology Node Using Self-Assembled Porous-Silica Ultra Low-k Films	S. Chikaki R. Yagi Y. Shishida T. Yoshino T. Ono N. Fujii T. Nakayama K. Kohmura H. Tanaka A. Ishikawa H. Matsuo N. Hata Y. Seino T. Gotoh J. Kawahara Y. Sonoda N. Kunimi Y. Uchida S. Hishiya K. Kinoshita T. Kikkawa	Proc. 2005 IEEE International Interconnect Technology Conference, (2005) pp. 48-50
F23 Control of Process-Induced Damages in Self-Assembled Porous Silica /Cu Damascene Interconnects for 45nm Node and Beyond	R. Yagi S. Chikaki M. Shimoyama T. Yoshino T. Ono A. Ishikawa N. Fujii N. Hata T. Nakayama K. Kohmura H. Tanaka T. Gotoh J. Kawahara Y. Sonoda H. Matsuo Y. Seino K. Kinoshita T. Kikkawa	Tech. Dig. 2005 Symposium on VLSI Technology, (2005) pp. 146-147
F24 Feasibility Study of a Novel Molecular-Pore-Stacking (MPS), SiOCH Film in Fully-scale-down, 45nm-node Cu Damascene Interconnects	M. Tada H. Otake M. Narihiro F. Itoh T. Hataji M. Tohara K. Motoyama Y. Kawama M. Tanoue M. Abe T. Takeuchi K. Arai S. Saitoh N. Furutake T. Onodera J. Kawahara K. Kinoshita N. Hata T. Kikkawa Y. Tsuchiya K. Fujii N. Oda M. Sekine Y. Hayashi	Tech. Dig. 2005 Symposium on VLSI Technology, (2005) pp. 18-19
F25 Distributions of electron density and deposition rate of a narrow-gap plasma polymerization system	K. Kinoshita N. Nakamura J. Kawahara O. Kiso N. Toyoda H. Sugai T. Kikkawa	Proc. XXVII International Conference on Phenomena in Ionized Gases, (2005) pp. 200

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F26 Mechanical Strength of Multilayered Dielectric Structures Measured by Laser-Pulse Generated Surface-Acoustic-Wave Technique	T. Takimura N. Hata T. Nakayama Y. Shishida R. Yagi J. Kawahara S. Chikaki N. Fujii T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials, (2005) pp. 52-53
F27 Electrical Characteristics of Porous Zeolite Interlayer Dielectrics	T. Yoshino G. Guao N. Hata N. Fujii T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials, (2005) pp. 58-59
F28 Adsorption in-situ Spectroscopic Ellipsometry Analysis of Disordered Porous Silica Low-k Films	X. Li N. Fujii N. Hata T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials, (2005) pp. 294-295
F29 Infrared Complex Dielectric Function Analysis for Chemical Bonding Structure of Porous Silica Low Dielectric Constant Films	S. Takada N. Hata S. Hishiya N. Fujii T. Nakayama T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials, (2005) pp. 552-553
F30 Comparison of Pore Shape Models for Small Angle X-ray Scattering of a Disordered Porous Silica Low-k film	N. Kunishige N. Hata N. Fujii T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials, (2005) pp. 292-293
F31 Comparative Studies of Pore Seal Films for Porous-Silica / Cu Interconnect	Y. Shishida S. Chikaki M. Shimoyama R. Yagi T. Yoshino T. Ono A. Ishikawa N. Fujii T. Nakayama K. Kohmura H. Tanaka J. Kawahara Y. Sonoda H. Matsuo S. Hishiya T. Yamanishi K. Kinoshita T. Kikkawa	Extend. Abst. 2005 International Conference on Solid State Devices and Materials, (2005) pp. 302-303
F32 Extraction of process-induced damage in low-k/Cu damascene structure	S. Chikaki R. Yagi T. Yoshino Y. Shishida T. Ono A. Ishikawa H. Matsuo N. Fujii T. Nakayama K. Kohmura H. Tanaka S. Hishiya T. Yamanishi J. Kawahara K. Kinoshita S. Takada N. Hata T. Kikkawa	Proc. International Symposium on Semiconductor Manufacturing 2005, (2005) pp. 422-425

