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Published Papers

A. Mechanical System Engineering

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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 Kamikariyafor	

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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-09 (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 Pyrolysis 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	Hiddenori 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	Hiddenori 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

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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

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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 Jeekeun 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 Cornelia Farcasanu Masaki Mizunuma Fumitaka Nishiyama Tokichi Miyakawa	Biosci. Biotechnol. Biochem., 69 , 12 (2005) pp. 2343-2348

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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. Nnjima	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 Yasuhisa Sekiguchi	Proc. of the First International Conference on Design Engineering and Science 2005, (2005) pp. 305-310
A59 Acoustic Cavitation in the Cylinder Piston Ultrasonic 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 Yasuhisa 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 Conference on Manufacturing, Machine Design and Tribology (Seoul, KOREA), (2005)

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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	Eiichirou 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 Eiichirou 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 Eiichirou 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 Hiroshi 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	Hiroshi 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)	Hiroshi 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)

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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 Mistuhiko 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	Katsuhiko Sekiya Yasuo Yamane Ayumu Torimoto	Proc. of the LEM21 Int. Conf. on Leading Edge Manufacturing in 21st Century, 3 (2005) pp. 915-920

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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 Keiji 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 Keiji Nakasa	Scripta Materialia, 52 (2005) pp. 227-230
A99 Analysis of Cracking and Delamination of Sputtered Thin Films during Wear Process	Keiji 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

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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

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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 Japonicae, 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

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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)
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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
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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. Myojyo 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

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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
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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

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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
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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
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D128 Pressure induced homothetic volume collapse in silicon clathrates	A. San Miguel A. Merlen P. Touleonde T. Kume S. Le Floch A. Aouizerat S. Pascarelli 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

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D131 Tunneling Spectroscopy of Deintercalated Layered Nitride Superconductor ZrNC10.7	T. Takasaki T. Ekino H. Fujii S. Yamanaka	J. Phys. Soc. Jpn., 74 (2005) pp. 2586-2591
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D134 Electronic structure and vibrational properties of Ba8Si46, Ba8Ag _n Si46-n, and Ba8Au _n Si46-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 -HfNC1	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
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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 Shoji 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	Proceedings of 6th international congress on global construction: ultimate concrete opportunities (Scotland), (2005) pp. 99-110

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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
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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

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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. Seiono 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
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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

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F16 A Single Chip UWB Receiver based on 0.18- μm 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 TMCTS 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
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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
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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
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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

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F51 Structure and Optical Band-Gap Energies of Ba _{0.5} Sr _{0.5} 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
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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
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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
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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

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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
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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
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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
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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
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