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Published Papers

A. Mechanical System Engineering

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| A2 Modeling of precipitation and Cr depletion profiles of Inconel 600 during heat treatments and LSM procedure | G. Bao K. Shinozaki M. Inkyo T. Miyoshi M. Yamamoto Y. Mahara H. Watanabe | Journal of Alloys and Compounds, 419 (2006) pp. 118-125 |
| A3 Simulation of Infiltration of Molten Alloy to Porous Preform Using Low Pressure | Yong Bum Choi Gen Sasaki Kazuhiro Matsugi Naoki Sorida Shunsaku Kondoh Toshio Fujii Osamu Yanagisawa | JSME International Journal, 49 , 1 (2006) pp. 20-24 |
| A4 Analysis of Manufacturing Processes for Metal Fiber Reinforced Aluminum Alloy Composite Fabricated by Low-Pressure Casting | Yong Bum Choi Kazuhiro Matsugi Gen Sasaki Kazushi Arita Osamu Yanagisawa | Materials Transactions, 47 , 4 (2006) pp. 1227-1231 |
| A5 Temperature Simulation of Pb-Free Sn-9Zn Elements for a Low Voltage Fuse | Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa Yasuo Kumagai Koji Fujii | Materials Transactions, 47 , 9 (2006) pp. 2413-2420 |
| A6 Effect of Al18B4O33 Whisker Surface Treatment on Aging Behavior of Al18B4O33 Whisker/ZK60 Magnesium Alloy Composites | W.G. Wang Y. Hasegawa Y.B. Choi N. Fuyama K. Matsugi O. Yanagisawa G. Sasaki | Key Engineering Materials, 326-328 (2006) pp. 1673-1676 |
| A7 Low Pressure Casting Process of Fe-CrSi/A366.0 Alloy Composites and Their Characterization | Yong Bum Choi Gen Sasaki Kazuhiro Matsugi Shunsaku Kondoh Osamu Yanagisawa | Key Engineering Materials, 326-328 (2006) pp. 1741-1744 |
| A8 Spark Sintering of Electroless Nickel or Tin Plated Metal, Carbide, Oxide and Sulfide Powders | Kazuhiro Matsugi Gen Sasaki Osamu Yanagisawa | Proc. of 6th Pacific Rim Int. Conf. on Ceramic and Glass Technology, 194 (2006) pp. 197-208 |
| A9 Spark Sintering Rate of Pure Copper Powder Compact | Kazuhiro Matsugi Hideaki Kuramoto Gen Sasaki Osamu Yanagisawa | Proc. of 6th Pacific Rim Int. Conf. on Ceramic and Glass Technology, 194 (2006) pp. 161-172 |
| A10 Influence of Preform Preparation Condition on Infiltration of Molten Aluminum | Takashi Yamanaka Yong Bum Choi Kazuhiro Matsugi Osamu Yanagisawa Gen Sasaki | Proc. of 3rd Int. Conf. on Advanced Forming and Die Manufacturing Technology, (2006) pp. M3E-3-1-M3E-3-7 |

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|--|--|---|
| A11 Surface Treatment of Al18B4O33 Whisker and Development of Al18B4O33/ZK60 Magnesium Alloy Matrix Composite | G. Sasaki W.G. Wang Y. Hasegawa Y.B. Choi N. Fuyama K. Matsugi O. Yanagisawa | Proc. of 3rd Int. Conf. on Advanced Forming and Die Manufacturing Technology, (2006) pp. M1E-4-1-M1E-4-5 |
| A12 First observation of plasma motion in GAMMA 10 using fast camera | Nobuhiro Nishino Y.Nakashima Y.Higashizono S.Kobayashi Islam Md. Khairul Y.Kubota M.Yoshikawa Y.Mishima T.Cho | Journal of Plasma and Fusion Research, 1 (2006) |
| A13 Model of filament structure in a turbulence plasma edge | Nobuhiro Nishino | Nuclear Fusion, 46 (2006) pp. S658-S664 |
| A14 High-speed 2D measurement of edge turbulence phenomena with a fast camera in Heliotron J | Nobuhiro Nishino T. Mizuuchi Z. Feng S. Kobayashi K. Nagasaki H. Okada Y. Torii K. Kondo F. Sano | J. Nucl. Mater., (2006) |
| A15 2-d image diagnostic technique for edge turbulence using fast cameras | Nobuhiro Nishino T. Mizuuchi Z. Feng S. Kobayashi K. Nagasaki H. Okada F. Sano K. Kondo Y. Nakashima Y. Higashizono H. Kawano T. Cho M. Shoji K.Sasaki K.Hanada H.Zushi | Journal of Plasma and Fusion Research Series, 9 (2006) |
| A16 Development of High-speed Centrifugal Compaction Process of Alumina | Hiroyuki Y. Suzuki Hidenori Kuroki | Advances in Science and Technology, 45 (2006) pp. 421-426 |
| A17 Molecular Dynamics Simulation of Grain Boundary Formation and Migration in Silicon | Kenjiro Sugio Hiroshi Fukushima Osamu Yanagisawa | Materials Transactions, 47 , 11 (2006) pp. 2711-2717 |
| A18 The Performance of Thin NaI(Tl) Scintillator Plate for Dark Matter Search | K. Fushimi H. Kawasuso E. Aihara R. Hayami M. Toi K. Yasuda S. Nakayama N. Koori M. Nomachi K. Ichihara Ryuta Hazama S. Yoshida S. Umehara K. Imagawa H. Ito | Journal of the Physical Society of Japan, 75 , 6 (2006) pp. 064201-1-064201-5 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|---|--|
| A19 A Search for Neutrinos from the Solar hep Reaction and the Diffuse Supernova Neutrino Background with the Sudbury Neutrino Observatory | B. Aharmim Ryuta Hazama et al. | The Astrophysical Journal, 653 (2006) pp. 1545-1551 |
| A20 CANDLES for double beta decay of ^{48}Ca | S. Umehara T. Kishimoto I. Ogawa Ryuta Hazama S. Yoshida K. Matsuoka D. Yokoyama K. Mukaida K. Ichihara Y. Hirano A. Yanagisawa | Journal of Physics Conference Series, 39 (2006) pp. 356-358 |
| A21 MOON for spectroscopic studies of double beta decays and the present status of the MOON-1 prototype detector | H. Nakamura H. Ejiri K. Fushima K. Ichihara K. Matsuoka M. Nomachi Ryuta Hazama S. Umehara S. Yoshida T. Ogama T. Sakiuchi V. H. Hai Y. Sugaya | Journal of Physics Conference Series, 39 (2006) pp. 350-352 |
| A22 WIMPs search by means of thin NaI(Tl) array | K. Fushima H. Kawasuso E. Aihara R. Hayami N. Koori S. Nakayama K. Yasuda Ryuta Hazama K. Ichihara H. Nakamura M. Nomachi T. Ogama S. Umehara S. Yoshida H. Ejiri K. Imagawa H. Ito | Journal of Physics Conference Series, 39 (2006) pp. 120-122 |
| A23 Oscillating Phenomenon of Conjugate Natural Convection of Liquid Metal in a Square Enclosure | Jun Kashima Ryuta Isago Yoshihiro Kikuchi | Proc. 5th Korea-Japan Symp. Nuclear Thermal Hydraulics and Safety (NTHAS5), 1 (2006) pp. 444-449 |
| A24 Trial for diameter-selective synthesis of single-walled carbon nanotubes | Shuhei Inoue Takeshi Nakajima Yoshihiro Kikuchi | Carbon, 44 , 6 (2006) pp. 1287-1291 |
| A25 Growth Mechanism and Selective Synthesis of SWNTs | Shuhei Inoue Takeshi Nakajima Kazuya Nomura Yoshihiro Kikuchi | Proc. of European Nano Systems 2006 (ENS 2006), 1 (2006) pp. 19-24 |
| A26 Numerical Studies on Specific Impulse of Partially Filled Pulse Detonation Rocket Engines | Shigeru Sato Akiko Matsuo Takuma Endo Jiro Kasahara | Journal of Propulsion and Power, 22 , 1 (2006) pp. 64-69 |
| A27 Effect of Split Injection Strategy on Combustion and Emission Characteristics of D.I. Diesel Engine | Sadahiro Akiba Keiya Nishida Xinyun Zi Wu Zhang | Proceedings of the 2nd International Symposium on Clean and High-Efficiency Combustion in Engines ISCE'2006, ISCE06-45 (2006) pp. 85-90 |

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|--|--|---|
| A28 Combustion and Emission Formation Processes in D.I. Diesel Engine under Various Injection Strategies | Keiya Nishida Sadahiro Akiba Kazunori Hirabayashi Katsuya Marushita Wu Zhang | CD-ROM Proceedings of FISITA 2006 World Automotive Congress, F2006P278 (2006) pp. 1-10 |
| A29 Effects of Hole Geometry and Its Internal Flow on Spray and Mixture Properties of Hole-Type Injectors for a DISI Engine | Kiyotaka Sato Jun Kanzaki Masahisa Yamakawa Keiya Nishida | CD-ROM Proceedings of 10th International Conference on Liquid Atomization and Spray Systems ICALSS-2006, ICLASS06-166 (2006) pp. 1-8 |
| A30 Spray and Mixture Properties of Group-Hole Nozzle for D.I. Diesel Engine | Keiya Nishida Shinsuke Nomura Yuhei Matsumoto | CD-ROM Proceedings of 10th International Conference on Liquid Atomization and Spray Systems ICALSS-2006, ICLASS06-171 (2006) pp. 1-8 |
| A31 Inclusive Data on Evaporating Fuel Spray Injected by Hole-Type D.I. Diesel Injector (Hole Geometry, Injection Rate, Liquid/Vapor Phase Concentration Distributions, Spray/Mixture Properties) | Jian Gao Yuhei Matsumoto Keiya Nishida | CD-ROM Proceedings of 10th International Conference on Liquid Atomization and Spray Systems ICALSS-2006, ICLASS06-173 (2006) pp. 1-8 |
| A32 Spray Characteristics of a Group-Hole Nozzle for D.I. Diesel Engines | Yuyin Zhang Keiya Nishida Shinsuke Nomura Tomoaki Ito | Atomization and Sprays, 16 , 1 (2006) pp. 35-50 |
| A33 Recent Developments of Tubular Flame Burners | Satoru Ishizuka | Proceedings of the 33rd KOSCO Symposium, 33 (2006) pp. 7-8 |
| A34 Efficient Electron Heating in Nitrogen Clusters Irradiated with Intense Femtosecond Laser Pulse | S. Namba N. Hasegawa, K. Nagashima T. Kawachi M. Kishimoto K. Sukegawa K. Takiyama | Physical Review A, 73 (2006) pp. 013205 |
| A35 Spectroscopic study of ablation and recombination processes in a laser-produced ZnO plasma | S. Namba R. Nozu K. Takiyama T. Oda | Journal of Applied Physics, 99 (2006) pp. 073302 |
| A36 Spectroscopic study of debris mitigation with minimum-mass Sn laser-plasma for extreme ultraviolet lithography | S. Namba S. Fujioka H. Nishimura U. Yasuda K. Nagai N. Miyanaga Y. Izawa K. Mima K. Takiyama | Applied Physics Letters, 88 (2006) pp. 151503 |
| A37 Development of supersonic metastable helium pulsed beam source for plasma diagnostics | S. Namba D. Andruszyk K. Takiyama D. Ueno S. Furukawa B. W. James | Japanese Journal of Applied Physics, 45 , 10B (2006) pp. 8099-8103 |
| A38 A short-pulsed compact supersonic helium beam source for plasma diagnostics | D. Andruszyk S. Namba B. W. James K. Takiyama T. Oda | Plasma Device and Operations, 14 (2006) pp. 81-91 |

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|---|--|--|
| A39 Observation of OH Radical Reactions with Atomic Hydrogen in He/H ₂ O Plasmas by LIF spectroscopy | Ken Takiyama Shinichi Namba Tsutomu Yamasaki Akira Shoji Jun-Hyoun Kwon Rae-Eun Park Hideo Nojima | Jpn. J. Appl. Phys., 45 , 10B (2006) pp. 8260-8263 |
| A40 Depolarization effect by electrons on electric field measurements in He plasmas using LIF polarization spectroscopy | K. Takiyama T. Yamasaki S. Furukawa, T. Nagashima S. Namba T. Oda | Proceedings of the 6th International Conference on Reactive Plasmas and 23rd Symposium on Plasma Processing, (2006) pp. 711-712 |
| A41 Emission profile from micro-hollow cathode discharge plasmas in helium water vapor mixture | T. Yamasaki S. Namba K. Takiyama | Proceedings of the 6th International Conference on Reactive Plasmas and 23rd Symposium on Plasma Processing, (2006) pp. 345-346 |
| A42 Spectroscopic studies of ionization and recombination dynamics in laser produced ZnO plasmas | S. Namba K. Uemura S. Furukawa K. Takiyama | Proceedings of the 6th International Conference on Reactive Plasmas and 23rd Symposium on Plasma Processing, (2006) pp. 386-387 |
| A43 Elemental Analysis of Uranouchi Bay Seabed Sludge Using PIXE | M Hasnat Kabir Tadashi Narusawa Fumitaka Nishiyama Katsuhiro Sumi | International Journal of PIXE, 16 , 3&4 (2006) pp. 221-230 |
| A44 Experimental apparatus at KUR-ISOL to identify isomeric transitions from fission products, and decay spectroscopy of ¹⁵¹ Ce | Y. Kojima M. Shibata A. Taniguchi Y. Kawase R. Doi A. Nagao K. Shizuma | Nuclear Instruments and Methods A, 564 (2006) pp. 275-282 |
| A45 α decay of ²³⁸ Cm and the new isotope ²³⁷ Cm | M. Asai K. Tsukada S. Ichikawa M. Sakama H. Haba I. Nishinaka Y. Nagame S. Goto Y. Kojima Y. Oura M. Shibata | Physical Review C, 73 (2006) pp. 067301(1)-067301(4) |
| A46 EXPERIMENTAL EVALUATION OF SCREW THREAD LOOSENING IN BOLTED JOINTS WITH SOME PARTS AND ANALYTICAL APPROACH OF LOOSENING MECHANISM OF THE JOINTS UNDER REPEATED TRANSVERSE LOADINGS | Toshiyuki Sawa Mitsutoshi Ishimura Yasumasa Shoji Hiroshi Yamanaka | Proceedings of SAE 2006 World Congress, (2006) |
| A47 NEW DESIGN FORMULA FOR BOLTED JOINTS UNDER TENSILE LOADS | Toshiyuki Sawa | Proceedings of SAE 2006 World Congress, (2006) |
| A48 The effect of the thermal Expansion Coefficient on the Sealing Performance of Pipe Flange Connections with NiTi Shape Memory Alloy gaskets | Yoshio Takagi Teruhisa Tatsuoka Toshiyuki Sawa | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A49 Measurements of Thermal Properties of Gaskets for the Design of Bolted Flange Joints Under Thermal Conductions | Takahiro Ohmura Kanji Hanashima Junichi Nyumura Toshiyuki Sawa | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |

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|---|--|--|
| A50 FEM Stress Analysis and an Evaluation of the Sealing Performance in Non-Circular Flange Connections with Gaskets Subjected to Internal Pressure | Toshiyuki Sawa Ryo Kurosawa Wataru Maezaki | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A51 Experimental Evaluation of Screw Thread Loosening in Bolted Joint with Some Parts for Preventing the Loosening Under Transverse Repeated Loadings | Toshiyuki Sawa Mitsutoshi Ishimura Hiroshi Yamanaka | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A52 Evaluation of Sealing Behavior of Gaskets Based on the Test Method HPIS Z104 Proposed in Japan | Takashi Kobayashi Toshiyuki Sawa Hiroyasu Tsuji Shoichi Shigetome | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A53 Evaluation of the Sealing Performance in Bolted Flange Connection Under Heat Condition and Internal Pressure: The Effect of Scatter in Bolt Preloads | Toshiyuki Sawa Yoshio Takagi Katsuhiro Yamada | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A54 Effects of Scatter in Bolt Preload on the Sealing performance in Bolted Flange Connections with Cover of Pressure Vessel Under Internal pressure | Satoshi Nagata Toshiyuki Sawa Seiichi Hamamoto | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A55 New Tightening Diagram for Bolted Flange Gasket Joints | Yoshio Ueno Satoshi Nagata Takashi Kobayashi Toshiyuki Sawa | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A56 Elasto-Plastic FEM Stress Analysis of Pipe Flange Connections Under Internal Pressure | Toshiyuki Sawa Satoshi Nagata Naofumi Ogata | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A57 Load Factor Based Calculation for Gasketed Flange Connection with Cover Plate Subjected to Internal Pressure | Satoshi Nagata Toshiyuki Sawa | Proceedings of ASME PVP 2006/ICPVT 11 CONFERENCE, (2006) |
| A58 A Stress Analysis and Strength of Scarf Adhesive Joints Under Static Tensile Loadings | Toshiyuki Sawa Masahiro Sasaki Yuya Hirayama | Proceedings of The 3rd World Congress on Adhesion and Related Phenomena, (2006) pp. 132-136 |
| A59 Two-dimensional Stress Analysis and the Strength Estimation of Adhesive Butt Joints Under Bending Moments | Toshiyuki Sawa Yosuke Akita | Proceedings of The 3rd World Congress on Adhesion and Related Phenomena, (2006) pp. 137-141 |
| A60 Two-dimensional Stress Analysis of Single-lap Adhesive Joints Subjected to Tensile Loads | Toshiyuki Sawa Katsuyuki Nakano Shiro Iiduka | Proceedings of The 3rd World Congress on Adhesion and Related Phenomena, (2006) pp. 142-148 |
| A61 A Stress Analysis and Strength Evaluation of Stepped-lap Adhesive joints Under Static Loadings | Toshiyuki Sawa Katsuyuki Nakano Shiro Iiduka | Proceedings of The 3rd World Congress on Adhesion and Related Phenomena, (2006) pp. 186 |
| A62 Non-Rotational-Loosening Behavior of Bolted Joint Constructed from Steel Tube and Plates | Yasuo Fujioka Koichi Hara Toshiyuki Sawa | Proceedings of ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS AND EXPOSITION, (2006) |
| A63 FEM Analysis and an Evaluation of the Sealing Performance in Flexible Box-Shape Flanged Bolted Joints with Gaskets Subjected to Internal Pressure | Toshiyuki Sawa Yasuaki Tatsumi Ryo Kurosawa | Proceedings of ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS AND EXPOSITION, (2006) |
| A64 Two-Dimensional Stress Analysis of Adhesive Butt joints Filled with Elastic Circular Fillers in an Adhesive Subjected to Static Tensile Loadings | Toshiyuki Sawa Yosuke Akita | Proceedings of ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS AND EXPOSITION, (2006) |
| A65 A Stress Analysis and Strength Evaluation of Scarf Adhesive Joints Subjected to Static Tensile Loading | Toshiyuki Sawa Yuya Hirayama Masahiro Sasaki | Proceedings of ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS AND EXPOSITION, (2006) |

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|---|--|---|
| A66 New Development in Studies on the Characteristics of Bolted Pipe Flange Connections in JPVRC | Toshiyuki Sawa Satoshi Nagata Hirokazu Tsuji | Journal of Pressure Vessel Technology, 128 (2006) pp. 103-108 |
| A67 A computational study of interface motion driven by diffusion and stress fields under finite deformation using the level-set method | Takeshi Iwamoto Mohammed Cherkaoui Esteban P. Busso | Proceedings of Plasticity 2006 (CD-ROM), (2006) |
| A68 Removal of Pipe Fouling Inside Pipes Using Ultrasonic Waves | Noritoshi Nakagawa Masaya Fujihara Chaoqun Wu Jun Satonobu | JSME International Journal, Series C, 49 , 3 (2006) pp. 713-718 |
| A69 Dynamic Characteristics of Exhaust Hanger Composed of Rubber and Thin Metal Ring | Kazunari Nakahara Noritoshi Nakagawa Katsutoshi Ohta Tetsuya Miyake Ramanjaneyulu Kakarla | JSME International Journal, Series C, 49 , 3 (2006) pp. 750-757 |
| A70 Study on Acoustic Cavitations in the Ultrasonic Radiation Field | Chaoqun Wu Noritoshi Nakagawa Masaya Fujihara | JSME International Journal, Series C, 49 , 3 (2006) pp. 758-763 |
| A71 Identification Method of Plural Sound Sources by Using Measured Values with Error and Power Spectra Identification | Noritoshi Nakagawa Yasuhide Sekiguchi | Proc. of the 13th International Congress on Sound and Vibration, (2006) |
| A72 Experimental Study on Frictional Vibration in Bearing Case of Centrifugal Fan | Takeo Fujii Noritoshi Nakagawa | Proc. of the 8th International Conference on Motion and Vibration Control (MOVIC 2006), (2006) pp. 398-403 |
| A73 Observation of Multibubble Cavitation in the Ultrasonic Cleaning Tank | Noritoshi Nakagawa Chaoqun Wu Yasuhide Sekiguchi | Proc. of the Fourth Joint Meeting: ASA and ASJ, (2006) pp. 1-12 |
| A74 Foreword | Noritoshi Nakagawa | JSME International Journal, Series C, 49 , 3 (2006) pp. 633-633 |
| A75 The Damage Diagnosis of Gear Tooth Surface by Using a Laser Beam Reflection | Eiichiro Tanaka Kazuteru Nagamura Kiyotaka Ikejo Ryozo Nemoto | Proceedings of the International Conference on Mechanical Transmissions (IMCT'2006), (Chongqing, CHINA), 2 (2006) pp. 990-995 |
| A76 Acoustic Wave Generation in a Compressible Wake | Hiroshi Maekawa Takashi Takiguchi Daisuke Watanabe | JSME International Journal Series B, 49 , 4 (2006) pp. 1086-1091 |
| A77 Acoustic Waves Emanating from Transitional Structures in a Compressible Boundary-layer for High-speed Train | Daisuke Watanabe Hajime Takami Hiroshi Maekawa Katsuhiro Kikuchi Masanobu Iida Hiroki Suzuki | Proc. of 13th International Congress on Sound and Vibration (ICSV13), (2006) |
| A78 Low-Frequency Noise Radiated from a High-Speed Train Running in an Open Section | Hajime Takami Katsuhiro Kikuchi Masanobu Iida Hiroshi Maekawa Takeshi Kurita Yusuke Wakabayashi | Proc. of 13th International Congress on Sound and Vibration (ICSV13), (2006) |
| A79 Production Planning and Simulation for Reverse Supply Chain | Takeshi Murayama Mitsunobu Yoda Toru Eguchi Fuminori Oba | JSME International Journal Series C, 49 , 2 (2006) pp. 281-286 |
| A80 Bi-criteria Scheduling for Meeting Due-dates and Minimizing Setup Times Using the Mixture of a Genetic Algorithm and a Priority Rule | Toru Eguchi Hiroaki Kawai Fuminori Oba | Proceedings of the 39th CIRP International Seminar on Manufacturing Systems, 241 , 266 (2006) pp. 241-246 |

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| A81 Efficient Dynamic scheduling with Short Forecast Window using the Mixture of a Genetic Algorithm and a Priority Rule | Toru Eguchi Masashi Dougakiuchi Fuminori Oba Takeshi Murayama | Proceedings of the 2006 International Symposium on Flexible Automation, (2006) |
| A82 A Homogeneous Mobile Robot Team That is Fault-Tolerant | Toshiyuki Yasuda Kazuhiro Ohkura Kanji Ueda | The Advanced Engineering Informatics Journal, 20 , 6 (2006) pp. 301-311 |
| A83 estimating the Degree of Neutrality in Fitness Landscapes by the Nei's Standard Genetic Distance - An Application to Evolutionary Robotics | Yoshiaki Katada Kazuhiro Ohkura | Proceedings of the 2006 Congress on Evolutionary Computation, (2006) pp. 1590-1597 |
| A84 An Ecological Approach to the Feature Analysis of Evolutionary Multi-Agent Systems | Masanori Goka Kazuhiro Ohkura | Proceedings of the 6th International Workshop on Emergent Synthesis, (2006) pp. 173-180 |
| A85 Behavior Acquisition Based on Reinforcement Learning with Adaptive Action Generator | Toshiyuki Yasuda Kazuhiro Ohkura | Proceedings of the 6th International Workshop on Emergent Synthesis, (2006) pp. 283-288 |
| A86 Fixed structured PID controller design for standard H-infinity control problem | Masami Saeki | Automatica, 42 , 1 (2006) pp. 93-100 |
| A87 Gain scheduling controller design for two-rotor hovering system and its experimental verification | Makoto Yamashita Masami Saeki Nobutaka Wada Izumi Masubuchi | Journal of Robotics and Mechatronics, 18 , 5 (2006) pp. 589-597 |
| A88 Properties of stabilizing PID gain set in paramter space | Masami Saeki | Proceedings of the 17th International Symposium on Mathematical Theory of Networks and Systems, (2006) pp. 2277-2283 |
| A89 Static output feedback design for H_{∞} control by descent method | Masami Saeki | Proceedings of the 45th IEEE Conference on Decision and Control, (2006) pp. 5156-5161 |
| A90 Model Predictive Control for Linear Parameter Varying Systems using Parameter Dependent Lyapunov Function | Nobutaka Wada Koji Saito Masami Saeki | IEEE Transactions on Circuits and Systems, II-53 , 12 (2006) |
| A91 Constrained Control of Planar Systems Using Multi-level Variable Saturation Function | Nobutaka Wada Masami Saeki | Proc. of International Symposium on Mathematical Theory of Networks and Systems, (2006) pp. 1824-1828 |
| A92 Dissipativity Inequalities for Continuous-Time Descriptor Systems with Applications to Synthesis of Control Gains | Izumi Masubuchi | Systems & Control Letters, 55 , 2 (2006) pp. 589-597 |
| A93 Stability Analysis of Hybrid Automata with Set-Valued Vector Fields Using Sum of Squares | Izumi Masubuchi Tokihisa Tsuji | IEICE Transactions on Fundamentals, E89-A , 11 (2006) pp. 3185-3191 |
| A94 Characterization of Positively Invariant Sets by Density Functions | Izumi Masubuchi | 17th International Symposium on Mathematical Theory of Networks and Systems, (2006) pp. 1599-1607 |
| A95 A Change-of-Variables Method for Output Feedback Synthesis of Descriptor Systems Based on Realization-Independent LMIs | Izumi Masubuchi | 17th International Symposium on Mathematical Theory of Networks and Systems, (2006) pp. 2259-2270 |
| A96 Density Functions Characterizing Positive Invariance and Regional Almost Attraction with Converse Results | Izumi Masubuchi | 45th IEEE Conference on Decision and Control, (2006) pp. 5126-5131 |
| A97 Reaction force estimation for injection unit by disturbance observer | Kiyoshi Ochi Masami Saeki | SICE-ICASE International Joint Conference 2006, (2006) pp. 4468-4472 |

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| A98 PID gain tuning based on falsification using bandpass filters | Masami Saeki Osamu Hamada Nobutaka Wada Izumi Masubuchi | SICE-ICASE International Joint Conference 2006, (2006) pp. 4032-4037 |
| A99 Effect of Oil Mist on Tool Temperature in Cutting | Takashi Ueda Akira Hosokawa Keiji Yamada | Trans. of the ASME, J. of Manufac. Sci. and Eng., 128 , 1 (2006) pp. 130-135 |
| A100 Thermal Damage of Silicon Wafer in Thermal Cleaving Process with Pulsed Laser and CW Laser | Keiji Yamada Takashi Ueda Akira Hosokawa Yasuo Yamane Katsuhiko Sekiya | Proc. of Photonics West 2006: Lasers and Applications in Science and Engineering, (2006) |
| A101 On-machine Evaluation Method for Misengagement of Toolholder by Inclusion of Chips | Keiji Yamada Yasuo Yamane Katsuhiko Sekiya Tadashi Makiyama | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 57-60 |
| A102 Tool Life Detecting System Using Damage Sensor-Integrated Insert | Katsuhiko Sekiya Yasuo Yamane Ayumu Torimoto | JSME International Journal, Series C, 49 , 2 (2006) pp. 301-306 |
| A103 Tool Wear under High-speed End Milling of Ti-6Al-4V Alloy | Katsuhiko Sekiya Yasuo Yamane Keiji Yamada Norihiko Narutaki | Material Scinence and Technology (MS&T) 2006: Product Manufacturing, (2006) pp. 57-60 |
| A104 Reduction of Adhesion with an Amorphous Silicon Coated Tool | Ryo Tezuka Katsuhiko Sekiya Masahiko Kato Yasuo Yamane Keijiro Nakasa Keiji Yamada | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 205-208 |
| A105 Visualizing and Measuring of Splayed Mixture with Optical Dispersion Method for MQL Drilling | Tadashi Makiyama Katsuhiko Sekiya Keiji Yamada Yasuo Yamane | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 297-300 |
| A106 Turning of BN Free-machining Steel | Ryutaro Tanaka Yasuo Yamane Katsuhiko Sekiya Norihiko Narutaki Tetsuo Shiraga | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 477-479 |
| A107 Difficulty in Machining Calculated from Mechanical and Thermal Properties of Difficult-to-cut Material | Yasuo Yamane Katsuhiko Sekiya Norihiko Narutaki Emmanuel O. Ezugwu | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 497-501 |
| A108 Development of Coated Tools that Generate Wear-resistant Protective Layers during High-speed Dry Machining | Shogo Nakashima Hiroshi Usuki Satoshi Furuya Yasuo Yamane Takashi Kano Kazuyuki Kubota Norihiko Shima | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 89-92 |
| A109 Examaination by Modeling on Cutting Temperateure of the Titanium Alloys | Akihiko Ikuta Yasuhiro Fukaya Shohei Kobatake Kenji Shinozaki Hidenori Kuroki Yasuo Yamane Masatoshi Aritoshi Kazuya Hamaguchi | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 137-140 |
| A110 Deterministic Ultra-precision Cutting of Cemented Carbide for Aspheric Mold | Kunitaka Kuriyama Masahiko Fukuta Yasuo Yamane | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 353-356 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|---|---|
| A111 Simulator for Scraping Operation - Educational Tool for Bringing up a Skillful Worker | Tadanori Sugino Yasuo Yamane | Proc. of the Eighth International Conference on Progress of Machining Technology, (2006) pp. 437-440 |
| A112 Identification of Plasticity Parameters of Metallic Coatings by means of Depth-Sensing Micro-Indentation | Hiroshi Hamasaki Fusahito Yoshida | Materials Science Forum, 505-507 (2006) pp. 757-762 |
| A113 Influence of strain ratio on bending fatigue life and fatigue crack growth in TiNi shape-memory alloy thin wires | R. Matsui Y. Makino H. Tobushi Y. Furuichi F. Yoshida | Materials Transactions, 47 , 3 (2006) pp. 759-765 |
| A114 Optimum blank design for sheet metal forming based on the interaction of high- and low-fidelity FE models | Ryutaro Hino Fusahito Yoshida Vassili V. Toropov | Archive of Applied Mechanics, 75 , 10-12 (2006) pp. 679-691 |
| A115 A model of large-strain cyclic plasticity for accurate springback analysis | F. Yoshida T. Uemori S. Abe | Proceedings of the IDDRG 2006 Conference (CD-ROM), (2006) pp. 145-152 |
| A116 A Model of Anisotropic Plasticity and Its Application to Springback Simulation | F. Yoshida T. Uemori S. Abe | Proceedings of the 12th International Symposium on Plasticity (PLASTICITY 2006) (CR-ROM), (2006) |
| A117 Effect of stress concentration on upper yield point in mild steel | H.B. Sun Y. Kaneda M. Ohmori F. Yoshida | Materials Transactions, 47 , 1 (2006) pp. 96-100 |
| A118 Formation of Fine and Dense Conical Carbides on Tool Steel Surface by Sputter Etching | Rongguang Wang Qinglian Zhang Masahiko Kato Keijiro Nakasa | Materials Transactions, 47 , 7 (2006) pp. 1798-1804 |
| A119 Statistical fatigue properties of SCM435 steel in ultra-long-life regime based on JSMS database on fatigue strength of metallic materials | Tatsuo Sakai Takashi Sakai Kenji Okada Machiko Furuichi Izuru Nishikawa Atsushi Sugeta | International Journal of Fatigue, 28 , 11 (2006) pp. 1486-1492 |

B. Artificial Complex Systems Engineering

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|--|--|
| B1 A Search of Stackelberg Solutions with Using Evolutionary Multi-Agent Systems for Bi-level Facility Location Problem | Takeshi Uno Masatoshi Sakawa Kosuke Kato Hideki Katagiri Takahiro Takebe | Proceedings of Czech-Japan Seminar 2006 on Data Analysis & Decision Making under Uncertainty, (2006) pp. 29-34 |
| B2 An Application of Tabu Search for Multi-Dimensional Competitive Facility Location Problem | Takeshi Uno Masatoshi Sakawa Kosuke Kato Seiichirou Hanaoka | Proceedings of Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems, (2006) pp. 1519-1523 |
| B3 Jumping pattern optimization for a serial link robot through soft computing technique | Takeshi Matsui Masatoshi Sakawa Takeshi Uno Kosuke Kato Mitsuru Higashimori Makoto Kaneko | Proceedings of Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems, (2006) pp. 1514-1518 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|--|---|
| B4 Acquisition of KANSEI decision rules of coffee flavor using rough set method | Tatsuo Nishino Mitsuo Nagamachi Masatoshi Sakawa | Kansei Engineering International, 5 , 4 (2006) pp. 41-50 |
| B5 A comparative study on approximations of decision class and rule acquisition by rough sets model | Tatsuo Nishino Mitsuo Nagamachi Masatoshi Sakawa Kousuke Kato Hideo Tanaka | Kansei Engineering International, 5 , 4 (2006) pp. 51-60 |
| B6 Approximate solution of reflecting Brownian motion using penalty method and numerical application to imperfect elastic barrier | Shuya Kanagawa Yasumasa Saisho Hiroaki Uesu | Dynamic Systems and Applications, 15 , 2 (2006) pp. 287-300 |
| B7 Stochastic models describing human metabolism processes using stochastic differential equations | Toshihiko Kawamura Yasumasa Saisho | Stochastic Models, 22 , 2 (2006) pp. 273-287 |
| B8 Interactive decision making using possibility and necessity measures for a fuzzy random multiobjective 0-1 programming problem | Hideki Katagiri Masatoshi Sakawa Ichiro Nishizaki | Cybernetics and Systems, 37 , 1 (2006) pp. 59-74 |
| B9 A multi-objective resource allocation problem in PERT networks | Amir Azaron Hideki Katagiri Masatoshi Sakawa Kosuke Kato Azizollah Memariani | European Journal of Operational Research, 172 , 3 (2006) pp. 838-854 |
| B10 Reliability evaluation of multi-component cold-standby redundant systems | Amir Azaron Hideki Katagiri Kosuke Kato Masatoshi Sakawa | Applied Mathematics and Computation, 173 , 1 (2006) pp. 137-149 |
| B11 Longest path analysis in networks of queues: dynamic scheduling problems | Amir Azaron Hideki Katagiri Kosuke Kato Masatoshi Sakawa | European Journal of Operational Research, 174 , 1 (2006) pp. 132-149 |
| B12 Modelling complex assemblies as a queuing network for lead time control | Amir Azaron Hideki Katagiri Kosuke Kato Masatoshi Sakawa | European Journal of Operational Research, 174 , 1 (2006) pp. 150-168 |
| B13 A tabu search algorithm for k-minimum spanning tree problems | Hideki Katagiri Ichiro Nishizaki Tomohiro Hayashida Masatoshi Sakawa Kosuke Kato | Proceedings of SCIS & ISIS 2006, CD-ROM (2006) pp. 1524-1529 |
| B14 Agent-based simulation for generalized matching pennies games | Ichiro Nishizaki Tsuyoshi Nakakura Tomohiro Hayashida | Proceedings of SCIS & ISIS 2006, CD-ROM (2006) pp. 1530-1535 |
| B15 Bit-rate maximization for multiuser OFDM systems | Hiroyuki Tase Shuichi Ohno Takao Hinamoto | Electronics and Communications in JAPAN, Part 3, 1 , 9 (2006) |
| B16 Multi-carrier multiple access is sum-rate optimal for block transmissions over circulant ISI channels | Shuichi Ohno Georgios B. Giannakis Zhi-Quan Lu | IEEE Journal on Selected Areas in Communications, 24 , 6 (2006) pp. 1256-1260 |
| B17 Performance of single-carrier block transmissions over multipath fading channels with linear equalization | Shuichi Ohno | IEEE Transactions on Signal Processing, 54 , 10 (2006) pp. 3678-3687 |
| B18 Adaptive subcarrier allocation for multi-user OFDM system | Kok Ann Donny Teo Yoshiyuki Otani Shuichi Ohno | IEICE Transactions on Fundamentals, E89-A (2006) pp. 3131-3137 |
| B19 A universal interpretation of receive diversity gain in MIMO systems over flat channels | Shuichi Ohno Kok Ann Donny Teo | Proc. of the 2006 European Signal Processing Conference, (2006) |
| B20 Pilot-aided channel estimation and Viterbi equalization for OFDM over doubly-selective channel | Kok Ann Donny Teo Shuichi Ohno | Proc. of IEEE Global Telecommunications Conference, (2006) |

Published Papers

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|---|--|
| B21 Performance analysis of successive interference cancellation in multiuser CDMA over flat channels | Kok Ann Donny Teo Shuichi Ohno | Proc. of IEEE Asia Pacific Conference on Circuits and Systems, (2006) |
| B22 Tradeoff between BER and bandwidth efficiency in MIMO systems with ZF equalization | Shuichi Ohno Kok Ann Donny Teo | Proc. of 2006 International Symposium on Intelligent Signal Processing and Communication Systems, (2006) |
| B23 Design of IIR digital filters with discrete coefficients based on MLS criterion | Masayoshi Nakamoto Takao Hinamoto | IEICE Trans. on Fundamentals, E89-A, 4 (2006) pp. 1116-1121 |
| B24 Finite Wordlength Implementation for Recursive Digital Filters with Error Feedback | Masayoshi Nakamoto Takao Hinamoto Masaki Oku Tuyoshi Yoshiya | Proc. 14th European Signal Processing Conference, (2006) |
| B25 Wavelet-Based Watermarking with New Key Sequence in Still Images | Masayoshi Nakamoto Suguru Fujimoto Akimitsu Doi Takao Hinamoto | Proc. 2006 International Symposium on Intelligent Signal Processing and Communication Systems, (2006) pp. 159-162 |
| B26 L2-sensitivity minimization for MIMO linear discrete-time systems subject to L2-scaling constraints | Osemekhian Innocent Omoifo Takao Hinamoto Wu-Sheng Lu | Proc. 2006 2nd Int. Symp. on Communications, Control and Signal Processing, (2006) |
| B27 $\Delta e_2 \approx 0.08$ use -20.364470 Td (6)crol)Tj 33.5698 0 Td (Errtems)T 33.569280Tn | L2-auxiliary 37.030870 Td (w)Ters | |

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|---|---|---|
| B36 Extraction of trabecular structures of mandible excluding tooth roots on dental panoramic radiographs using mathematical morphology | Akira Asano Takahiro Tambe Akira Taguchi Chie Muraki Asano Takashi Nakamoto Keiji Tanimoto Mitsuji Muneyasu Takao Hinamoto | Proc. 18th Int. Conf. on Pattern Recognition (ICPR2006), 3 (2006) pp. 988-991 |
| B37 L2-sensitivity minimization of 2-D separable-denominator state-space digital filters subject to L2-scaling constraints | Osemekhian Innocent Omoifo Takao Hinamoto | Proc. 6th WSEAS Int. Conf. on Simulation, Modelling and Optimization, (2006) pp. 405-410 |
| B38 Minimization of L2-sensitivity subject to L2-scaling constraints for 2-D separable-denominator state-space digital filters | Osemekhian Innocent Omoifo Takao Hinamoto | WSEAS Trans. on Circuits and Systems, 5 , 10 (2006) pp. 1506-1513 |
| B39 Minimization of L2-sensitivity for linear discrete-time systems subject to L2-scaling constraints using a Lagrange function and a bisection method | Takao Hinamoto Toru Oumi | Proc. SICE-ICASE Int. Joint Conf. 2006, (2006) pp. 1963-1967 |
| B40 Roundoff noise minimization for 2-D state-space digital filters using joint optimization of error feedback and realization | Takao Hinamoto Hiroaki Ohnishi Wu-Sheng Lu | IEEE Trans. on Signal Processing, 54 , 11 (2006) pp. 4302-4310 |
| B41 Memory-based IMC tuning of PID controllers for nonlinear systems | Kenji Takao Toru Yamamoto Takao Hinamoto | IEEJ Trans. on Electrical and Electronic Engineering, 1 , 4 (2006) pp. 364-373 |
| B42 Minimization of L2-sensitivity for 2-D separable-denominator state-space digital filters subject to L2-scaling constraints | Takao Hinamoto Yukihiro Shibata Wu-Sheng Lu | Proc. 2006 IEEE Asia Pacific conf. on Circuits and Systems, (2006) pp. 390-393 |
| B43 3-D separable-denominator digital filters with minimum L2-sensitivity and no overflow oscillations | Takao Hinamoto Osemekhian Innocent Omoifo | Proc. 2006 Int. Symp. on Intelligent Signal Processing and Communication Systems, (2006) pp. 721-724 |
| B44 MRP rescheduling heuristics with capacity extension under deterministic demand | Chao Rong Katsuhiko Takahashi Katsumi Morikawa | Computers & Industrial Engineering, 51 , 1 (2006) pp. 2-13 |
| B45 Analysis and design of self-balancing production line | Daisuke Hirotani Myreshka Katsumi Morikawa Katsuhiko Takahashi | Computers & Industrial Engineering, 50 , 4 (2006) pp. 488-502 |
| B46 Decomposition-based makespan minimization in job shops | Katsumi Morikawa Katsuhiko Takahashi | Industrial Engineering and Management Systems, 5 , 1 (2006) pp. 31-38 |
| B47 Evaluating costs and environmental impacts of production policies in recycling systems with the limited number of recycles | Katsuhiko Takahashi Katsumi Morikawa Daisuke Hirotani Akihiko Mizuno | Proceedings of the 7th Asia Pacific Industrial Engineering & Management Systems Conference, (2006) pp. 2188-2196 |
| B48 Analysis of the self-balancing production line with stochastic process time | Daisuke Hirotani Katsumi Morikawa Katsuhiko Takahashi | Proceedings of the 7th Asia Pacific Industrial Engineering & Management Systems Conference, (2006) pp. 1912-1918 |
| B49 Modeling planning and scheduling tasks based on interviews | Katsumi Morikawa Katsuhiko Takahashi | Proceedings of the 7th Asia Pacific Industrial Engineering & Management Systems Conference, (2006) pp. 1657-1661 |
| B50 A multi-agent system for assembly line balancing | Kana Yoyoyama Katsumi Morikawa Katsuhiko Takahashi | Proceedings of the Eighth International Conference on Industrial Management, (2006) pp. 33-39 |
| B51 Strict due date based acceptance and rejection decision | Sujan Piya Katsumi Morikawa Katsuhiko Takahashi | Proceedings of the Eighth International Conference on Industrial Management, (2006) pp. 40-47 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|---|---|
| B52 Layer structures for the solutions to the perturbed simple pendulum problems | Tetsutaro Shibata | Journal of Mathematical Analysis and Applications, 315 (2006) pp. 725-739 |
| B53 Three-term asymptotics for the boundary layers of semilinear elliptic eigenvalue problems | Tetsutaro Shibata | Nonlinear Differential Equations and Applications, 13 (2006) pp. 23-41 |
| B54 Boundary layer and variational eigencurve in two-parameter single pendulum type equations | Tetsutaro Shibata | Communications on Pure and Applied Analysis, 5 , 1 (2006) pp. 147-154 |
| B55 L^q Spectral asymptotics for nonlinear Sturm-Liouville problems | Tetsutaro Shibata | Differential and Integral Equations, 19 (2006) pp. 773-783 |
| B56 The relationship between two-parameter perturbed sine-Gordon type equation and nonlinear Klein-Gordon equation | Tetsutaro Shibata | Indiana University Mathematical Journal, 55 , 5 (2006) pp. 1557-1572 |
| B57 Wandering behavior of the chaotic itinerancy in an oscillator neural network model | Satoki Uchiyama Hiroyazu Fujisaka | Progress of Theoretical Physics Supplement, 161 (2006) pp. 381-384 |
| B58 Phase diffusion in chaotic oscillators system | Toshiaki Kono Go Kinoshita Hiroyazu Fujisaka Satoki Uchiyama Tomoji Yamada | Progress of Theoretical Physics Supplement, 161 (2006) pp. 240-243 |
| B59 Chaotic phase synchronization in coupled three maps systems | Hiroyazu Fujisaka Go Kinoshita Satoki Uchiyama Toshiaki Kono | NPCS pack of the Proceedings of the 6th International Summer School/Conference, (2006) |
| B60 A Method for Pricing VAR Providers in the Electricity Markets Considering Voltage Security | E. E. Elaraby N. Yorino Y. Zoka | Trans. on Electrical and Electronic Engineering, 1 , 3 (2006) pp. 247-254 |
| B61 Operation margin analysis of zone 3 impedance relay based on sensitivities to power injection | S. H. Li N. Yorino Y. Zoka | IEE Proc. Generation, Transmission & Distribution, (2006) |
| B62 An Economic Evaluation for an Autonomous Independent Network of Distributed Generators | Y. Zoka K. Koeda A. Sugimoto N. Yorino K. Kawahara | The Journal of the Institution of Engineers, Singapore, Special Issue (2006) |
| B63 An Economic Evaluation for an Autonomous Independent Network of Distributed Energy Resources | Y. Zoka A. Sugimoto N. Yorino K. Kawahara J. Kubokawa | Journal of Electric Power Systems Research, (2006) |
| B64 Validation of a New Outage Work Planning Method Based on System Configuration Searching Technique for Maintaining High Supply Reliability | H. Asahara Y. Takeuchi H. Sugihara K. Kawahara T. Matsuda Y. Zoka N. Yorino | Proc. of the International Conference on Electrical Engineering (ICEE 2006), SE1-03 (2006) |
| B65 Impacts of the Integration of Wind Energy on Power Systems | M. Eghbal N. Yorino Y. Zoka | Proc. of the International Workshop on Sustainable Energy and Materials, 1 , 1-p-1 (2006) pp. 1.49-1.52 |
| B66 An Economic Evaluation for Strategic Integration of Distributed Energy Resources | N. Yorino Y. Zoka A. Sugimoto | Proc. of the International Workshop on Sustainable Energy and Materials, 1 , 1-1-2 (2006) pp. 1.5-1.8 |
| B67 A Mutual Interaction Problem of Distributed Generators Installed in an Autonomous Independent Small Grid | Y. Zoka N. Yorino K. Kawahara | Proc. of the Renewable Energy 2006 International Conference and Exhibition, (2006) |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|--|---|
| B68 A PSO Approach to VAR planning considering slow and fast devices prices | M. Eghbal E. E. El-Araby Y. Ito Y. Zoka N. Yorino | Proc. of the International IEEE conference SMC, (2006) pp. 1849-1854 |
| B69 Functional demanded excitability changes of human hand motor area | Zhen Ni Makoto Takahashi Nan Liang Yoshiyuki Tanaka Toshio Tsuji Susumu Yahagi Tatsuya Kasai | Experimental Brain Research, 170 (2006) pp. 141-148 |
| B70 Virtual Driving Simulator for Measuring Dynamic Properties of Human Arm Movements | Yoshiyuki Tanaka Ryoma Kanda Naoki Yamada Hitoshi Fukuba Ichiro Masamori Toshio Tsuji | Journal of Robotics and Mechatronics, 18 , 2 (2006) |
| B71 Motor strategies and excitability changes of human hand motor area are dependent on different voluntary drives | Zhen Ni Nan Liang Makoto Takahashi Takamasa Yamashita Susumu Yahagi Yoshiyuki Tanaka Toshio Tsuji Tatsuya Kasai | European Journal of Neuroscience, (2006) pp. 3399-3406 |
| B72 Novel Human Interface for Game Control Using Voluntarily Generated Biological Signals | Keisuke Shima Masaru Okamoto Nan Bu Toshio Tsuji | Journal of Robotics and Mechatronics, 18 , 5 (2006) pp. 626-633 |
| B73 Biomimetic Control of mobile robots based on the Information Processing Model of Paramecium | Akira Hirano Toshio Tsuji Noboru Takiguchi Hisao Otake | Proceedings of the Eleventh International Symposium on Artificial Life and Robotics, (2006) pp. 313-318 |
| B74 LMI-Based Neurocontroller for Guaranteed Cost Control of Uncertain Servo System | Hiroaki Mukaidani Yoshiyuki Tanaka Toshio Tsuji | the 2006 American Control Conference (ACC 2006), (2006) pp. 2963-2968 |
| B75 Manipulability Analysis of Kicking Motion in Soccer Based on Human Physical Properties | Yoshiyuki Tanaka Mitsuhisa Shiokawa Hiroyuki Yamashita Toshio Tsuji | Proceedings of the 2006 IEEE International Conference on Systems, Man, and Cybernetics, (2006) pp. 68-73 |
| B76 An electrophysiological model of chemotactic response in Paramecium | Akira Hirano Toshio Tsuji Noboru Takiguchi Hisao Otake | Proceedings of the 2006 IEEE International Conference on Systems, Man, and Cybernetics, (2006) pp. 3612-3617 |
| B77 Analysis of Current Density and Specific Absorption Rate in Biological Tissue Surrounding an Air-core Type of Transcutaneous Transformer for an Artificial Heart | Kenji Shiba Masayuki Nukaya Toshio Tsuji Kohji Koshiji | IEEE 2006 International Conference of the Engineering in Medicine and Biology Society, (2006) pp. 5392-5395 |
| B78 Behavioral effects of radiation exposure on food-NaCl associative learning of <i>Caenorhabditis elegans</i> | Tetsuya Sakashita Daisuke D. Ikeda Nobuyuki Hamada Michiyo Suzuki Toshio Tsuji Seiichi Wada Tomoo Funayama Yasuhiko Kobayashi | 20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, (2006) pp. 142-142 |
| B79 Equivalent Inertia of Human-Machine Systems under Constraint Environments | Masatoshi Hada Daisuke Yamada Toshio Tsuji | Proceedings of The Third Asian Conference on MULTibody Dynamics 2006, (2006) |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|---|---|
| B80 Vascular stiffness, viscosity and inertia in the patients with cardiovascular disease | N. Saeki A. Sakane R. Nakamura M. Kawamoto T. Tsuji O. Yuge | 10th International Congress of Cardiothoracic and Vascular anesthesia with Industrial Exhibits, (2006) |
| B81 Simulation of chemotactic networks in nematode <i>C. elegans</i> : Is there any change on networks by exposure to ionizing radiation? | Michiyo Suzuki Tetsuya Sakashita Toshio Tsuji Kana Fukamoto Nobuyuki Hamada Yasuhiko Kobayashi | The Seventh International Conference on Systems Biology (ICSB-2006), BN03 (2006) |
| B82 Computer simulation of chemotactic neuronal networks in <i>C. elegans</i> : Does food-NaCl associative learning lead to changes in the networks? | Michiyo Suzuki Tetsuya Sakashita Toshio Tsuji Yasuhiko Kobayashi | The 2nd East Asia <i>C. elegans</i> Meeting 2006, (2006) pp. 112-112 |
| B83 Contact Probe Based Stiffness Sensing of Human Eye | Yuichi Kurita Yoshichika Iida Roland Kempf Makoto Kaneko | Proc. of the 2006 , IEEE International Conf. on Robotics and Automation, (2006) pp. 2972-2977 |
| B84 Non-Contact Impedance Imager with Phase Differentiator | T. Kawahara C. Toya N. Tanaka M. Kaneko Y. Miyata M. Okajima T. Asahara | Proc. of the 1st IEEE/RAS-EMBS Int. Conf. on Biomedical Robotics and Biomechatronics, #159, (2006) |
| B85 Non-Contact Stiffness Imager | T. Kawahara S. Tanaka M. Kaneko | The International Journal of Robotics Research, Vol.25 , No.5/6 (2006) pp. 537-549 |
| B86 Non-Dimensional Analysis Based Design on Tracing Type Legged Robots | M. Higashimori I. Ishii M. Kaneko | Journal of Robotics and Mechatronics, vol.18 , no.3 (2006) pp. 333-339 |
| B87 Torque Pattern Generation Towards the Maximum Jump Height | Mitsuru Higashimori Manabu Harada Idaku Ishii Makoto Kaneko | Proc. the IEEE Int. Conf. on Robotics and Automation, (2006) pp. 1096-1101 |
| B88 Noncontact Impedance Sensing | T. Kawahara K. Tokuda N. Tanaka M. Kaneko | The Int. J. of Artificial Life and Robotics, Vol.10 (2006) pp. 35-40 |
| B89 Development of High-resolution Digital Vision Chip Based on CFPE Architecture | Kenkichi Yamamoto Munehiro Kubozono Idaku Ishii | Proceedings of the 2006 IEEE International Workshop on Computer Architecture for Machine Perception and Sensing (Camps 2006), (2006) pp. 24-29 |
| B90 A Real-time Finger-tapping Interface Using High-speed Vision System | Kenkichi Yamamoto Satoshi Ikeda Tokuo Tsuji Idaku Ishii | Proceedings of the 2006 IEEE International Conference on Systems, Man and Cybernetics(SMC2006), (2006) pp. 296-303 |

C. Information Engineering

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|--|--|
| C1 An Energy Efficient Ranking Protocol for Radio Networks | Koji Nakano | IEICE Trans. on Fundamentals, E89-A , 5 (2006) pp. 1346-1354 |
| C2 An Energy Efficient Leader Election Protocol for Radio Network with a Single Tranceiver | Jacir L. Bordim Yasuaki Ito Koji Nakano | IEICE Trans. on Fundamentals, E89-A , 5 (2006) pp. 1355-1361 |
| C3 Efficient Hardware Algorithm for N Choose K Counters | Yasuaki Ito Koji Nakano Youhei Yamagishi | Proc. of Workshop on Advances in Parallel and Distributed Computational Models (CD-ROM of International Parallel and Distributed Processing Symposium), (2006) |
| C4 Randomized Leader Election Protocols in Noisy Radio Networks with a Single Transceiver | Jacir L. Bordim Yasuaki Ito Koji Nakano | Proc. of International Symposium on Parallel and Distributed Processing and Application(LNCS 4330), (2006) pp. 246-256 |
| C5 A Generic Solver based on Functional Parallelism for Solving Combinatorial Optimization Problems | Shigeaki Tagashira Masaya Mito Satoshi Fujita | IEICE Transaction on Information and Systems, E89-D , 6 (2006) pp. 1940-1947 |
| C6 A Fault-Tolerant Content Addressable Network | Daisuke Takemoto Shigeaki Tagashira Satoshi Fujita | IEICE Transaction on Information and Systems, E89-D , 6 (2006) pp. 1923-1930 |
| C7 A Localization Scheme for Sensor Networks Based on Wireless Communication with Anchor Groups | Hiroyuki Ochi Shigeaki Tagashira Satoshi Fujita | IEICE Transaction on Information and Systems, E89-D , 5 (2006) pp. 1614-1621 |
| C8 Proxy-based Index Caching for Content-addressable networks | Shigeaki Tagashira Syuhei Shirakawa Satoshi Fujita | IEICE Transaction on Information and Systems, E89-D , 2 (2006) pp. 555-562 |
| C9 Loose Covering by Graphs | Satoshi Fujita | Proc. 2006 Japan-Korea Joint Workshop on Algorithms and Computation, (2006) pp. 9-15 |
| C10 Vertex-Disjoint Paths in Transposition Graphs | Satoshi Fujita | Proc. The 18th IASTED Int'l Conf. on Parallel and Distributed Computing and Systems (PD'CS' 2006), (2006) pp. 490-494 |
| C11 Efficient Support of Conjunctive Queries in P2P DHT by using Bloom Filter, | Koji Kobatake Shigeaki Tagashira Satoshi Fujita | Proc. The 18th IASTED Int'l Conf. on Parallel and Distributed Computing and Systems (PD'CS' 2006), (2006) pp. 202-207 |
| C12 Adaptive MAC Scheme for Wireless LAN based on Dynamic Group Constructions | Kenichi Yasuda Shigeaki Tagashira Satoshi Fujita | Proc. Int'l Conf. on Parallel and Distributed Computing, Applications and Technologies (PD-CAT'2006), (2006) pp. 300-305 |
| C13 An Efficient Assignment of Transmission Opportunity in QoS Guaranteed Wireless LAN | Masahiro Yamane Shigeaki Tagashira Satoshi Fujita | Proc. Int'l Conf. on Parallel and Distributed Computing, Applications and Technologies (PD-CAT'2006), (2006) pp. 105-108 |
| C14 A New Caching Technique for Supporting Conjunctive Queries in P2P DHT | Koji Kobatake Shigeaki Tagashira Satoshi Fujita | Proc. IFIP Int'l Conf. on Network and Parallel Computing (NPC'2006), (2006) pp. 185-190 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|---|---|
| C15 A Fair and Efficient Congestion Control Scheme Based on Minority Game | Hiroshi Kutsuna Shigeaki Tagashira Satoshi Fujita | Proc. 14th IEEE Int'l Conf. on Networks (ICON'2006), (2006) pp. 98-103 |
| C16 Bi-Connectivity Augmentation for Specified Vertices of a Graph with Upper Bounds on Vertex-Degree Increase | Toshiya Mashima Takanori Fukuoka Satoshi Taoka Toshimasa Watanabe | IEICE Trans. Information and Systems, E89-D , 2 (2006) pp. 751-762 |
| C17 On Minimum k-Edge-Connectivity Augmentation for Specified Vertices of a Graph with Upper Bounds on Vertex-Degree | Toshiya Mashima Satoshi Taoka Toshimasa Watanabe | IEICE Trans. Fundamentals, E89-A , 4 (2006) pp. 1042-1048 |
| C18 Experimental Evaluation of Maximum-Supply Partitioning Algorithms for Demand-Supply Graphs | Satoshi Taoka Kazuya Watanabe Toshimasa Watanabe | IEICE Trans. Fundamentals, E89-A , 4 (2006) pp. 1049-1057 |
| C19 Time Complexity Analysis of the Legal Firing Sequence Problem of Petri Nets with Inhibitor Arcs | Satoshi Taoka Toshimasa Watanabe | IEICE Trans. Fundamentals, E89-A , 11 (2006) pp. 3216-3226 |
| C20 An Improved Heuristic Algorithm FEIDEQ for the Maximum Legal Firing Sequence Problem of Petri Nets | Satoru Shimada Satoshi Taoka Masahiro Yamauchi Toshimasa Watanabe | Proc. 2006 IEEE International Symposium on Circuit and Systems (ISCAS 2006), (2006) pp. 4483-4486 |
| C21 Tri-Connectivity Augmentation Problems for Bi-connected Graphs with Upper Bounds on Vertex-Degree Increase | Takanori Fukuoka Satoshi Taoka Toshiya Mashima Toshimasa Watanabe | Proc. the 19th Workshop on Circuits and Systems in Karuizawa, (2006) pp. 613-618 |
| C22 Performance Comparison of Algorithms for the Dynamic Shortest Path Problem | Takashi Iguchi Satoshi Taoka Daisuke Takafuji Toshimasa Watanabe | Proc. the 19th Workshop on Circuits and Systems in Karuizawa, (2006) pp. 637-642 |
| C23 An Error Evaluation Scheme Based on Rotation of Magnetic Field in Adaptive Finite Element Analysis | Shinya Matsutomo Tomoyuki Miyamoto Kazufumi Kaneda So Noguchi Hideo Yamashita | IEEE Transactions on Magnetics, 42 , 4 (2006) pp. 567-570 |
| C24 A New Analysis Method for Accurate Supercurrent Distribution Inside High-Temperature Superconducting Bul | Tomohiro Yanagawa Kazufumi Kaneda Atsushi Ishiyama So Noguchi Hideo Yamashita | IEEE Transactions on Magnetics, 42 , 4 (2006) pp. 751-754 |
| C25 A New Topology Based Watermarking Method for Layered 3D Triangular Mesh Models | M. M. Rahman K. Kaneda K. Harada | Machine Graphics & Vision, 15 , 4 (2006) pp. 427-439 |
| C26 A Technique for Selecting An Optimal Solution from among Pareto-optima of Multi-purposed Electromagnetic Apparatus Design based on Game Theory | Tomoyuki Miyamoto Kazufumi Kaneda So Noguchi Hideo Yamashita | Proceedings of The Twelfth Biennial IEEE Conference on Electromagnetic Field Computation, (2006) pp. 120 |
| C27 String-like occluding region extraction for background restoration | Toru Tamaki Hiroshi Suzuki Masanobu Yamamoto | Proc. of the 18th International Conference on Pattern Recognition, 3 (2006) pp. 615-618 |
| C28 Developing and evaluation of a computer-based problem posing in the case of arithmetical word problems | Akira Nakano Tsukasa Hirashima Akira Takeuchi | ICCA2006, (2006) |
| C29 Visualizing Errors and its Evaluation | Hidenobu Kunichika Tsukasa Hirashima Akira Takeuchi | ITS2006, (2006) pp. 744-746 |
| C30 Virtual Experimental Environment to Support Learning by Designing Physics Experiment | Takahito Toumoto Tomoya Horiguchi Tsukasa Hirashim Akira Takeuchi | ED-MEDIA2006, (2006) |

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|---|--|--|
| C31 Interactive Environment to Support Learning by Designing Physics Experiments | Takahito Toumoto Tomoya Horiguchi Tsukasa Hirashima Akira Takeuchi | E-Learn2006, (2006) |
| C32 Property Exchange Method for Automatic Generation of Computer-Based Learning Games | Takanobu Umetsu Tsukasa Hirashima Akira Takeuchi | ICCE2006, (2006) |
| C33 Visualizing Errors for Self-correcting Discrepancy between Thinking and Writing | Hiidenobu Kunichika Tsukasa Hirashima Akira Takeuchi | ICCE2006, (2006) |
| C34 A Computer-Based Environment for Learning by Problem-Posing as Sentence-Integration | Tsukasa Hirashima Takuro Yokoyama Masahiko Okamoto Akira Takeuchi | ICCE2006, (2006) |
| C35 Practical Evaluation of Concept Mapping Software for Reconstructing Learning Process : Analysis of the Learners' Conceptual Understanding | Akiko Deguchi Shigenori Inagaki Etsuji Yamaguchi Hideo Funaoi | Paper presented at the meeting of the National Association for Research in Science Teaching (CD-ROM), (2006) |
| C36 Situated Evaluation of Concept Mapping Software with Bookmarking Function for Supporting Reflection and Dialogue: Interaction Analysis of Collaborative Learning Processes | Akiko Deguchi Shigenori Inagaki Etsuji Yamaguchi Hideo Funaoi | Proceedings of World Conference on Educational Multimedia, Hypermedia & Telecommunications 2006, (2006) pp. 2111-2118 |
| C37 Digital Fortune Line System: Externalizing and Sharing learners' commitments | Hideo Funaoi Naohisa Misawa Akiko Deguchi Shigenori Inagaki Etsuji Yamaguchi | Proceedings of E-Learn 2006, (2006) pp. 2823-2828 |
| C38 B-problem | Akira Nakamura Kenichi Morita Katsunobu Imai | Technical Report of CITR, University of Auckland , CITR-TR-180 (2006) pp. 1-22 |
| C39 Discrete-time cost analysis for a telecommunication billing application with rejuvenation | Kazuki Iwamoto Tadashi Dohi Hiroyuki Okamura Naoto Kaio | Computers & Mathematics with Applications, 52 , 2 (2006) pp. 335-344 |
| C40 Statistical estimation algorithms for some repair-limit replacement scheduling problems under earning rate criteria | Tadashi Dohi Akira Ashioka Naoto Kaio Shunji Osaki | Computers & Mathematics with Applications, 51 , 2 (2006) pp. 345-356 |
| C41 A unified parameter estimation algorithm for discrete software reliability models | Hiroyuki Okamura A. Murayama Tadashi Dohi | Opsearch, 42 , 4 (2006) pp. 355-377 |
| C42 Transient cost analysis of non-Markovian software systems with rejuvenation | Tadashi Dohi Hiroaki Suzuki Shunji Osaki | International Journal of Performance Engineering, 2 , 3 (2006) pp. 233-243 |
| C43 Cost-effective production policy for a stochastic unreliable manufacturing system | Bibhas C. Giri Tadashi Dohi | IMA Journal of Management Mathematics, 17 , 3 (2006) pp. 209-223 |
| C44 Distribution-free checkpoint placement algorithms based on min-max principle | Tatsuya Ozaki Tadashi Dohi Hiroyuki Okamura Naoto Kaio | IEEE Transactions on Dependable and Secure Computing, 3 , 2 (2006) pp. 130-140 |
| C45 A dynamic programming algorithm for software rejuvenation scheduling under distributed computation circumstance | Hiroyuki Okamura Kazuki Iwamoto Tadashi Dohi | Journal of Computer Science, 2 , 6 (2006) pp. 505-512 |
| C46 Determining the optimal software rejuvenation schedule via semi-Markov decision process | Hiroyuki Eto Tadashi Dohi | Journal of Computer Science, 2 , 6 (2006) pp. 528-534 |
| C47 A DP-based optimal checkpointing algorithm for real-time applications | Hiroyuki Okamura Kazuki Iwamoto Tadashi Dohi | International Journal of Reliability, Quality and Safety Engineering, 13 , 4 (2006) pp. 323-340 |

Published Papers

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C48 Optimal inspection schedule in an imperfect EMQ model

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|--|--|--|
| C62 Optimal sequential checkpoint placement with equality constraints | Tadashi Dohi Tatsuya Ozaki Naoto Kaio | Proceedings of The 2nd IEEE International Symposium on Dependable Autonomic and Secure Computing (DASC' 06), (2006) pp. 77-84 |
| C63 Estimating Markov modulated software reliability models via EM algorithm | Takao Ando Hiroyuki Okamura Tadashi Dohi | Proceedings of The 2nd IEEE International Symposium on Dependable Autonomic and Secure Computing (DASC' 06), (2006) pp. 111-118 |
| C64 Metrics-based software reliability models using non-homogeneous Poisson processes | Kazuya Shibata Koichiro Rinsaka Tadashi Dohi | Proceedings of The 17th International Symposium on Software Reliability Engineering (ISSRE'06), (2006) pp. 52-61 |
| C65 On the effect of fault removal in software testing — | | |

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|---|---|--|
| C77 Watermarking Method for Copyright Protection and Retrieval of 2D/3D Method | Md. M Rahman Koichi Harada | Proc. Int. MultiConf Eng. Comp. Sci., (2006) pp. 548-551 |
| C78 A Scheme of Wavelet-based Compression of 2D Image | Kamrul H Talukder Koichi Harada | Proc. Int. MultiConf Eng. Comp. Sci., (2006) pp. 531-536 |
| C79 Smooth Method from 3D Surface Construction | Ahsan Ullah Koichi Harada | Proc. Int. MultiConf Eng. Comp. Sci., (2006) pp. 574-577 |
| C80 Internet Application of Quad/Triangle Subdivision Scheme | Ahsan Ullah Koichi Harada | Proc. Int. MultiConf Eng. Comp. Sci., (2006) pp. 460-463 |
| C81 A Scheme of Combined Quad/Triangle Subdivision Surface | Ahsan Ullah Koichi Harada | Asian Jour. Inf. Tech., 6 , 5 (2006) pp. 573-577 |
| C82 Continuity Analysis o Non-uniform Subdivision Surface | Ahsan Ullah Koichi Harada | IJCSNS Int. Jour. Compt. Sci. and Network Security, 6 , 4 (2006) pp. 52-56 |
| C83 Solving Point-feature Labeling Placement Problem by Parallel Hopfield Neural Network on GPU Graphics Card | Zheng He Koichi Harada | Machine Graphics and Vision, 15 , 1 (2006) pp. 99-120 |
| C84 A Performance Evaluation of Connected Component Labeling Algorithms of Grayscale Digital Mammograms | Roshan D Yapa Koichi Harada | Proc. Int. Inform. Tech. Conf., (2006) pp. 254 |
| C85 Image Segmentation by Histogram Thresholding Using Hierarchical Cluster Analysis | Agus Zainal Arifin Akira Asano | Pattern Recognition Letters, 27 , 13 (2006) pp. 1515-1521 |
| C86 Computer-aided system for measuring the mandibular cortical width on dental panoramic radiographs in identifying post-menopausal women with low bone mineral density | Agus Zainal Arifin Akira Asano Akira Taguchi Takashi Nakamoto Masahiko Ohtsuka Mikio Tsuda Yoshiki Kudo Keiji Tanimoto | Osteoporosis International, 17 , 5 (2006) pp. 753-759 |
| C87 Identification of low bone mineral density based on the mandibular cortex by fuzzy neural network | Agus Zainal Arifin Akira Asano Akira Taguchi Takashi Nakamoto Masahiko Ohtsuka Mikio Tsuda Yoshiki Kudo Keiji Tanimoto | Proc. Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems (SCIS & ISIS 2006), (2006) pp. 1860-1865 |
| C88 Unsupervised optimization of morphological filters for noise removal in texture images | Atushi Fujiki Akira Asano Mitsui Muneyasu | Proc. Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems (SCIS & ISIS 2006), (2006) pp. 1794-1799 |
| C89 Analysis and evaluation of visual identification of texture using image processing methods | Chie Muraki Asano Akira Asano Mitsui Muneyasu Takako Fujimoto | Proc. Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems (SCIS & ISIS 2006), (2006) pp. 1789-1793 |
| C90 Application of morphological size distribution analysis to the evaluation of anti-aging treatments for skin rejuvenation | Akira Asano Shohei Hayashi Mitsui Muneyasu Minao Furumura Juichiro Nakayama | Proc. Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems (SCIS & ISIS 2006), (2006) pp. 1784-1788 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|---|---|
| C91 Mathematical morphology - fundamentals and advances | Akira Asano Mitsuhiko Fujio Hajime Nobuhara Mitsuji Muneyasu Chie Muraki Asano | Proc. Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems (SCIS & ISIS 2006) (invited talk), (2006) pp. 1630-1635 |
| C92 Unsupervised structuring element optimization of morphological opening for texture images | Atsushi Fujiki Akira Asano Mitsuji Muneyasu | Proc. 2006 International Symposium on Nonlinear Theory and its Applications (NOLTA2006), (2006) pp. 711-714 |
| C93 Extraction of trabecular structures of mandible excluding tooth roots on dental panoramic radiographs using mathematical morphology | Akira Asano Takahiro Tambe Akira Taguchi Chie Muraki Asano Takashi Nakamoto Keiji Tanimoto Mitsuji Muneyasu Takao Hinamoto | Proc. 18th International Conference on Pattern Recognition (ICPR2006), 3 (2006) pp. 988-991 |
| C94 Description and identification of texture of clothing materials using image processing method | Chie Muraki Asano Miyuki Morita Takako Fujimoto Akira Asano Surrinder Tandon Masakuni Mori | Proc. 35th Textile Research Symposium, (2006) |
| C95 Observer performance in identifying postmenopausal women with osteoporosis by dental panoramic radiographs: Results from the Osteoporosis Screening Project in Dentistry (OSPD) | Akira Taguchi Akira Asano Masahiko Ohtsuka Takashi Nakamoto Yoshikazu Suei Mikio Tsuda Yoshiki Kudo | Proc. Sixth European Congress on Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ECCEO6); Osteoporosis International, 17 , supp. 1 (2006) pp. 127 |
| C96 Observer Performance in Diagnosing Osteoporosis by Panoramic Radiographs | Akira Taguchi Akira Asano Masahiko Ohtsuka Takashi Nakamoto Yoshikazu Suei Mikio Tsuda Yoshiki Kudo | Proc. 84th General Session & Exhibition of the IADR, (2006) |
| C97 GA-optimal partially balanced fractional $2^{m_1+m_2}$ factorial designs of resolutions R(00,10,01,20,02 — Ω) and R(00,10,01,20,11 — Ω) with $2 \leq m_1, m_2 \leq 4$ | Masahide Kuwada Shujie Lu Yoshifumi Hyodo Eiji Taniguchi | Journal of the Japan Statistical Society, 36 , 2 (2006) pp. 237-259 |
| C98 GA-optimal partially balanced fractional $2^{m_1+m_2}$ factorial designs of resolutions R(00,10,01,20 — Ω) with $2 \leq m_1, m_2 \leq 4$ | Masahide Kuwada Shujie Lu Yoshifumi Hyodo Eiji Taniguchi | Communications in Statistics - Theory and Methods, 35 , 11 (2006) pp. 2035-2053 |
| C99 Performance Management Using Data Mining | Taufik Djatna Yasuhiko Morimoto | IEEE-ITS International Conference on Information and Communication Technology Seminar, (2006) pp. 75-82 |

D. Chemistry and Chemical Engineering

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|-------------------------------------|---|
| D1 Simple synthesis of GaN nanoparticles from gallium nitrate and ammonia aqueous solution under a flow of ammonia gas | F. Iskandar T. Ogi K. Okuyama | Mater. Lett., 60 , 1 (2006) pp. 73-76 |

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|--|---|---|
| D2 Preparation of Submicron- and Nanometer-sized Particles of $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$ by Flame Spray Pyrolysis using Ultrasonic and Two-Fluid Atomizers | A. Purwanto I. W. Lenggoro H. K. Chang K. Okuyama | J. Chem. Eng. Jpn., 39 , 1 (2006) pp. 68-76 |
| D3 A Flame Spray Pyrolysis Process for Preparing Red-Emitting, Submicron-Sized Luminescent Strontium Titanate Particles | H. K. Chang I. W. Lenggoro K. Okuyama H. D. Jang | Jpn. J. Appl. Phys. Part 1, 45 , 2A (2006) pp. 967-973 |
| D4 Effects of Ethanol Addition and Ba/Ti Ratios on Preparation of Barium Titanate Nanocrystals via a Spray Pyrolysis Method | W. N. Wang I. W. Lenggoro K. Okuyama Y. Terashi Y. C. Wang | J. Am. Ceram. Soc., 89 , 3 (2006) pp. 888-893 |
| D5 Performance Evaluation of Long Differential Mobility Analyzer (LDMA) in Measurements of Nanoparticles | D. K. Song H. M. Lee H. Chang S. S. Kim M. Shimada K. Okuyama | J. Aerosol Sci., 37 , 5 (2006) pp. 598-615 |
| D6 Evaporative Cooling of Micron-sized Droplets in a Low-Pressure Aerosol Reactor | S. P. Fisenko W. N. Wang I. W. Lenggoro K. Okuyama | Chem. Eng. Sci., 61 , 18 (2006) pp. 6029-6034 |
| D7 Characterization of dip-coated ITO films derived from nanoparticles synthesized by low-pressure spray pyrolysis | T. Ogi F. Iskandar Y. Itoh K. Okuyama | J. Nanoparticle Res., 8 , 3-4 (2006) pp. 343-350 |
| D8 Filtration Efficiency of a Fibrous Filter for Nanoparticles | C. S. Kim L. Bao K. Okuyama M. Shimada H. Niinuma | J. Nanoparticle Res., 8 , 2 (2006) pp. 215-221 |
| D9 Nanoparticle assembly on patterned "plus/minus" surfaces from electrospray of colloidal dispersion | I. W. Lenggoro H. M. Lee K. Okuyama | J. Colloid Interface Sci., 303 , 1 (2006) pp. 124-130 |
| D10 Fabrication of L10 FePtAg nanoparticles and a study of the effect of Ag during the annealing process | F. Iskandar H. M. Lee T. Toda T. Iwaki K. Okuyama | J. Magn. Magn. Mater., 305 , 2 (2006) pp. 514-519 |
| D11 Development of a Photon Correlation Spectroscopy Instrument to Measure Size Distributions of Nanoparticles | T. Yamaguchi Y. Azuma K. Okuyama | Part. Part. Syst. Charact., 23 , 2 (2006) pp. 188-192 |
| D12 Experimental Investigation of Nanoparticle Dispersion by Beads Milling with Centrifugal Bead Separation | M. Inkyo T. Tahara T. Iwaki F. Iskandar C.J.Hogan Jr. K. Okuyama | J. Colloid Interface Sci., 304 , 2 (2006) pp. 535-540 |
| D13 Modification of Simha-Somcynsky equation of state for small and large molecules | Ming Wang Shigeki Takishima Yoshiyuki Sato Hirotatsu Masuoka | Fluid Phase Equilibria, 242 (2006) pp. 10-18 |
| D14 Phase behavior for the supercritical ethylene + hexane + polyethylene systems | Shigeki Takishima Yuboku Takakura Masashi Haruki | Proc. of the 8th International Symposium on Supercritical Fluids, (2006) |
| D15 Correlation of phase equilibria for hydrogen + alkane systems using cubic equation of state | Yusuke Shimoyama Yoshio Iwai Masashi Haruki Yasuhiko Arai | ITE Letters on Batteries, New Technology & Medicine, 7 (2006) pp. 346-351 |
| D16 Bubble Coalescence in Polymeric Foaming Process | Kentaro Taki Hidekazu Tabata Shin-ichi Kihara Masahiro Ohshima | Polymer Engineering and Science, 46 , 5 (2006) pp. 680-690 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|---|---|
| D17 Linear Viscoelastic Measurement of Polymer/CO ₂ Single Phase Mixtures | Shin-ichi Kihara Haruo Shikuma Eita Funami Masahiro Ohshima | 22nd Annual meeting of the polymer processing society, July 2-6, (2006), Yamagata, Japan, (2006) |
| D18 Viscoelastic analysis of branched polymer in film blowing process | Taichi Shiroyama Shin-ichi Kihara Takeshi Ishikawa | 22nd Annual meeting of the polymer processing society, July 2-6, (2006), Yamagata, Japan, (2006) |
| D19 Measurement and prediction of surface tension of polymer in supercritical CO ₂ | Eita Funami Kentaro Taki Takashi Murakami Shin-ichi Kihara Masahiro Ohshima | 22nd Annual meeting of the polymer processing society, July 2-6, (2006), Yamagata, Japan, (2006) |
| D20 Effect of surface modification of silica particles on performance of bubble nucleating-agent in polymer/CO ₂ foaming process | Kentaro Taki Akihiro Ito Shin-ichi Kiraha Masahiro Ohshima | 22nd Annual meeting of the polymer processing society, July 2-6, (2006), Yamagata, Japan, (2006) |
| D21 Preparation of a novel composition-gradient thermosensitive gel | Hideaki Tokuyama Masahiro Sasaki Shuji Sakohara | Colloids and Surfaces A: Physicochem. Eng. Aspects, 273 (2006) pp. 70-74 |
| D22 Temperature swing adsorption of heavy metals on novel phosphate-type adsorbents using thermosensitive gels and/or polymers | Hideaki Tokuyama Kiyomi Yanagawa Shuji Sakohara | Separation and Purification Technology, 50 (2006) pp. 8-14 |
| D23 Adsorption/Desorption of Hydrophobic Molecules on Porous Thermosensitive gel | Takehiko Gotoh Yasunao Seo Shuji Sakohara | Polymer Networks (Functional and biological gels and networks: Theory & experiment), 1 , 1 (2006) pp. M8 |
| D24 A photocatalytic membrane reactor for VOC decomposition using Pt-modified titanium oxide porous membranes | Toshinori Tsuru Takehiro Kan-no Tomohisa Yoshioka Masashi Asaeda | Journal of Membrane Science, 280 (2006) pp. 156-162 |
| D25 A bimodal catalytic membrane having a porous hydrogen-selective silica layer and a bimodal catalytic support: Preparation and its application to steam reforming of methane | Toshinori Tsuru Hiroaki Shintani Tomohisa Yoshioka Masashi Asaeda | Applied Catalysis A: General, 302 (2006) pp. 78-85 |
| D26 Reverse osmosis of non-aqueous solutions through porous silica-zirconia membranes | Toshinori Tsuru Masashi Miyawaki Tomohisa Yoshioka Masashi Asaeda | AICHE J., 52 , 2 (2006) pp. 522-531 |
| D27 Pervaporation characteristics of alkene/alkane mixtures with microstructured SiO ₂ -ZrO ₂ membranes: Experimental study | (p13ng)Tj 18.wd3 0 Td (ech-)Tj 33.0 Td (re124.43n0 Td (us-or)Tj 20.log 0 Td (m25j R. a T(g)Tj 26.P 0 Td (s(200)Tj 18.wd3 0 Td (p13ng)Tj 33.0 Td (ech-)Tj 124.43n0 Td (us-or)Tj 20.log 0 Td (m25j R. Tj 27.Tj 26.9120.y(0.00) (M10)Tj 620.TD38(P12) (a)Tj 303ta2818.RD0 (Tj 27.0.10 ps)Tj 20.Tj 30208.0 (Metal)Yb-HJ | |

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|--|--|---|
| D33 Growth Mechanism of Soap-Free Polymerization of Styrene investigated by AFM | Tetsuya Yamamoto Masaki Nakayama Yoichi Kanda Ko Higashitani | Journal of Colloid and Interface Science, 297 (2006) pp. 112-121 |
| D34 Initial Growth Process of Polystyrene Particle investigated by AFM | Tetsuya Yamamoto Yoichi Kanda Ko Higashitani | Journal of Colloid and Interface Science, 299 (2006) pp. 493-496 |
| D35 Nucleation and Growth Process of Polystyrene Particle investigated by AFM | Tetsuya Yamamoto Yoichi Kanda Ko Higashitani | Journal of Chemical Engineering of Japan, 39 , 6 (2006) pp. 596-603 |
| D36 Effect of NaOH concentration on zeolite synthesis from fly-ash with a hydrothermal treatment method | Kunihiro Fukui Takashi Nishimoto Mayumi Takiguchi Hideto Yoshida | KONA, 24 (2006) pp. 183-191 |
| D37 Fine particle classification with revised cyclone | Hideto Yoshida Kouichiro Ono Kunihiro Fukui | 5th World Congress on Particle Technology, 239-a (2006) |
| D38 Particle separation performance by use of electrical hydro-cyclone | Hideto Yoshida Kunihiro Fukui W. Pratern W. Tanthanapichakoon | Separation and Purification Technology, 50 (2006) pp. 330-335 |
| D39 Plasma Synthesis of Light Emitting Gallium Nitride Nanoparticles Using a Novel Microwave-Resonant Cavity | Manabu Shimada Yasushi Azuma Kikuo Okuyama Yutaka Hayashi Eiji Tanabe | Jpn. J. Appl. Phys., 45 , 1A (2006) pp. 328-332 |
| D40 Suppression of particle generation in a plasma process using a sine-wave modulated rf plasma | Nobuki Kashihara Heru Setyawan Manabu Shimada Yutaka Hayashi Chan Soo Kim Kikuo Okuyama Sugeng Winardi | J. Nanoparticle Res., 8 , 3-4 (2006) pp. 395-403 |
| D41 Exfoliation and Fracture Behavior of Oxide Films Formed on Titanium and Its Alloy in High Temperature Environments | Yoshinori Isomoto Oka Takahiro Yamabe Toshinori Tsumura | Materials Science Forum, 522-523 (2006) pp. 417-424 |
| D42 Fermi surface of the organic superconductor (MDT-ST)(I3)0.417 reconstructed by incommensurate potential | T. Kawamoto T. Mori K. Enomoto T. Konoike T. Terashima S. Uji A. Takamori K. Takimiya T. Otsubo | Phys. Rev. B, 73 , 024503 (2006) |
| D43 Organic Field Effect Transistors based on 2,6-Diphenylbenzo[1,2-b:5,4-b']dithiophene and diselenophene (iso-DPh-BDXs) | K. Takimiya Y. Konda H. Ebata, T. Otsubo Y. Kunugi | Mol. Cryst. Liq. Cryst, 455 (2006) pp. 355-359 |
| D44 2,7-Diphenyl[1]benzoselenopheno[3,2-b][1]benzoselenophene as Stable Organic Semiconductor for High-Performance Field-Effect Transistor | K. Takimiya Y. Kunugi Y. Konda H. Ebata Y. Toyoshima T. Otsubo | J. Am. Chem. Soc, 128 , 9 (2006) pp. 3044-3050 |
| D45 Synthesis and Properties of Ethylenethiotetraselenafulvalene (ET-TSF) and Its conductive Radical Cation Salts | K. Takimiya M. Kodani S. Murakami T. Otsubo Y. Aso | Heterocycles, 67 , 2 (2006) pp. 655-663 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|--|---|
| D46 Synthesis and Photophysical Properties of Two Dual Oligothiophene-Fullerene Linkage Molecules as Photoinduced Long-Distance Charge Separation Systems | M. Narutaki K. Takimiya T. Otsubo Y. Harima H. Zhang Y. Araki O. Ito | J. Org. Chem, 71 (2006) pp. 1761-1768 |
| D47 Development and Photovoltaic Performance of Oligothiophene-sensitized TiO ₂ Solar Cells | K. Tanaka K. Takimiya T. Otsubo K. Kawabuchi S. Kajihara Y. Harima | Chem. Lett, 35 , 6 (2006) pp. 592-593 |
| D48 Synthesis and Photovoltaic Properties of Tetraphiafulvalene-oligothiophene-Fullerene Triads | H. Kanato M. Narutaki K. Takimiya T. Otsubo Y. Harima | Chem. Lett, 35 , 6 (2006) pp. 668-669 |
| D49 Thin Film Characteristics and FET Performances of β -Octyl-substituted Long Oligothiophenes | K. Takimiya K. Sakamoto T. Otsubo Y. Kunugi | Chem. Lett, 35 , 8 (2006) pp. 942-943 |
| D50 Effects of Extension or Prevention of Conjugation on Photoinduced Electron Transfer Processes of Ferrocene-Oligothiophene-Fullerene Triads | T. Nakamura H. Kanato Y. Araki O. Ito K. Takimiya T. Otsubo Y. Aso | J. Phys. Chem. A, 110 , 10 (2006) pp. 3471-3479 |
| D51 Hybrid Organic Semiconductors Including Chalcogen Atoms in pi-Conjugated Skeletons. Tuning of Optical, Redox, and Vibrational Properties by Heavy Atom Conjugation | J. Casado M. Moreno Oliva M. C. Ruiz Delgado R. Ponce Ortiz J. Joaquin Quirante J. T. Lopez Navarrete K. Takimiya T. Otsubo | J. Phys. Chem. A, 110 , 23 (2006) pp. 7422-7430 |
| D52 Changes in Electrochemical and Optical Properties of Oligoalkylthiophene Film Induced by Bipolaron Formation | Y. Harima R. Patil H. Liu Y. Ooyama K. Takimiya T. Otsubo | J. Phys. Chem. B, 110 , 4 (2006) pp. 1529-1535 |

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|---|---|---|
| D57 Kinetic studies on Brook-type isomerization of acylpolysilanes to silenes | J. Ohshita H. Takahashi A. Kunai K. Komaguchi A. Naka M. Ishikawa | J. Organomet. Chem., 691 (2006) pp. 541-544 |
| D58 Ring-opening reactions of cyclic ethers with diiodo- and dibromodimethylsilane equivalents | J. Ohshita Y. Izumi Z. Lu J. Ikadai A. Kunai | J. Organomet. Chem., 691 (2006) pp. 1907-1911 |
| D59 Preparation of Poly(silylene-p-phenylene)s Bearing a Benzocrown Pendant Group and Their Iono- and Solvatochromic Behavior in the Emission Spectra | J. Ohshita T. Uemura T. Inoue K. Hino A. Kunai | Organometallics, 25 (2006) pp. 2225-2229 |
| D60 Synthesis of p-Conjugated Oligomers Containing Dithienosilole Units | D.-H. Kim J. Ohshita K.-H. Lee Y. Kunugi A. Kunai | Organometallics, 25 (2006) pp. 1511-1516 |
| D61 Synthesis and reactions of poly[(ethoxysilylene)phenylenevinylene]s and chain-to-pendant energy transfer in the resulting polymer | J. Ohshita R. Taketsugu K. Hino A. Kunai | J. Organomet. Chem., 691 (2006) pp. 3065-3070 |
| D62 Synthesis of Poly[(cyanophenyl)silylene-p-phenylene]s as Patternable Ceramic Precursors | J. Ohshita T. Iida Y. Izumi A. Kunai | J. Cer. Soc., Jpn., 114 (2006) pp. 529-532 |
| D63 Chemical Shifts in ESCA and NMR: The Case of Bridged Trichlorosilyl Trimethylsilyl Molecules | S. Nagaoka U. Nagashima J. Ohshita | Bull. Chem. Soc. Jpn., 79 (2006) pp. 537-548 |
| D64 Silicon-Carbon Unsaturated Compounds. 71. Thermolysis of 1,2-Bis(acyl)tetrakis-(trimethylsilyl)disilane with Di-Substituted Acetylenes | J. Ohshita H. Ohnishi A. Naka N. Senba J. Ikadai A. Kunai H. Kobayashi M. Ishikawa | Organometallics, 25 (2006) pp. 3955-3962 |
| D65 Singlet Energy Migration along Alternating Block Copolymer of Oligothiophene and Oligosilylene in Solution | M. Fujitsuka D.-W. Cho J. Ohshita A. Kunai T. Majima | J. Phys. Chem. B, 110 (2006) pp. 12446-12450 |
| D66 Palladium-Catalyzed Distannylation of ortho-Quinodimethanes | H. Yoshida S. Nakano Y. Yamaryo J. Ohshita A. Kunai | Org. Lett., 8 (2006) pp. 4157-4159 |
| D67 CO ₂ Incorporation Reaction using Arynes: Straightforward Access to Benzoxazinone | H. Yoshida H. Fukushima J. Ohshita A. Kunai | J. Am. Chem. Soc., 128 (2006) pp. 11040-11041 |
| D68 A new approach to styrenic thermoplastic elastomers: synthesis and characterization of crystalline styrene-butadiene-styrene triblock copolymers | Hoang The Ban Toshio Kase Masanao Kawabe Akira Miyazawa Takeshi Ishihara Hideaki Hagibara Yasuo Tsunogae Masahide Murata Takeshi Shiono | Macromolecules, 39 , 1 (2006) pp. 171-176 |

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|---|--|---|
| D69 Stereospecific polymerization of propylene with group 4 <i>ansa</i> -fluorenlylamidodimethyl complexes | Kei Nishii Hideaki Hagihara Tomiki Ikeda Munetaka Akita Takeshi Shiono | J. Organomet. Chem., 691 , 1-2 (2006) pp. 193-201 |
| D70 Preparation of poly(3,3'-dialkynyl-2,2'-bithiophene-5,5'-diyl) with high coplanarity and effective π -conjugation system | Takao Sato Zhengguo Cai Takeshi Shiono Takakazu Yamamoto | Polymer, 47 , 1 (2006) pp. 37-41 |
| D71 Living random copolymerization of propylene and norbornene with <i>ansa</i> -fluorenlylamidodimethyltitanium complex: synthesis of novel syndiotactic polypropylene- <i>b</i> -poly(propylene- <i>ran</i> -norbornene) | Zhengguo Cai Yuushou Nakayama Takeshi Shiono | Macromolecules, 39 , 6 (2006) pp. 2031-2033 |
| D72 Synthesis of crystallizable syndiotactic-atactic stereoblock polypropylene using a living polymerization system | Zhengguo Cai Yuushou Nakayama Takeshi Shiono | Kinet. Catal., 47 , 2 (2006) pp. 274-277 |
| D73 Characteristics of LLDPE/ZrO ₂ nanocomposite synthesized by in-situ polymerization using a zirconocene/MAO catalyst | Piyasan Praserthdam Bunjerd Jongsomjit Joongjai Panpranot Mitsuhiro Okada Takeshi Shiono | Iran. Polym. J., 15 , 5 (2006) pp. 433-439 |
| D74 Synthesis of uniquely branched polyethylene by anilinonaphthoquinone-ligated nickel complex activated with tris(pentafluorophenyl)borane | Mitsuhiro Okada Yuushou Nakayama Tomiki Ikeda Takeshi Shiono | Macromol. Rapid Commun., 27 , 17 (2006) pp. 1418-1423 |
| D75 Cataly | | |

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|--|--|---|
| D83 Propene polymerization by <i>ansa</i> -fluorenlylamidodimethyltitanium activated with SiO ₂ -supported modified methylalminoxane | Takeshi Shiono Takeshi Matsumae Kei Nishii Tomiki Ikeda | Stud. Surf. Sci. Catal., 161 (2006) pp. 241-244 |
| D84 Effect of α -olefins on copolymerization of ethylene and α -olefin with [<i>t</i> -BuNSiMe ₂ Flu]TiMe ₂ catalyst | Nawaporn Intaragamjon Takeshi Shiono Bunjerd Jongsomjit Piyasan Praserthdam | Stud. Surf. Sci. Catal., 161 (2006) pp. 271-274 |
| D85 Elucidation of solvent effects on the catalytic behaviors for [<i>t</i> -BuNSiMe ₂ Flu]TiMe ₂ complex during ethylene/1-hexene copolymerization | Nawaporn Intaragamjon Takeshi Shiono Bunjerd Jongsomjit Piyasan Praserthdam | Catal. Commun., 7 , 9 (2006) pp. 721-727 |
| D86 A comparative study ethylene/1-hexene copolymerization with [<i>t</i> -BuNSiMe ₂ Flu]TiMe ₂ catalyst via various activators | Nawaporn Intaragamjon Takeshi Shiono Piyasan Praserthdam | Stud. Surf. Sci. Catal., 159 (2006) pp. 841-844 |
| D87 Kinetic features of the cobalt dihalide/methylaluminoxane catalytic system in 1,3-butadiene polymerization | Dilip Chandra Deb Nath Christopher M. Fellows Takeshi Shiono | Macromol. Res., 14 , 3 (2006) pp. 338-342 |
| D88 Surface functionalization of mesoporous and microporous activated carbons by immobilization of diamine | Hisashi Tamai Katsumi Shiraki Takeshi Shiono Hajime Yasuda | J. Colloid Interface Sci., 295 , 1 (2006) pp. 299-302 |
| D89 Adsorption of methyl mercaptan on surface modified activated carbon | Hisashi Tamai Hisato Nagoya Takeshi Shiono | J. Colloid Interface Sci., 300 , 2 (2006) pp. 814-817 |
| D90 Syntheses of group 4 transition metal complexes bearing 2-pyridinethiolate ligands and their catalytic activities for ethylene polymerization | Yoshinori Takashima Yuushou Nakayama Mika Hashiguchi Takashi Hosoda Hajime Yasuda Toshikazu Hirao Akira Harada | Polymer, 47 , 16 (2006) pp. 5762-5774 |
| D91 Hydrophosphination of Alkynes and Related Reactions Catalyzed by Rare-Earth Amides | Ken Takaki Kimihiro Komeyama Daisuke Kobayashi Tomonori Kawabata Katsuomi Takehira | J. Alloy. Compd., 408-412 (2006) pp. 432-436 |
| D92 A Simple and Efficient Iron-Catalyzed Intramolecular Hydroamination of Unactivated Olefins | Kimihiro Komeyama Takayuki Morimoto Ken Takaki | Angew. Chem. Int. Ed., 45 (2006) pp. 2938-2941 |
| D93 Ti(NMe ₂) ₄ -Catalyzed Markovnikov Hydroamination of Alkynes in the presence of N-Heterocyclic Carbenes and LiN(SiMe ₃) ₂ | Ken Takaki Sadayuki Koizumi Yuta Yamamoto Kimihiro Komeyama | Tetrahedron Lett., 47 (2006) pp. 7335-7337 |
| D94 Ytterbium-Catalyzed Dual Intermolecular Hydrophosphination: Synthesis of Bis(phosphinyl)dienes and Bis(alkenyl)phosphine Oxides | Kimihiro Komeyama Daisuke Kobayashi Yuta Yamamoto Katsuomi Takehira Ken Takaki | Tetrahedron, 62 (2006) pp. 2511-2519 |
| D95 Simultaneous monitoring of inorganic cations, amines and amino acids in human sweat by capillary electrophoresis | Takeshi Hirokawa Hikaru Okamoto Yoshinori Gosyo Takao Tsuda Andrei R. Timerbaev | Anal. Chim. Acta, 581 (2006) pp. 83-88 |
| D96 Recent advances of transient isotachophoresis-capillary electrophoresis in the analysis of small ions from high-conductivity matrices | Andrei R. Timerbaev Takeshi Hirokawa | Electrophoresis, 27 , 1 (2006) pp. 323-340 |
| D97 Single particle analysis for chemical characterization of atmospheric aerosols application of x-ray microprobe system and double thin film method | Susumu Tohno Chang-Jin Ma Shinjiro Hayakawa Satoshi Yamasaki Mikio Kasahara | Environmental Monitoring and Assessment, 120 (2006) pp. 575-584 |

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|---|---|---|
| D98 Changes in electrochemical and optical properties of oligoalkylthiophene film induced by bipolaron | Harima Yutaka Hongfang Liu Patil Rahul Ooyama Yousuke Takimiya Kazuo Otsubo Tetsuo | J. Phys. Chem. B, 110 (2006) pp. 1529-1535 |
| D99 Influence of extended pi-conjugation units on carrier mobilities in conducting polymers | Harima Yutaka Kim D-H. Tsutitori Yasunori Jiang Xiaoqing Ooyama Yousuke Ohshita Joji kunai Atsutaka | Chem. Phys. Lett., 420 (2006) pp. 387-390 |
| D100 Electrical conduction mechanism in conjugated polymers studied using Flicker noise spectroscopy | Parkhutik Vitali Patil Rahul Harima Yutaka Matveyva Eugenia | Electrochim. Acta, 51 (2006) pp. 2656-2661 |
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| D102 Template-free formation of microspheres based on poly(N-methylaniline) | Sanada Kei Patil Rahul Ooyama Yousuke Yano Jun Harima Yutaka | Polymer J., 38 (2006) pp. 1-5 |
| D103 Unusual electrochemical responses of oligoalkylthiophene films: involvement of bipolarons | Liu Honfang Harima Yutaka Patil Rahul Jiang Xiaoqing Ooyama Yousuke Takimiya Kazuo Otsubo Tetsuo | Mol. Cryst. Liq. Cryst., 455 (2006) pp. 361-366 |
| D104 Development and photovoltaic performance of oligothiophene-sensitized TiO ₂ solar cells | Tanaka K. Takimiya Kazuo Otsubo Tetsuo Kawabuchi Koji Kajiwara Shotaro Harima Yutaka | Chem. Lett., 35 (2006) pp. 592-593 |
| D105 Synthesis and photovoltaic properties of tetrathiafulvalene-oligothiophene-fullerene triads | Kanato H. Narutaki H. Takimiya Kazuo Otsubo Tetsuo Harima Yutaka | Chem. Lett., 35 (2006) pp. 668 |
| D106 Photoinduced electron transfer from anatase to rutile in partially reduced TiO ₂ (P-25) nanoparticles: An ESR study | Komaguchi Kenji Nakano Haruka Araki A. Harima Yutaka | Chem. Phys. Lett., 428 (2006) pp. 338-342 |
| D107 Hybrid composites of conductive polyaniline and nanocrystalline titanium oxide prepared via self-assembling and graft polymerization | Li J. Zhu L. Wu Y. Harima Yutaka Zhang A. Tang Heqing | Polymer, 47 (2006) pp. 7361-7367 |
| D108 Dramatic effects of the substituents on the solid-state fluorescence properties of structural isomers of novel benzofuro[2,3-c]oxazolocarbazole-type fluorophores | Ooyama Yousuke Harima Yutaka | Chem. Lett., 35 (2006) pp. 902-903 |
| D109 Bilayer polymer coating for corrosion protection of iron comprised of a conductive polymer polyaniline and a | Yano Jun Nakatani K. Harima Yutaka Kitani Akira | Electrochemistry, 74 (2006) pp. 877-882 |

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|--|--|--|
| D110 Effect of Anions and Added Organic Solvents of Polymerizing Solutions on the Conductivity of Poly(N-methylaniline) | Jun Yano Hiroko Yoshikawa, Tomomi Mukai Sumio Yamasaki Akira Kitani | Electrochemistry, 74 (2006) pp. 42 |
| D111 Bilayer Polymer Coating for Corrosion Protection of Iron Comprised of a Conducting Polymer Polyaniline and a Polymer with Triazine Rings | Jun Yano Kazumasa Nakatani Yutaka Harima Akira Kitani | Electrochemistry, 74 (2006) pp. 877 |
| D112 Bilayer Polymer Coating Containing a Polyaniline for Corrosion Protection of Iron | Jun Yano Kazumasa Nakatani Yutaka Harima Akira Kitani | Mater. Lett., (2006) |
| D113 ESR and Theoretical Studies of Trimer Radical Cations of Coronene | Kenji Komaguchi Kotaro Nomura Masaru Shiotani Anders Lund Magnus Jansson Sten Lunell | Spectrochim. Acta A, 63 (2006) pp. 76-84 |
| D114 Photoinduced Electron Transfer From Anatase to Rutile in Partially Reduced TiO ₂ (P-25) Nanoparticles: An ESR Study | Kenji Komaguchi Haruka Nakano Akira Araki Yutaka Harima | Chem. Phys. Lett., 428 (2006) pp. 338-342 |
| D115 Electron Conductive Three-Dimensional Polymer of Cuboidal C60 | Shoji Yamanaka Akira Kubo Kei Inumaru Kenji Komaguchi N. S. Kini Toru Inoue Tetuso Irifune | Phys. Rev. Lett., 96 (2006) pp. 076602/1-4 |
| D116 An Attempt of Prepare Carbon Clathrate Compounds using High Pressure and High Temperature Conditions | Shoji Yamanaka Akira Kubo S. N. Kini Kei Inumaru | Physica B, 383 (2006) pp. 59-62 |
| D117 Tunneling spectroscopy of layered nitride superconductors MNCl _{0.7} (M = Hf and Zr) | T. Takasaki T. Ekino S. Yamanaka | Physica C, 445 (2006) pp. 77-79 |
| D118 Tunneling spectroscopy of AlB ₂ type silicide superconductor CaAlSi | T. Takasaki T. Ekino T. Otsuki S. Yamanaka | Physica B, 383 (2006) pp. 80-81 |
| D119 Structural Evolution of the Binary System Ba-Si Treated under High-Pressure and High-Temperature conditions | Shoji Yamanaka Shoichi Maekawa | Z. Natureforschng, 61B (2006) pp. 1493-1499 |
| D120 Specific heat capacity and magnetic susceptibility of superconducting Ba ₂₄ Si ₁₀₀ | T. Rachi K. Tanigaki R. Kumashiro K. Kobayashi H. Yoshino K. Murata H. Fukuoka S. Yamanaka H. Shimotani T. Takenobu Y. Iwasa T. Sasaki N. Kobayashi Y. Miyazaki K. Saito | J. Phys. Chem. Solids, 67 (2006) pp. 1334-1337 |
| D121 Preparation and characterization of microporous SiO ₂ -ZrO ₂ pillared montmorillonite | Y. S. Han S. Yamanaka | J. Solid State Chem., 179 (2006) pp. 1146-1153 |
| D122 Structural distortion and suppression of superconductivity in stoichiometric B ₁ -MoN epitaxial thin films. | K. Inumaru K. Baba S. Yamanaka | Phys. Rev. B, 73 (2006) pp. 052504/1-4 |

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|--|--|---|
| D123 Preparation of Superconducting Molybdenum Nitride MoNx (0.5 < x < 1) Films with Controlled Composition. | K. Inumaru K. Baba S. Yamanaka | Physica B., 383 (2006) pp. 84-85 |
| D124 Molecular selective adsorption of alkylphenols and alkylanilines from water by alkyl-grafted mesoporous alumina: a comparative study to alkyl-grafted mesoporous silica. | K. Inumaru T. Nakano S. Yamanaka | Micropor. Mesopor. Mater., 95 (2006) pp. 279-285 |
| D125 Superconducting Molybdenum Nitride Epitaxial Thin Films Deposited on MgO and α -Al2O3 Substrates by Molecular Beam Epitaxy | K. Inumaru K. Baba S. Yamanaka | Appl. Surf. Sci., 253 (2006) pp. 2863-2869 |
| D126 Glasslike versus crystalline thermal conductivity in carrier-tuned Ba6Ga15X30 clathrates (X=Ge, Sn) | M. A. Avila K. Suekuni K.Umeo H. Fukuoka S. Yamanaka T. Takabatake H.Negishi T.Imura D.Kitamoto T.Ikegami H.Ynagaishita M.Okamoto Y.Idemoto N.Koura T.Sano | Phys. Rev. B, 74 (2006) pp. 1251091-1251098 |
| D127 Preparation of tubular silicalite membranes by hydrothermal synthesis with electrophoretic deposition as a seeding technique | H.Jon B.Lu Y.Oumi K.Itabashi T.Sano | J.Am.Ceram.Soc., 89 (2006) pp. 124-130 |
| D128 Synthesis and thermal stability of beta zeolite using ammonium fluoride | B.Lu H.Jon T.Kanai Y.Oumi K.Itabashi T.Sano | Microporous Mesoporous Mater., 89 (2006) pp. 88-95 |
| D129 Synthesis and characterization of large beta zeolite crystals using ammonium fluoride | B.Lu H.Jon T.Kanai Y.Oumi K.Itabashi T.Sano | J.Mater. Sci., 41 (2006) pp. 1861-1864 |
| D130 Water-gas shift reaction over Cu/ZnO and Cu/ZnO/Al2O3 catalysts prepared by homogeneous precipitation | T. Shishido M. Yamamoto D. Li Y. Tian H. Morioka M. Honda T. Sano K. Takehira | Appl. Catal. A, 303 (2006) pp. 62-71 |
| D131 Convenient synthesis of large mordenite crystals | B.Lu Y.Oumi T.Sano | J.Crystal Growth, 291 (2006) pp. 521-526 |
| D132 Steam reforming of dimethyl ether over ZSM-5 coupled with Cu/ZnO/Al2O3 catalyst praperd by homogeneous precipitation | T.Kawabata H.Matsuoka T.Shishido D.Li Y.Tian T.Sano K.Takehira | Appl. Catal. A, 308 (2006) pp. 82-90 |
| D133 Sustainability of Ni loded Mg-Al mixed oxide catalysts in daily startup and shutdown opeartions of CH4 steam reforming | T.Ohi T.Miyata D.Li T.Shishido T.Kawabata T.Sano K.Takehira | Appl. Catal. A, 308 (2006) pp. 194-203 |

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|--|---|---|
| D134 Solubility and crystallization-controlled synthesis of lamellar mesostructured calcium phosphate in the ethanol/water system | N.Ikawa Y.Oumi T.Kimura T.Ikeda T.Sano | Chem Lett., 35 (2006) pp. 948-949 |
| D135 Memory effect-enhanced catalytic ozonation of aqueous phenol and oxalic acid over supported Cu catalysts derived from hydrotalcite | M.Shiraga T.Kawabata D.Li T.Shishido K.Komaguchi T.Sano K.Takehira | Appl. Clay Sci., 33 (2006) pp. 247-259 |
| D136 Control of crystal size of high-silica mordenite by quenching in the course of crystallization process | B.Lu Y.Yakushi Y.Oumi K.Itabashi T.Sano | Microporous Mesoporous Mater., 95 (2006) pp. 141-145 |
| D137 Cu/Zn based catalysts improved by adding magnesium for water-gas shift reaction | T. Shishido M. Yamamoto I. Atake D. Li H. Morioka M. Honda T. Sano K. Takehira | J.Mol.Catal. A, 253 (2006) pp. 270-278 |
| D138 Improved Fe/Mg-Al hydrotalcite catalyst for Baeyer-Villiger oxidation of ketones with molecular oxygen and benzaldehyde | T.Kawabata N.Fujisaki T.Shishido K.Nomura T.Sano K.Takehira | J.Mol.Catal. A, 253 (2006) pp. 279-289 |
| D139 Promoting effect of Rh, Pd and Pt noble metals to the Ni/Mg(Al)O catalysts for the DSS-like operation in CH ₄ steam reforming | T.Miyata D.Li M.Shiraga T.Shishido Y.Oumi T.Sano K.Takehira | Appl. Catal. A, 310 (2006) pp. 97-104 |
| D140 Hydrothermal conversion of FAU into *BEA zeolites | H.Jon K.Nakahata B.Lu Y.Oumi T.Sano | Microporous Mesoporous Mater., 96 (2006) pp. 72-78 |
| D141 Novel inorganic-organic layered composite synthesized by polycondensation of 3-aminopropyltriethoxysilane associated with the self-assembly of alkanoate | T.Chujo Y.Gonda Y.Oumi T.Sano H.Yoshitake | Chem.Lett., 35 (2006) pp. 1198-1199 |
| D142 Growth inhibition effects of allelochemicals released from aquatic and terrestrial plants on the cyanobacterium <i>Microcystis aeruginosa</i> | Satoshi Nakai Guoyan Zou Xiangfu Song Qi Pan Sheng Zhou Masaaki Hosomi | Proc. of 10th International Conference on Wetland Systems for Water Pollution Control, 2 (2006) pp. 1047-1055 |
| D143 Nitrogen behavior in free water surface flow wetland planted with forage rice receiving river water | Sheng Zhou Satoshi Nakai Masaaki Hosomi | Proc. of 10th International Conference on Wetland Systems for Water Pollution Control, 1 (2006) pp. 219-227 |
| D144 Rapid drying of soil and sediment using a home microwave oven for analysis of PCDDs, PCDFs and PCBs | Satoshi Nakai Katsuyuki Manabe Shingo Yamada Makoto Takada Masaaki Hosomi | Organohalogen Compounds, 68 (2006) pp. 2450-2453 |

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|--|---|---|
| D145 Enhancement of Cryptosporidium Oocyst Removal by Coagulation and Sedimentation with Poly-Silicate Iron (PSI) | Tetsuji Okuda Phengxay Deevanhxay Wataru Nishijima Takao Hasegawa Mitsumasa Okada | Journal of Chemical Engineering of Japan, 39 , 2 (2006) pp. 137-143 |
| D146 Evaluation of Organic Carbon Leaching Potential from Treated Incinerator Bottom Ash using Conventional and Green Process Methodologies | Andre L. Guimaraes Tetsuji Okuda Wataru Nishijima Mitsumasa Okada | Journal of Chemical Engineering of Japan, 39 , 4 (2006) pp. 481-487 |
| D147 ORGANIC CARBON LEACHING BEHAVIOR FROM INCINERATOR BOTTOM ASH | Andre L. Guimaraes Tetsuji Okuda Wataru Nishijima Mitsumasa Okada | Journal of Hazardous Materials, 137 , 2 (2006) pp. 1096-1101 |
| D148 Assimilable Organic Carbon (AOC) Originated From Picophytoplankton in Drinking Water | Tetsuji Okuda Wataru Nishijima Mitsumasa Okada | Water Science & Technology : Water Supply, 6 , 2 (2006) pp. 169-176 |
| D149 Heavy Metals Removal from Automobile Shredder Residues (ASR) | Keisuke Kurose Tetsuji Okuda Wataru Nishijima Mitsumasa Okada | Journal of Hazardous Materials, 137 , 3 (2006) pp. 1618-1623 |
| D150 Removal of Phytoplankton and Cryptosporidium oocyst by using Poly-Silicate Iron Coagulant (PSI) | Tetsuji Okuda Phengxay Deevanhxay Wataru Nishijima Mitsumasa Okada | Separation Science and Technology, 41 , 15 (2006) pp. 3387-3396 |
| D151 Making the Liquid-phase Catalytic Hydrodechlorination of PCE over Pd/C Safer | Neil C. Concibido Tetsuji Okuda Wataru Nishijima Mitsumasa Okada | Reaction Kinetics and Catalysis Letters, 89 , 2 (2006) pp. 369-376 |

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| E1 Experimental Studies on Salty Water Penetration through Cracks | Kazuyuki Tanaka Ippei Maruyama Ryoichi Sato Kenji Kawai | Proceedings of International RILEM-JCI Seminar on Concrete Durability and Service Life Planning, ConcreteLife'06, Dead Sea, Israel, (2006) pp. 24-32 |
| E2 Cracking of High Strength Concrete around Deformed Reinforcing Bar due to Shrinkage | Ippei Maruyama Syoichi Kameta Masahiro Suzuki Ryoichi Sato | Proceedings of International RILEM-JCI Seminar on Concrete Durability and Service Life Planning, ConcreteLife'06, Dead Sea, Israel, (2006) pp. 104-111 |
| E3 Activities of JCI-TC043A on Control of Thermal Cracking | Ryoichi Sato Shigeyuki Sogo Tsutomu Kanazu | Proceedings of International RILEM-JCI Seminar on Concrete Durability and Service Life Planning, ConcreteLife'06, Dead Sea, Israel, (2006) pp. 139-148 |
| E4 Mechanical Performance of Reinforced Expansive-High Strength Concrete Beams | Ryoichi Sato Ippei Maruyama | Proceedings of Seventh CAN-MET/ACI International Conference, Kenji Sakata Symposium on Properties of Concrete, Montreal, Canada (Invited), (2006) pp. 419-463 |

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|---|---|--|
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| E6 Serviceability Performance of RC Flexural Members Improved by Using Low Shrinkage-High Strength Concrete | Makoto Tanimura Masahiro Suzuki Ryoichi Sato | Proceedings of the 2nd ACF International Conference on Recent Development of Concrete Technology and Structures, Bali, Indonesia, (2006) pp. HSP-39-HSP-52 |
| E7 Application of Numerical Analysis for Deterioration of Erosion Depth of Mortar Specimens Exposed to Flowing Sulfuric Acid | Kenji Kawai Takeo Ishida Tatsuo Shinmi | Proceedings of Seventh CANMET/ACI International Conference on Durability of Concrete, Supplementary Papers, Montreal, Canada, (2006) pp. 511-525 |
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| E9 Effects of the Flow of Fluid on Concrete Deterioration Caused by Sulfuric Acid Attack | Kenji Kawai | Proceedings of International Seminar on Durability and Lifecycle Evaluation of Concrete Structures, Organized by Structural Safety and Reliability Project Research Center of Hiroshima University, Higashi-Hiroshima, (2006) pp. 51-60 |
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| E13 Fundamental Study on Dissolution Rate of Carbon Dioxide Gas in High pH Solution | Takeo Ishida Kenji Kawai Ryoichi Sato | Proceedings of International Seminar on Durability and Lifecycle Evaluation of Concrete Structures, Organized by Structural Safety and Reliability Project Research Center of Hiroshima University, Higashi-Hiroshima, (2006) pp. 23-30 |
| E14 Study on Decomposition of Cement Hydrates due to Carbonation | Takeo Ishida Kenji Kawai Ryoichi Sato | Proceedings of International Conference on Civil and Environmental Engineering, Organized by Department of Social and Environmental Engineering, Hiroshima University, Higashi-Hiroshima, (2006) pp. 43-50 |

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|--|---|--|
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| E16 POST-BUCKLING ANALYSIS OF THE HIGH-SYMMETRIC CAGE STRUCTURES | Ichiro Ario | INTERNATIONAL WORKSHOP ON COMPUTATIONAL MORPHOGENESIS, (2006) |
| E17 Dynamic Folding Analysis for Multi-Folding Structures under Impact Loadings | Ichiro Ario Andrew Watson | INTERNATIONAL CONFERENCE on VIBRO-IMPACT SYSTEMS, 1 (2006) |
| E18 Structural Stability of Multi-Folding Structures with Contact Problem | I. Ario A. Watson P. Pawlowski J. Holnicki | Proceedings of EUROMECH Colloquium 484, (2006) |
| E19 DYNAMIC ANALYSIS OF FOLDING PATTERNS FOR MULTI-FOLDING STRUCTURES | I. Ario P. Pawlowski J. Holnicki | Proceedings of European Conference on Computational Mechanics, 3 (2006) |
| E20 A Numerical Simulation of Local Strong Winds and Torrential Rains Affected by Geography | H. Nakamura K. Fujii I. Suizu | The International Symposium on Management System for Disaster Prevention, (2006) pp. CD-ROM |
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| E22 The Analytical Study on Bending Strength of Corroded Plate Girder | T. Kaita K. Tagaya H. Isami K. Fujii H. Kuboura | The International Symposium on Management System for Disaster Prevention, (2006) pp. CD-ROM |
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| E29 Geosynthetics reinforcement for marine structure with soil stabilization | Yoshihisa Miyata Koji Ichii Yoshi Suzuki Takao Hirai Hideto Terakawa | Proceedings of the 8th International Conference on Geosynthetics (8ICG), (2006) pp. 883-886 |

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| E31 SG-WALL: A NEW ATTEMPT OF A QUAY-WALL EXTENSION USING DREDGED MATERIAL | Koji Ichii Jyunichi Hironaka Yasuhsia Takaba Mitsuharu Fukuda | 31st PIANC Congress CD-ROM, (2006) |
| E32 Upward movement of fines in sand under one-dimensional water pressure change | Tsuchida,T Yoshimuta, S. Asa-umi, R | Proceedings of International Conference on International Symposium, (2006) |
| E33 Investigation of Spacial Variability of Natural Masado Slopes | Athapaththu A.M.R.G Takashi Tsuchida Kazuaki Suga Takashi Sato | Proceedings of the 17th International Offshore (Ocean) and Polar Engineering Conference, (2006) |
| E34 A Study on Computation of Seismic Permanent Displacement of Embankments considering Horizontal and Vertical Seismic Motion | Yoshiya Hata Norihiko Yamashita Seiji Kano Takashi Tsuchida | First European Conference on Earthquake Engineering and Seismology, (2006) |
| E35 Evaluating the Inefficiency of Household Car Use Behavior Based on a Stochastic Frontier Model | Masashi Kuwano Akimasa Fujiwara Junyi Zhang | Proceedings of International Conference of Civil and Environmental Engineering , (2006) pp. 217-226 |
| E36 Evaluating efficiency of household vehicle use | Masashi Kuwano Akimasa Fujiwara Junyi Zhang Backjin Lee | Proceedings of ICTTS 2002, Edited by B. Mao, Z. Tian, Z. Gao and H. Huang, Science Press, (2006) pp. 268-277 |
| E37 Bayesian analysis of group choice behavior in the context of household car ownership | Junyi Zhang Backjin Lee Masashi Kuwano Akimasa Fujiwara | International Conference for Travel Behavior Research, 11 (2006) |
| E38 transit-oriented development and its application in GuiYang, | Q. Fang Y. Sugie Z.Z. Yan J.Y. Zhang | Proceedings of ICTTS 2002, Edited by B. Mao, Z. Tian, Z. Gao and H. Huang, Science Press, (2006) pp. 246-255 |
| E39 Dispersion and dry and wet deposition of PAHs in an atmospheric environment | Noriatsu Ozaki Kyoko Nitta Takehiko Fukushima | Water Science and Technology, 53 , 2 (2006) pp. 215-224 |
| E40 Runoff and loads of nutrients and heavy metals from an urbanized area | H. Shirasuna T. Fukushima K. Matsushige A. Imai N. Ozaki | Water Science & Technology, 53 , 2 (2006) pp. 203-213 |
| E41 Community structure, abundance, and in situ activity of nitrifying bacteria in river sediments as determined by the combined use of molecular techniques and microelectrodes. | Yoshiyuki Nakamura Hisashi Satoh Tomonori Kindaichi Satoshi Okabe | Environmental Science & Technology, 40 , 5 (2006) pp. 1532-1539 |
| E42 Community structures and activities of nitrifying and denitrifying bacteria in industrial wastewater-treating biofilms. | Hisashi Satoh Takeshi Yamakawa Tomonori Kindaichi Tsukasa Ito Satoshi Okabe | Biotechnology and Bioengineering, 94 , 4 (2006) pp. 762-772 |
| E43 Population dynamics and in situ kinetics of nitrifying bacteria in autotrophic nitrifying biofilms as determined by real-time quantitative PCR. | Tomonori Kindaichi Yoshiko Kawano Tsukasa Ito Hisashi Satoh Satoshi Okabe | Biotechnology and Bioengineering, 94 , 6 (2006) pp. 1111-1121 |
| E44 Analysis of bacterial community structure of rising sludge in a wastewater treatment plant. | Hiroshi Kajihara Tomonori Kindaichi Noriatsu Ozaki | Proceedings of International Conference on Civil and Environmental Engineering ICCEE-2006, (2006) pp. 317-322 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|--|--|
| E45 Detection of polycyclic aromatic hydrocarbons-degrading Bacteria in activated sludge by microautoradiography-fluorescence in situ hybridization. | Yasuto Tanabe Tomonori Kindaichi Noriatsu Ozaki | Proceedings of International Conference on Civil and Environmental Engineering ICCEE-2006, (2006) pp. 323-328 |
| E46 Development of a super high-rate ANAMMOX reactor and in situ analysis of biofilm structure and function. | Ikuo Tsushima Yuji Ogasawara Masaki Shimokawa Tomonori Kindaichi Satoshi Okabe | Proceedings of IWA international conference Biofilm Systems IV in Amsterdam., (2006) pp. 29-38 |
| E47 Estimation of the emission factors of PAHs by the traffic activities with the model of atmospheric dispersion and deposition from heavy traffic road. | Noriatsu Ozaki Hiroki Tokumitsu Keisuke Kojima Tomonori Kindaichi | Proceedings of 10th International Conference Diffuse/Nonpoint Pollution and Watershed Management in Istanbul, (2006) |
| E48 Microbial community structure in a super high-rate ANAMMOX biofilm. | Tomonori Kindaichi Ikuo Tsushima Noriatsu Ozaki Satoshi Okabe | Proceedings of ISME 11th international symposium on microbial ecology in Vienna., (2006) |
| E49 A high-resolution finite-volume approach for shallow water flows with complex geometries based on a conservative CIP scheme | Tatsuhiko UCHIDA | Proceedings of International Conference on Civil and Environmental Engineering ICCEE-2006, (2006) pp. 121-130 |
| E50 Numerical simulation of inundation in Takahara City due to storm surge | Yasushi ITO Yukihiro KINASHI Tatsuhiko UCHIDA Yoshihisa KAWAHARA | Proceedings of International Conference on Civil and Environmental Engineering ICCEE-2006, (2006) pp. 281-286 |
| E51 Flood flow structure during rising and falling stages in a compound meandering channel | Yu MORISHITA Tatsuhiko UCHIDA Yoshihisa KAWAHARA Akihide WATANABE | Proceedings of International Conference on Civil and Environmental Engineering ICCEE-2006, (2006) pp. 287-292 |
| E52 A CIP-based method for shallow water flows in complex geometries using Cartesian grids | Tatsuhiko UCHIDA | 7th International Conference on Hydroscience and Engineering (ICHE-2006), (2006) |
| E53 Influence of tidal range and river discharge on transport of suspended sediment in the Ohta flood-way | Kiyosi Kawanisi Takanori Tsutsui Satoshi Nakamura Hitoshi Nishimaki | Journal of Hydroscience and Hydraulic Engineering, 24 , 1 (2006) pp. 1-9 |
| E54 Variability of tidal current, density stratification and tidal flat sediment in a tidal river | Kiyosi Kawanisi | Environmental Problems in Coastal Regions, 6 (2006) pp. 129-138 |
| E55 Settling and Reproduction of Floating Mud on the Sea Bottom | Tadashi Hibino Ryoji Takamido Hideo Matsumoto | ICCEE-2006(30th International Conference on Coastal Engineering), (2006) |
| E56 The characteristics of tidal wave propagation in the Ota River and the coastal aquifer | Katsuaki Komai Seiji Hanabata | The Proceedings of International Conference on Civil and Environmental Engineering, (2006) pp. 183-192 |
| E57 Generation and propagation forecast of storm surge in the Seto Inland Sea | Katsuaki Komai Tadashi Hibino Hideo Matsumoto | 30th International Conference on Coastal Engineering, (2006) |
| E58 Characteristics of suspended sediment transport 0 Td (s)Tj.849 0a185.412 19.0oTj | 7.ron- | |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|--|---|
| E62 High Performance LES on Earth Simulator: A Challenge for Vehicle Aerodynamics | Makoto Tsubokura Kozo Kitoh Nobuyuki Oshima Takuji Tominaga (Nakashima) Huilai Zhang Keiji Onishi Toshio Kobayashi Simone Sebben | Proceedings of FISITA World Automotive Congress, (2006) |
| E63 HIGH PERFORMANCE COMPUTATION OF UNSTEADYFLOW AROUND A FORMULA CAR USING LARGE-SCALE LES ON EARTH SIMULATOR | Makoto Tsubokura Toshio Kobayashi Nobuyuki Oshima Kozo Kitoh Huilai Zhang Keiji Onishi Takuji Tominaga (Nakashima) | Proceedings of the 12th International Symposium on Flow Visualization, (2006) |
| E64 Estimation of ultimate strength of continuous stiffened panel under combined transverse thrust and lateral pressure Part 1: Continuous plate | Masahiko Fujikubo Tetsuya Yao Mohammad Reza Khedmati Minoru Harada Daisuke Yanagihara | Marine Structures, 18 (2006) pp. 383-410 |
| E65 Estimation of ultimate strength of continuous stiffened panel under combined transverse thrust and lateral pressure Part 2: Continuous stiffened panel | Masahiko Fujikubo Tetsuya Yao Mohammad Reza Khedmati Minoru Harada Daisuke Yanagihara | Marine Structures, 18 (2006) pp. 411-427 |
| E66 Solid-Fluid Interaction Analysis by using a Multi-Material Eulerian Finite Element Method | Rafael Doig Shigenobu Okazawa Masahiko Fujikubo | Journal of Applied Mechanics, 9 (2006) pp. 151-159 |
| E67 Evaluation of the Residual Strength of Corroded Steel Tubular Members in Marine Environment | Makoto Yamane Kimiharu Tanaka Baku Matsuda Masahiko Fujikubo Daisuke Yanagihara Naoki Iwao | Proc. of the Sixteenth Int. Offshore and Polar Engineering Conference, (2006) |
| E68 Development of ISUM Element for Rectangular Plate with Cutout | Kinya Ishibashi Masahiko Fujikubo Tetsuya Yao | Proc. of the Sixteenth Int. Offshore and Polar Engineering Conference, (2006) |
| E69 Quasi-Static Collapse Analysis of Plates by Explicit Dynamic Method | Shigenobu Okazawa Masahiko Fujikubo Yoshiaki Hase | Proc. of Asian Technical Exchange and Advisory Meeting on Marine Structure, 12 (2006) pp. 41-46 |
| E70 Collapse Analysis of Ship's Hull Girder under Longitudinal Bending by Parallel Finite Element Method | Takahiro Kaida Daisuke Yanagihara Go Maeta Masahiko Fujikubo | Proc. of Asian Technical Exchange and Advisory Meeting on Marine Structure, 12 (2006) pp. 47-54 |
| E71 Strength of Corroded Steel Tubular Member in Marine Environments | Baku Matsuda Makoto Yamane Masahiko Fujikubo Daisuke Yanagihara, | Proc. of Asian Technical Exchange and Advisory Meeting on Marine Structure, 12 (2006) pp. 55-62 |
| E72 Thermo-elastic-viscoplastic Analysis for Evaluation of Hot Crack Susceptibility in Laser Welding | Moustafa Hassan Mitsuru Kitamura Motomochi Yamamoto | Proceedings of TEAM 2006, 20 (2006) pp. 337-344 |
| E73 Optimization System for Ship Assembling Hierarchy Using Genetic Algorithm and Product Model | Wibisono M. Arif Hamada Kunihiro Mitsuru Kitamura | Proceedings of TEAM 2006, 20 (2006) pp. 220-227 |
| E74 Shoes insole sensor using piezoelectric film | Setyanto, T.A. Amano,K. Fujimoto,Y. Watanabe,K. Hoshino, | Proc. of The Welfare Engineering Symposium, JSME, No.06-41 (2006) pp. 122-125 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|--|--|
| E75 Coupled Vibration analysis of magnetizable plate in magnetic field using magnetic moment method | Yoshikazu Tanaka kouji Okamoto Yukio Fujimoto | Book of summaries of 7th international symposium on electric and magnetic fields, (2006) pp. 177-178 |
| E76 Observation of corroded steel buildings standing near the sea | Kiichiro Sawada Akira Matsuo Masahiko Tanimoto Takao Takamatsu Hiroyuki Tamai Akio Nakayama | Fifth International Conference on BEHAVIOUR OF STEEL STRUCTURES IN SEISMIC AREAS, (2006) pp. 841-848 |
| E77 A study on seismic performance of existing school gymnasiums which do not meet the present Japanese national seismic regulations | Akira Matsuo Akiko Horiguchi Kiichiro Sawada Sachi Murakami Takao Takamatsu Hiroyuki Tamai | Fifth International Conference on BEHAVIOUR OF STEEL STRUCTURES IN SEISMIC AREAS, (2006) pp. 869-876 |
| E78 A SIMPLE ESTIMATION OF FABRICATION COST AND MINIMUM COST DESIGN FOR STEEL FRAMES | Kiichiro Sawada Hitoshi Shimizu Akira Matsuo Takaichi Sasaki Takashi Yasui Atsushi Namba | The Fourth China-Japan-Korea Joint Symposium on Optimization of Structural and Mechanical Systems, (2006) pp. 89-94 |
| E79 A new attenuation relation for strong ground motion in Japan based on recorded data | Tatsuo Kanno Akira Narita Nobuyuki Morikawa Hiroyuki Fujiwara Yushimitsu Fukushima | Bulletin of the Seismological Society of America, 96 (2006) pp. 879-897 |
| E80 Full Scale Tests for Existing Columns Reinforced with FRP | Hideo Araki Kenji Kabayama | Proceedings of the 2nd International Congress fib, (2006) |
| E81 Damping Characteristics of RC Columns Containing Coal Ash Subjected to Strong Motions | Kenji Kabayama Hideo Araki | Proceedings of the 2nd International Congress fib, (2006) |
| E82 Calculation Method for the Loads of Cold and Hot Water Consumption in Office Buildings based on the Simulation Technique | Saburo Murakawa Hiroshi Takata Kazuhiko, Sakamoto | Proceedings of the CIB- W62 International Symposium on Water Supply and Drainage for Buildings, (2006) pp. 1-14 |
| E83 A Study on the Hot Water Consumption in a Hot Spa Facility | Naoki Yamamoto Saburo Murakawa Hiroshi Takata | Proceedings of the CIB- W62 International Symposium on Water Supply and Drainage for Buildings, (2006) pp. 1-10 |
| E84 An Analysis of the Evaluation for the Improvement of Regional Landscapes Based on the Individual Characteristics | Hiroshi Oishi Saburo Murakawa Daisaku Nishina | Proceedings of the 7th International Symposium for Environment-Behavior Studies, (2006) pp. 76-84 |
| E85 Comparative Analysis of the Reasons for Preference on River Landscapes among the Australian and Japanese Subjects | Daisaku Nishina Saburo Murakawa Hiroshi Oishi Takeshi Nitta | Proceedings of the 7th International Symposium for Environment-Behavior Studies, (2006) pp. 256-265 |
| E86 Comparative Study on Fixation Behavior of River Landscape by Chinese, Japanese and European Testees | Hua Jin Zhuo Wang Saburo Murakawa Daisaku Nishina | Proceedings of the 7th International Symposium for Environment-Behavior Studies, (2006) pp. 272-277 |

F. Research Center for Nanodevices and Systems

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|--|--|
| F1 Influence of Cu electroplating solution on 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 | Journal of The Electrochemical Society, 153 , 9 (2006) pp. G870-G873 |
| F2 Measurement and analysis of water adsorption in porous silica films | S. Kuroki T. Kikkawa | Journal of The Electrochemical Society, 153 , 8 (2006) pp. G759-G764 |
| F3 Influence of CMP chemicals on the properties of porous silica low-k films | A. Ishikawa Y. Shishida T. Yamanishi N. Hata T. Nakayama N. Fujii H. Tanaka H. Matsuo K. Kinoshita T. Kikkawa | Journal of The Electrochemical Society, 153 , 7 (2006) pp. G692-G696 |
| F4 Analysis of transmission characteristics of Gaussian monocycle pulses for silicon integrated antennas | K. Kimoto N. Sasaki P. K. Saha M. Nitta T. Kikkawa M. Sasaki | Japanese Journal of Applied Physics Part 1-Regular Papers Brief Communications & Review Papers, 45 , 4B (2006) pp. 3272-3278 |
| F5 A 2.4 GHz differential wavelet generator in 0.18 μ m complementary metal-oxide-semiconductor for 1.4 Gbps ultra-wideband impulse radio in wireless inter/intra-chip data communication | P. K. Saha N. Sasaki K. Kimoto T. Kikkawa | Japanese Journal of Applied Physics Part 1-Regular papers Brief Communications & Review Papers, 45 , 4B (2006) pp. 3279-3285 |
| F6 Vapor phase reactions in polymerization plasma for divinyisiloxane-bis-benzocyclobutene film deposition | K. Kinoshita A. Nakano J. Kawahara N. Kunimi Y. Hayashi O. Kiso N. Saito K. Nakamura T. Kikkawa | Journal of Vacuum Science & Technology, A 24 , 6 (2006) pp. 2192-2198 |
| F7 Plasma etch rates of porous silica low-k films with different dielectric constants | T. Ono H. Takahashi K. Kinoshita N. Fujii N. Hata T. Kikkawa | Japanese Journal of Applied Physics Part 1-Regular papers Brief Communications & Review Papers, 45 , 11 (2006) pp. 8873-8875 |
| F8 Recovery from plasma-process-induced damage in porous silica low-k films by organosiloxane vapor annealing | T. Ono K. Kinoshita H. Takahashi N. Fujii Y. Sonoda Y. Oku K. Kohmura R. Yagi N. Hata T. Kikkawa | Japanese Journal of Applied Physics Part 1-Regular papers Brief Communications & Review Papers, 45 , 8A (2006) pp. 6231-6235 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|---|--|
| F9 Signal transmission characteristics between Si chips with air gap using Si integrated dipole antennas | K. Kimoto T. Kikkawa | Japanese Journal of Applied Physics Part 1-Regular papers Brief Communications & Review Papers, 45 , 6A (2006) pp. 4968-4976 |
| F10 Ionic leakage current in porous silica films | Y. Kayaba K. Kohmura T. Kikkawa | Extended Abstracts of the 2006 International Conference on Solid State Devices and Materials, (2006) pp. 1018-1019 |
| F11 Pure-Silica Zeolite Films Prepared by a Vapor Phase Transport Method | Y. Cho K. Kohmura T. Kikkawa | Extended Abstracts of the 2006 International Conference on Solid State Devices and Materials, (2006) pp. 464-465 |
| F12 Formation of Mesoporous Pure Silica Zeolite Film | T. Seo T. Yoshino N. Hata T. Kikkawa | Extended abstracts of the International Conference on Solid State Devices and Materials, (2006) pp. 462-463 |
| F13 A Single-chip Gaussian Monocycle Pulse Transmitter using $0.18\ \mu\text{m}$ CMOS Technology for Intra/Interchip UWB Communication | P. K. Saha N. Sasaki T. Kikkawa | 2006 Symposium on VLSI circuits Digest of Technical Papers, (2006) pp. 252-253 |
| F14 Analysis of Si Integrated Dipole Antennas for Ultrawideband Signal Transmission | K. Kimoto N. Sasaki P. K. Saha M. Nitta T. Kikkawa | Proc. of IEEE AP-S International Symposium with USNC/URSI National Radio Science and AMEREM Meetings, 5 (2006) pp. 4661-4664 |
| F15 Influence of WLAN on Inter-chip UWB Signal Transmission with Si Integrated Antennas | M. Nitta K. Kimoto N. Sasaki T. Kikkawa | Proc. of IEEE AP-S International Symposium with USNC/URSI National Radio Science and AMEREM Meetings, 2 (2006) pp. 917-920 |
| F16 Inter-chip Transmission Characteristics of Meander Dipole Antennas Integrated in $0.18\ \mu\text{m}$ CMOS UWB Transceiver Chips | K. Kimoto N. Sasaki M. Nitta M. Fukuda T. Kikkawa | Ext. Abst. of the 2006 International Conference on Solid State Devices and Materials, (2006) pp. 66-67 |
| F17 A Single-chip Ultra-Wideband Receiver using Silicon Integrated Antennas for Inter-chip Wireless Interconnection | N. Sasaki M. Fukuda M. Nitta K. Kimoto T. Kikkawa | Ext. Abst. of the 2006 International Conference on Solid State Devices and Materials, (2006) pp. 70-71 |
| F18 A $0.18\ \mu\text{m}$ CMOS Impulse Radio Based UWB Transmitter for Global Wireless Interconnections of 3D Stacked-Chip System | M. Fukuda P. K. Saha N. Sasaki T. Kikkawa | Ext. Abst. of the 2006 International Conference on Solid State Devices and Materials, (2006) pp. 72-73 |
| F19 Effect of Frictional Force Vector on Delamination in Cu/Low-k Integration | H. Matsuo S. Kondou A. Ishikawa K. Fukaya N. Kobayashi T. Kikkawa | Materials for Advanced Metallization 2006, (2006) pp. 87-88 |
| F20 Influence of Ultraviolet Irradiation on Porous Silica Low-k Dielectric Films | T. Nakayama N. Fujii H. Tanaka K. Takamura Y. Takasu Y. