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## Published Papers

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### A. Mechanical System Engineering

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<b>A1</b> 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
<b>A2</b> Study of evaluation method for liquation crack initiaion in the HAZ of laser weldment	Motomichi Yamamoto Atsushi Takata Syota Kamikariya Yamam	

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<b>A13</b> 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, <b>203</b> (2005) pp. 1-6
<b>A14</b> 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, <b>203</b> (2005) pp. 1-5
<b>A15</b> 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, <b>148</b> , 4 (2005) pp. 205-209
<b>A16</b> 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, <b>14</b> , 10 (2005) pp. 1700-1704
<b>A17</b> Conduction Type Evolution during Eutectoid Decomposition of Mn-Added $\alpha$ -Fe <sub>2</sub> Si <sub>5</sub> Alloy	J.X.Jiang Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	Scripta Materialia, <b>153</b> , 6 (2005) pp. 707-711
<b>A18</b> Effect of Mn or Co Addition on Kinetics of Eutectoid Decomposition in Sintered $\alpha$ -Fe <sub>2</sub> Si <sub>5</sub> Alloys	J.X.Jiang Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	Materials Trans, JIM, <b>146</b> , 6 (2005) pp. 1407-1412
<b>A19</b> Resistivity Study of Eutectoid Decomposition Kinetics of $\alpha$ -Fe <sub>2</sub> Si <sub>5</sub> Alloy	J.X.Jiang Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	Materials Trans, JIM, <b>146</b> , 3 (2005) pp. 720-725
<b>A20</b> 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, <b>140</b> (2005) pp. 2645-2647
<b>A21</b> Thermoelectric properties of $\alpha$ -FeSi <sub>2</sub> with Si dispersoids formed by decomposition of $\beta$ -Fe <sub>2</sub> Si <sub>5</sub> based alloys	J.X.Jiang T. Sasakawa Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa	J. Alloys and Compounds, <b>391</b> , 1-2 (2005) pp. 115-122
<b>A22</b> 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, , <b>475</b> , 479 (2005) pp. 921-924
<b>A23</b> 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
<b>A24</b> Structures of Former Particle Boundaries	Hiddenori Kuroki Hiroyuki Y. Suzuki	Euro PM2005 Proceedings, <b>1</b> (2005) pp. 21-26
<b>A25</b> Mechanical Properties of Sintered Si <sub>3</sub> N <sub>4</sub> from Powder Produced by Fluidized-Bed Direct Silicon Nitridation	Hiroyuki Y. Suzuki Shunzo Tashima Shoichi Kimura	J. Ceram. Soc. Japan, <b>113</b> , 12 (2005) pp. 774-777
<b>A26</b> 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, <b>IEEE 05CH37608C</b> (2005) pp. 1245-1248

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<b>A28</b> TEM Studies of Grain Boundary Structure in a Cast Polycrystalline Silicon	Isamu Kuchiwaki Takahiro Hirabayashi Hiroshi Fukushima	Materials Science Forum, <b>475-479</b> (2005) pp. 1673-1676
<b>A29</b> 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, <b>406</b> , 1-3 (2005) pp. 184-187
<b>A30</b> Diameter control and growth mechanism of single-walled carbon nanotubes	Shuhei Inoue Yoshihiro Kikuchi	Chemical Physics Letters, <b>410</b> , 4-6 (2005) pp. 209-212
<b>A31</b> 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, <b>84</b> , 7 (2005) pp. 544-548
<b>A32</b> 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., <b>13</b> , 3 (2005) pp. 1-5
<b>A33</b> 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, <b>29</b> , 4 (2005) pp. 269-292
<b>A34</b> Current situation and prospect of biomass utilization in Japan	Yukihiko Matsumura Shin-ya Yokoyama	Biomass and Bioenergy, <b>29</b> , 5 (2005) pp. 304-309
<b>A35</b> 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, <b>29</b> , 5 (2005) pp. 321-330
<b>A36</b> 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, <b>29</b> , 5 (2005) pp. 336-346
<b>A37</b> 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, <b>29</b> , 5 (2005) pp. 347-354
<b>A38</b> 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, <b>29</b> , 5 (2005) pp. 355-359
<b>A39</b> Flow Field in Swirl-Type Tubular Flame Burner	Yuyin Zhang Daisuke Shimokuri Yoshihisa Mukae Satoru Ishizuka	JSME International Journal, Series B, <b>48</b> , 4 (2005) pp. 830-838
<b>A40</b> 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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<b>A42</b> 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
<b>A43</b> 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
<b>A44</b> 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
<b>A45</b> 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
<b>A46</b> 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
<b>A47</b> 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
<b>A48</b> 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
<b>A49</b> 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
<b>A50</b> 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., <b>A539</b> (2005) pp. 16-24
<b>A51</b> 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., <b>44</b> , 11 (2005) pp. 8118-8124
<b>A52</b> Role of L-Histidine in Conferring Tolerance to Ni <sup>2+</sup> in <i>Saccharomyces cerevisiae</i> Cells	Ileana Cornelia Farcasanu Masaki Mizunuma Fumitaka Nishiyama Tokichi Miyakawa	Biosci. Biotechnol. Biochem., <b>69</b> , 12 (2005) pp. 2343-2348

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<b>A54</b> 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
<b>A55</b> Proton-neutron configurations in $^{236g,m}\text{Am}$ and its EC-decay daughter $^{236}\text{Pu}$	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, <b>23</b> (2005) pp. 395-400
<b>A56</b> $\beta$ -decay half-lives of new neutron-rich rare-earth isotopes $^{159}\text{Pm}$ , $^{162}\text{Sm}$ and $^{166}\text{Gd}$	S.Ichikawa M. Asai K. Tsukada H. Haba Y. Nagame M. Shibata M. Sakama Y. Kojima	Phys. Rev. C, <b>71</b> (2005) pp. 067302
<b>A57</b> 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, <b>29</b> (2005) pp. 11-18
<b>A58</b> 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
<b>A59</b> 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
<b>A60</b> 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
<b>A61</b> 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
<b>A62</b> 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
<b>A63</b> 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
<b>A64</b> 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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<b>A66</b> 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)
<b>A67</b> 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
<b>A68</b> 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
<b>A69</b> 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)
<b>A70</b> 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)
<b>A71</b> 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
<b>A72</b> 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
<b>A73</b> 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)
<b>A74</b> Self-improving System for Assembly Sequence Planning	Takeshi Murayama Toru Eguchi Fuminori Oba	SICE2005 Proceedings, (2005) pp. 884-889
<b>A75</b> 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
<b>A76</b> 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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<b>A79</b> 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)
<b>A80</b> 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)
<b>A81</b> H-infinity Control of Descriptor Systems Based on Realization-Independent LMIs	Izumi Masubuchi	Proceedings of the SICE Annual Conference 2005, (2005) pp. 2996-3000
<b>A82</b> 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
<b>A83</b> 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
<b>A84</b> $l_{\infty}$ 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
<b>A85</b> 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
<b>A86</b> Fixed structured PID controller design for standard $H_{\infty}$ control problem	Masami Saeki	Proceedings of the 16th IFAC World Congress, (2005)
<b>A87</b> 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
<b>A88</b> Temperature Measurement in Laser Forming of Sheet Metal	Takashi Ueda Eisuke Sentoku Keiji Yamada Akira Hosokawa	Annals of the CIRP, <b>54</b> , 1 (2005) pp. 179-182
<b>A89</b> 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
<b>A90</b> 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, <b>3</b> (2005) pp. 915-920

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<b>A92</b> Identification of viscoplasticity properties of individual phases in lead-free solder alloy by depth-sensing microindentation	Hiroshi Hamasaki Kazuhiro Shinbata Fusahito Yoshida	Materials Transactions, <b>46</b> , 12 (2005) pp. 3073-3076
<b>A93</b> 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)
<b>A94</b> 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
<b>A95</b> 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)
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<b>A98</b> 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, <b>52</b> (2005) pp. 227-230
<b>A99</b> 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, <b>297-300</b> (2005) pp. 1718-1723

## B. Artificial Complex Systems Engineering

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<b>B2</b> 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, <b>10</b> , 1 (2005) pp. 70-77
<b>B3</b> 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, <b>10</b> , 2 (2005) pp. 107-111
<b>B4</b> A genetic algorithm approach for the time-cost trade-off in PERT networks	Amir Azaron Cahit Perkgoz Masatoshi Sakawa	Applied Mathematics and Computation, <b>168</b> , 2 (2005) pp. 1317-1339
<b>B5</b> 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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<b>B7</b> 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
<b>B8</b> Numerical simulation of multi dimensional reflecting geometrical Brownian motion and its application to mathematical finance	Shuya Kanagawa Akio Arimoto Yasumasa Saisho	Nonlinear Analysis, <b>63</b> , 5-7 (2005) pp. e2209-e2222
<b>B9</b> 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, <b>2005</b> , Special (2005) pp. 463-475
<b>B10</b> 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, <b>36</b> , 6 (2005) pp. 565-579
<b>B11</b> 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, <b>19</b> , 8 (2005) pp. 721-741
<b>B12</b> 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)
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<b>B14</b> 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)
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<b>B24</b> 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
<b>B25</b> 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
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<b>B27</b> 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
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<b>B67</b> On-line Learning of Robot Arm Impedance Using Neural Networks	Toshio Tsuji Yoshiyuki Tanaka	Robotics and Autonomous Systems, <b>52</b> , 4 (2005) pp. 257-271
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<b>C50</b> Computational aspects of an extended EMQ model with variable production rate	Bibhas C. Giri Tadashi Dohi	Computers & Operations Research, <b>32</b> (2005) pp. 3143-3161
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<b>C52</b> 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
<b>C53</b> 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
<b>C54</b> 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), <b>II</b> (2005) pp. 483-487
<b>C55</b> 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), <b>II</b> (2005) pp. 493-497
<b>C56</b> Gompertz software reliability model and its application	Koji Ohishi Hiroyuki Okamura Tadashi Dohi	Proceedings of 29th Annual International Computer Software and Application Conference (COMP-SAC 2005), (2005) pp. 405-410
<b>C57</b> 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
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<b>C61</b> Determination of optimal warranty period in a software development project	Koichiro Rinsaka Tadashi Dohi	International Journal of Quality and Reliability Management, <b>22</b> , 7 (2005) pp. 715-730
<b>C62</b> Discrete-time spare ordering policy with lead time and discounting	Bibhas C. Giri Tadashi Dohi Naoto Kaio	Journal of Quality in Maintenance Engineering, <b>11</b> , 3 (2005) pp. 191-205

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<b>C78</b> Application of Fourier spectrum 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
<b>C79</b> 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 , <b>5747</b> (2005) pp. 813-821
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<b>C82</b> 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
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<b>D5</b> 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, <b>23</b> , 3 (2005) pp. 388-393
<b>D6</b> Direct Synthesis of Barium Magnesium Aluminate Blue Phosphor Particles via a Flame Route	H. K. Chang Wuled Lenggoro T. Ogi Kikuo Okuyama	Materials Letters, <b>59</b> , 10 (2005) pp. 1183-1187
<b>D7</b> Quartz Crystal Microbalance for Silicon Surface Organic Contamination	H. Habuka K. Suzuki S. Okamura Manabu Shimada Kikuo Okuyama	Journal of the Electrochemical Society, <b>152</b> , 4 (2005) pp. G241-G245
<b>D8</b> Incorporation of Dust Particles into a Growing Film during Silicon Dioxide Deposition from a TEOS/O <sub>2</sub> Plasma	Manabu Shimada H. Setyawan Y. Hayashi N. Kashihara Kikuo Okuyama	Aerosol Science and Technology , <b>39</b> , 5 (2005) pp. 408-414
<b>D9</b> Coagulation of Bipolarly Charged Ultrafine Aerosol Particles	S. H. Park K. W. Lee Manabu Shimada Kikuo Okuyama	Journal of Aerosol Science, <b>36</b> , 7 (2005) pp. 830-845
<b>D10</b> 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, <b>36</b> , 7 (2005) pp. 813-829
<b>D11</b> Highly Charging of Nanoparticles through Electropray of Nanoparticle	J. Suh B. Han Kikuo Okuyama M. Choi	Journal of Colloid and Interface Science, <b>287</b> , 1 (2005) pp. 135-140
<b>D12</b> A Polymer Solution Process for Synthesis of (Y,Gd) <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Ce Phosphor Particles	M. Abdullah Kikuo Okuyama Wuled Lenggoro S. Taya	Journal of Non-Crystalline Solids, <b>351</b> , 8-9 (2005) pp. 697-704
<b>D13</b> 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, <b>288</b> , 2 (2005) pp. 423-431
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<b>D26</b> 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, <b>232</b> (2005) pp. 1-8
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<b>D71</b> Preparation of Poly(silylene-phenylene)s Containing a Pendant Fluorophore and Their Applications to PL Imaging	J. Ohshita T. Uemura D.-H. Kim A. Kunai Y. Kunugi M. Kakimoto	Macromolecules, <b>38</b> (2005) pp. 730-735
<b>D72</b> 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, <b>358</b> (2005) pp. 4156-4162

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<b>F22</b> 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
<b>F23</b> 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
<b>F24</b> Feasibility Study of a Novel Molecular-Pore-Stacking (MPS), SiOCH Film in Fully-scale-down, 45nm-node Cu Damascene Interconnects	M. Tada H. Ohtake 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
<b>F25</b> 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

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<b>F26</b> 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
<b>F27</b> 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
<b>F28</b> 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
<b>F29</b> 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
<b>F30</b> 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
<b>F31</b> 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
<b>F32</b> 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

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<b>Paper Title</b>	<b>Author Name</b>	<b>Journal, Vol., No. (Year) Page</b>
<b>F33</b> 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)
<b>F34</b> 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)
<b>F35</b> 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
<b>F36</b> 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
<b>F37</b> 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
<b>F38</b> 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

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<b>F39</b> 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
<b>F40</b> 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
<b>F41</b> 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. Hishiya 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
<b>F42</b> Accuracy of SIMS Depth Profiling for Sub-keV As+Implantation	T. Eto K. Shibahara	Jpn. J. Appl. Phys. Part 1., <b>44</b> , 4B (2005) pp. 2433-2436
<b>F43</b> 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., <b>44</b> , 24 (2005) pp. L756-L759
<b>F44</b> Workfunction Tuning Using Various Impurities for Fully Silicided NiSi gate	K. Sano M. Hino N. Ooishi K. Shibahara	Jpn. J. Appl. Phys. Part 1., <b>44</b> , 6A (2005) pp. 3774-3777
<b>F45</b> 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, <b>237</b> (2005) pp. 136-141
<b>F46</b> 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., <b>44</b> , 12 (2005) pp. 8391-8395
<b>F47</b> 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., <b>44</b> , 2 (2005) pp. 1130-1131
<b>F48</b> Mechanism of Anomalous Behavior of Metal-Oxide-Semiconductor Capacitors Contaminated with Organic Molecules	M. Suzuki S. Yokoyama	Jpn. J. Appl. Phys., <b>44</b> , 3 (2005) pp. 1208-1212
<b>F49</b> Contact-Hole Etching with NH <sub>3</sub> -Added C <sub>5</sub> F <sub>8</sub> Pulse-Modulated Plasma	M. Ooka S. Yokoyama	Jpn. J. Appl. Phys., <b>44</b> , 9A (2005) pp. 6476-6480

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<b>F50</b> 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 <b>23</b> , 4 (2005) pp. 1018-1021
<b>F51</b> Structure and Optical Band-Gap Energies of Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> Thin Films Fabricated by RF Magnetron Plasma Sputtering	Zhimou Xu M. Suzuki S. Yokoyama	Jpn. J. Appl. Phys., <b>44</b> , 12 (2005) pp. 8507-8511
<b>F52</b> 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
<b>F53</b> Structural and Optical Properties of Electro-Optic Material: Sputtered (Ba,Sr)TiO <sub>3</sub>	M. Suzuki Zhimou Xu Y. Tanushi S. Yokoyama	Ext. Abst. Int. Conf. on Solid State Devices and Materials (SSDM2005), (2005) pp. 732-733
<b>F54</b> Groove-Buried Optical Waveguides Based on Metal Organic Solution-Derived Ba <sub>0.7</sub> Sr <sub>0.3</sub> TiO <sub>3</sub> 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
<b>F55</b> 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
<b>F56</b> 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
<b>F57</b> 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
<b>F58</b> 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., <b>44</b> , 2A (2005) pp. L60-L62
<b>F59</b> 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., <b>86</b> , 8 (2005) pp. 083501-1-083501-3
<b>F60</b> 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., <b>26</b> , 3 (2005) pp. 216-218
<b>F61</b> 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., <b>86</b> , 12 (2005) pp. 123118-1-123118-3
<b>F62</b> Annealing Temperature Dependence on Nickel-Germanium Solid-State Reaction	Shiyang Zhu Anri Nakajima	Jpn. J. Appl. Phys., <b>44</b> , 24 (2005) pp. L753-L755
<b>F63</b> Enhancement of BTI Degradation in pMOSFETs under High-Frequency Bipolar Gate Bias	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	IEEE Electron Device. Lett., <b>26</b> , 6 (2005) pp. 387-389
<b>F64</b> 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., <b>44</b> , 28 (2005) pp. L903-L905



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<b>F65</b> Atomic-Layer-Deposited Si-Nitride/SiO <sub>2</sub> 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., <b>26</b> , 8 (2005) pp. 538-540
<b>F66</b> Pulse Waveform Dependence on Ac Bias Temperature Instability in pMOSFETs	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	IEEE Electron Device. Lett., <b>26</b> , 9 (2005) pp. 658-660
<b>F67</b> 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., <b>98</b> , 11 (2005) pp. 114504-1-114504-6
<b>F68</b> Periodic Coulomb oscillation in Si single-electron transistor based on multiple islands	Kensaku Ohkura Tetsuya Kitade Anri Nakajima	J. Appl. Phys., <b>98</b> , 12 (2005) pp. 124503-1-124503-6
<b>F69</b> 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
<b>F70</b> 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
<b>F71</b> 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., <b>44</b> , 4B (2005) pp. 2273-2278
<b>F72</b> 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)
<b>F73</b> 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, <b>36</b> , 9 (2005) pp. 1-13
<b>F74</b> 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, <b>40</b> (2005) pp. 245-253
<b>F75</b> 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, <b>E88-C</b> (2005) pp. 622-629

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<b>F76</b> 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, <b>E88-C</b> (2005) pp. 1332-1342
<b>F77</b> 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, <b>J88-A</b> (2005) pp. 498-510
<b>F78</b> 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
<b>F79</b> 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
<b>F80</b> 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
<b>F81</b> 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
<b>F82</b> 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
<b>F83</b> 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
<b>F84</b> 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
<b>F85</b> 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
<b>F86</b> 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

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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

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## Registered Patents

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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