Published Papers

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F33 Influence of Cu Electroplating Solutions on Leakage Current in Self-Assembled Porous Silica Low-k Films	M. Shimoyama R. Yagi S. Chikaki N. Fujii T. Nakayama K. Kohmura H. Tanaka K. Kinoshita T. Kikkawa	Proc. Advanced Metallization Conference 2005, VI.6 (2005)
F34 Influence of CMP chemicals on the properties of porous silica low-k films	A. Ishikawa Y. Shishida T. Yamanishi N. Hata T. Nakayama N. Fijii H. Tanaka H. Matsuo T. Kikkawa	Proc. Advanced Metallization Conference 2005, IX.3 (2005)
F35 Influence of Cu Electroplating Solutions on Leakage Current in Self-Assembled Porous Silica Low-k Films	M. Shimoyama R. Yagi S. Chikaki N. Fujii T. Nakayama K. Kohmura H. Tanaka K. Kinoshita T. Kikkawa	Proc. Advanced Metallization Conference 2005: 15th Asian Session, (2005) pp. 36-37
F36 Self-assembled porous silica/Cu damascene interconnects for 45nm node and beyond	T. Kikkawa R. Yagi S. Chikaki M. Shimoyama T. Ono N. Fujii K. Kohmura H. Tanaka T. Nakayama A. Ishikawa H. Matsuo Y. Sonoda N. Hata Y. Seino T. Yoshino K. Kinoshita	Proc. SPIE Optics East 2005, (2005) pp. 71
F37 Fabrication of Mesoporous Silica for Ultra-low-k Interlayer Dielectrics	N. Fujii K. Kohmura T. Nakayama H. Tanaka N. Hata Y. Seino T. Kikkawa	Proc. SPIE Optics East 2005, (2005) pp. 71
F38 Developments of Plasma Copolymerization Technique for Deposition of low-k Films	K. Kinoshita A. Nakano N. Kunimi M. Shimoyama J. Kawahara O. Kiso H. Miyoshi Y. Seino Y. Takasu R. Ichikawa M. Komatsu N. Nakamura Y. Hayashi T. Kikkawa	Proc. AVS 52nd International Symposium, (2005) pp. 113

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F39 Effect of Dry Etching Chemistry on Reduction of Surface Roughness of Porous Silica Low-k Film	T. Ono K. Kinoshita K. Kurihara Y. Takasu Y. Seino N. Hata T. Kikkawa	Proc. 27th International Symposium on Dry Process, (2005) pp. 41-42
F40 A Novel Organosiloxane Vapor Annealing Process for Improving Properties of Porous Low-k Films	K. Kohmura S. Oike M. Murakami H. Tanaka S. Takada Y. Seino T. Kikkawa	Proc. 27th International Symposium on Dry Process, (2005) pp. 199-200
F41 Advanced Scalable Ultralow-k/Cu Interconnect Technology for 32 nm CMOS ULSI Using Self-Assembled Porous Silica and Self-aligned CoWP Barrier	T. Kikkawa S. Chikaki R. Yagi M. Shimoyama Y. Shishida N. Fujii K. Kohmura H. Tanaka T. Nakayama S. Hishiy T. Ono T. Yamanishi A. Ishikawa H. Matsuo Y. Seino N. Hata T. Yoshino S. Takada J. Kawahara K. Kinoshita	Technical Digest, International Electron Devices Meeting (IEDM 2005), (2005) pp. 99-102
F42 Accuracy of SIMS Depth Profiling for Sub-keV As+Implantation	T. Eto K. Shibahara	Jpn. J. Appl. Phys. Part 1. , 44 , 4B (2005) pp. 2433-2436
F43 Ultra Shallow Junction Formation by Green-Laser Annealing with Light Absorber	E. Takii T. Eto K. Kurobe K. Shibahara	Jpn. J. Appl. Phys. Part 2., 44 , 24 (2005) pp. L756-L759
F44 Workfunction Tuning Using Various Impurities for Fully Silicided NiSi gate	K. Sano M. Hino N. Ooishi K. Shibahara	Jpn. J. Appl. Phys. Part 1., 44 , 6A (2005) pp. 3774-3777
F45 Merits and Demerits of Light Absorbers for Ultra Shallow Junction Formation by Green Laser Annealing	A. Matsuno E. Takii T. Eto K. Kurobe K. Shibahara	Nucl. Instr. and Meth. B, 237 (2005) pp. 136-141
F46 Sheet Resistance Reduction and Crystallinity Improvement in Ultrashallow n+/p Junctions by Heat-Assisted Excimer Laser Annealing	K. Kurobe Y. Ishikawa K. Shibahara	Jpn. J. Appl. Phys. Part 1., 44 , 12 (2005) pp. 8391-8395
F47 Evaluation of Front-Opening Unified Pod with Attached UV/Photocatalyst Cleaning Unit	M. Suzuki T. Tabei S. Yokoyama K. Miyamoto T. Wada T. Fujii	Jpn. J. Appl. Phys., 44 , 2 (2005) pp. 1130-1131
F48 Mechanism of Anomalous Behavior of Metal-Oxide-Semiconductor Capacitors Contaminated with Organic Molecules	M. Suzuki S. Yokoyama	Jpn. J. Appl. Phys., 44 , 3 (2005) pp. 1208-1212
F49 Contact-Hole Etching with NH ₃ -Added C ₅ F ₈ Pulse-Modulated Plasma	M. Ooka S. Yokoyama	Jpn. J. Appl. Phys., 44 , 9A (2005) pp. 6476-6480

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F50 Plasma-based ion implantation sterilization technique and ion energy estimation	T. Tanaka S. Watanabe K. Shibahara S. Yokoyama T. Takagi	J. Vac. Sci. Technol., A 23 , 4 (2005) pp. 1018-1021
F51 Structure and Optical Band-Gap Energies of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{TiO}_3$ Thin Films Fabricated by RF Magnetron Plasma Sputtering	Zhimou Xu M. Suzuki S. Yokoyama	Jpn. J. Appl. Phys., 44 , 12 (2005) pp. 8507-8511
F52 Design and Simulation of Ring Resonator Switches using Electro-Optic Materials	Y. Tanushi S. Yokoyama	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM2005), (2005) pp. 318-319
F53 Structural and Optical Properties of Electro-Optic Material: Sputtered $(\text{Ba}, \text{Sr})\text{TiO}_3$	M. Suzuki Zhimou Xu Y. Tanushi S. Yokoyama	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM2005), (2005) pp. 732-733
F54 Groove-Buried Optical Waveguides Based on Metal Organic Solution-Derived $\text{Ba}_{0.7}\text{Sr}_{0.3}\text{TiO}_3$ Thin Films	Zhimou Xu M. Suzuki Y. Tanushi K. Wakushima S. Yokoyama	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM2005), (2005) pp. 738-739
F55 Fabrication of spin-coat optical waveguides for optically interconnected LSI and influence of fabrication process on lower layer MOS capacitors	T. Tabei K. Maeda S. Yokoyama H. Sunami	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM2005), (2005) pp. 332-333
F56 Novel Fabrication Technique of Optical Waveguides using Low Density Silicon Nitride Films Deposited by Plasma-Enhanced Chemical Vapor Deposition	S. Yokoyama T. Kakite	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM2005), (2005) pp. 736-737
F57 High-Speed and Low-Voltage Ring Resonator Optical Switches Using Electro- and Magneto-Optic Materials	Y. Tanushi S. Yokoyama	2nd International Conference on Group IV Photonics, (2005) pp. 165-167
F58 Modified Direct-Current Current-Voltage Method for Interface Trap Density Extraction in Metal-Oxide-Semiconductor Field-Effect-Transistor with Tunneling Gate Dielectrics at High Temperature	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	Jpn. J. Appl. Phys., 44 , 2A (2005) pp. L60-L62
F59 Abnormal enhancement of interface trap generation under dynamic oxide field stress at Mega Hz region	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	Appl. Phys. Lett., 86 , 8 (2005) pp. 083501-1-083501-3
F60 Interface Trap Generation Induced by Charge Pumping Current under Dynamic Oxide Field Stresses	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	IEEE Electron Device. Lett., 26 , 3 (2005) pp. 216-218
F61 Room-temperature operation of an exclusive-OR circuit using a highly doped Si single-electron transistor	Tetsuya Kitade Kensaku Ohkura Anri Nakajima	Appl. Phys. Lett., 86 , 12 (2005) pp. 123118-1-123118-3
F62 Annealing Temperature Dependence on Nickel-Germanium Solid-State Reaction	Shiyang Zhu Anri Nakajima	Jpn. J. Appl. Phys., 44 , 24 (2005) pp. L753-L755
F63 Enhancement of BTI Degradation in pMOSFETs under High-Frequency Bipolar Gate Bias	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	IEEE Electron Device. Lett., 26 , 6 (2005) pp. 387-389
F64 Carrier Mobility in Metal-Oxide-Semiconductor Field Effect Transistor with Atomic-Layer-Deposited Si-Nitride Gate Dielectrics	Anri Nakajima Hiroyuki Ishii Shin Yokoyama	Jpn. J. Appl. Phys., 44 , 28 (2005) pp. L903-L905

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F65 Atomic-Layer-Deposited Si-Nitride/SiO ₂ Stack Gate Dielectrics for Future High-Speed DRAM with Enhanced Reliability	Anri Nakajima Takuo Ohashi Shiyang Zhu Shigeyuki Yokoyama Shigetomi Michimata Hideharu Miyake	IEEE Electron Device. Lett., 26 , 8 (2005) pp. 538-540
F66 Pulse Waveform Dependence on Ac Bias Temperature Instability in pMOSFETs	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	IEEE Electron Device. Lett., 26 , 9 (2005) pp. 658-660
F67 Interface trap and oxide charge generation under negative bias temperature instability of p-channel metal-oxide-semiconductor field-effect transistors with ultrathin plasma-nitrided SiON gate dielectric	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	J. Appl. Phys., 98 , 11 (2005) pp. 114504-1-114504-6
F68 Periodic Coulomb oscillation in Si single-electron transistor based on multiple islands	Kensaku Ohkura Tetsuya Kitade Anri Nakajima	J. Appl. Phys., 98 , 12 (2005) pp. 124503-1-124503-6
F69 Temperature Dependence of Ni-Germanide Formed by Ni-Ge Solid-State Reaction	Shiyang Zhu Anri Nakajima Yuichi Yokoyama Kensaku Ohkura	Extend. Abst. 5th International Workshop on Junction Technology 2005 (IWJT2005), (2005) pp. 85-86
F70 Influence of bulk bias on NBTI of pMOSFETs with ultrathin SiON gate dielectric	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	Extend. Abst. 2005 Int. Conf. on Solid State Devices and Materials (SSDM2005), (2005) pp. 872-873
F71 Application of Arsenic Plasma Doping in Three-Dimensional MOS Transistors and the Doping Profile Evaluation	K. Kobayashi T. Eto K. Okuyama K. Shibahara H. Sunami	Jpn. J. Appl. Phys., 44 , 4B (2005) pp. 2273-2278
F72 High-Aspect-Ratio Structure Formation Techniques for Three-Dimensional Metal-Oxide-Semiconductor Transistors	H. Sunami K. Okuyama	Abstract of 31st International Conference on Micro- and Nano-Engineering, 11B-03 (2005)
F73 Chip Size and Performance Evaluations of Shared Cache for On-chip Multiprocessors	T. Sasaki T. Inoue N. Omori T. Hironaka H.J. Mattausch T. Koide	Systems & Computers in Japan, 36 , 9 (2005) pp. 1-13
F74 A Cost-Efficient High-Performance Dynamic TCAM with Pipelined Hierarchical Searching and Shift Redundancy Architecture	H. Noda K. Inoue M. Kuroiwa F. Igaue K. Yamamoto H.J. Mattausch T. Koide A. Amo A. Hachisuka S. Soeda F. Morishita K. Dosaka K. Arimoto T. Yoshihara	IEEE Journal of Solid-State Circuits, 40 (2005) pp. 245-253
F75 Embedded Low-Power Dynamic TCAM Architecture with Transparently Scheduled Refresh	H. Noda K. Inoue H.J. Mattausch T. Koide K. Dosaka K. Arimoto K. Fujishima K. Anami T. Yoshihara	IEICE Trans. on Electronics, E88-C (2005) pp. 622-629

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F76 A CAM-based signature-matching co-processor with application-driven power-reduction features	K. Inoue H. Noda K. Arimoto H.J. Mattausch T. Koide	IEICE Trans. on Electronics, E88-C (2005) pp. 1332-1342
F77 Evaluation of a Bank-based Multi-port Memory Architecture with Blocking Network	T. Inoue T. Hironaka T. Sasaki S. Fukae T. Koide H.J. Mattausch	IEICE Trans. on Fundamentals of Electronics, Communications and Computer Science, J88-A (2005) pp. 498-510
F78 A Low-Power Video Segmentation LSI with Boundary-Active-Only Architecture	T. Morimoto O. Kiriyama H. Adachi Z. Zhu T. Koide H.J. Mattausch	Proceedings of the Asia and South Pacific Design Automation Conference (ASP-DAC 2005), (2005) pp. D13-D14
F79 Design of Superscalar Processor with Multi-Bank Register File	T. Saito M. Maeda T. Hironaka K. Tanigawa T. Sueyoshi K. Aoyama T. Koide H.J. Mattausch	Proc. IEEE Int. Symposium on Circuits and Systems (ISCAS 2005), (2005) pp. 3507-3510
F80 Object Tracking in Video Pictures based on Image Segmentation and Pattern Matching	T. Morimoto O. Kiriyama Y. Harada H. Adachi T. Koide H.J. Mattausch	Proc. IEEE Int. Symposium on Circuits and Systems (ISCAS 2005), (2005) pp. 3215-3218
F81 CAM-based VLSI Architecture for Huffman Coding with Real-time Optimization of the Code Word Table	T. Kumaki Y. Kuroda T. Koide H.J. Mattausch H. Noda K. Dosaka K. Arimoto K. Saito	Proc. IEEE Int. Symposium on Circuits and Systems (ISCAS 2005), (2005) pp. 5202-5205
F82 A Parallel Hardware Design for Snake Models with an FPGA Architecture	A. Ahmadi H.J. Mattausch T. Koide	International Workshop on Nonlinear Signal and Image Processing (NSIP 2005), (2005) pp. 146-150
F83 Multi-Port CAM based VLSI Architecture for Huffman Coding with Real-time Optimized Code Word Table	T. Kumaki Y. Kuroda T. Koide H.J. Mattausch H. Noda K. Dosaka K. Arimoto K. Saito	Proceedings of the 48th IEEE International Midwest Symposium on Circuits and Systems (MWSCAS 2005), (2005) pp. 55-58
F84 An LSI hardware design for online character recognition using associative memory	A. Ahmadi Y. Shirakawa Md. A. Abedin K. Kamimura H.J. Mattausch T. Koide	Proceedings of the 48th IEEE International Midwest Symposium on Circuits and Systems (MWSCAS 2005), (2005) pp. 464-467
F85 A Parallel Hardware Design for Parametric Active Contour Models	A. Ahmadi Md. A. Abedin H.J. Mattausch T. Koide	Proceedings of the IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS 2005), (2005) pp. 609-613
F86 Image-Scan Architecture for Efficient FPGA/ASIC Implementation of Video-Segmentation by Region Growing	H. Adachi T. Morimoto K. Yamaoka T. Koide H.J. Mattausch	Proceedings of the International SoC Design Conference (ISOCC 2005), (2005) pp. 301-304

Paper Title	Author Name	Journal, Vol., No. (Year) Page
F87 Highly Parallel Huffman Encoding by Exploiting Multiple Matches in Content Addressable Memory	Y. Kuroda T. Kumaki T. Koide H.J. Mattausch H. Noda K. Dosaka K. Arimoto K. Saito	Proceedings of the International SoC Design Conference (ISOCC 2005), (2005) pp. 313-316

Published Books

Book Title (Editor Name)	Author Name	Publisher	Year
Encyclopedia of Life Support Systems (EOLSS)	Yukihiko Matsumura	UNESCO	2005
Reassessment of the Atomic Bomb Radiation Dosimetry for Hiroshima and Nagasaki	G.D. Kerr K. Shizuma T. Maruyama H.M. Cullings K. Komura Y. Okumura S.D. Egbert	Radiation Effects Research Foundation	2005
Parameter Identification of Materials and Structures, CISM International Centre for Mechanical Sciences, No. 469	V. V. Toropov F. Yoshida	Springer-Verlag	2005
Multiphase Flow Handbook	Hideto Yoshida	CRC Taylor & Francis	2005
Handbook of biodegradable polymeric materials and their applications	H. Yasuda Y. Nakayama H. Shirahama	American Scientific Publishers	2005

Registered Patents

Patent Name (Registered Number)	Inventor Name	Registered Date
Method of analyzing particles suspended in liquid and liquid-suspended particle analyzer for carrying out the method (US 6,892,142)	Kazuo Takeuchi Kikuo Okuyama Wuled Lenggoro	2005.5.10
Common Memory (US6874068 (USA))	H.J. Mattausch	2005.3.29
Nonvolatile Memory using Deep Level Capture of Carriers at Corner Structure of Gate Oxide Film (JP3643864 (Japan))	M. Miura-Mattausch T. Ono H.J. Mattausch	2005.2.10
Multiport Cache Memory (US6845429 (USA))	H.J. Mattausch K. Kishi N. Omori	2005.1.18
Associative Memory (K0501623 (Korea))	H.J. Mattausch T. Gyohten	2005.7.6
Picture Segmentation Method, Picture Segmentation Equipment, Real-Time Picture-Processing Method, Real-Time Picture-Processing Equipment and Picture-Processing Integration Circuit (TW(I)226193 (Taiwan))	T. Koide H.J. Mattausch T. Morimoto Y. Harada	2005.1.1
Winner-Line-Up Amplifier with Self-Adapting Maximum-Gain Region (JP3742878 (Japan))	H.J. Mattausch T. Koide	2005.11.25
Winner-Line-Up Amplifier with Self-Adapting Maximum-Gain Region (US6853251 (USA))	H.J. Mattausch T. Koide	2005.2.8
Winner-Line-Up Amplifier with Self-Adapting Maximum-Gain Region (K0504294 (Korea))	H.J. Mattausch T. Koide	2005.7.20
Encoding Device (Japanese Patent Application No. 2005-146211)	T. Koide H.J. Mattausch T. Kumaki Y. Kuroda H. Noda K. Dosaka K. Arimoto K. Saito	2005.5.19
Associative Memory for minimum Euclidean Distance Search (Japanese Patent Application No. TBD)	H. J. Mattausch T. Koide Md. A. Abedin	2005.9.9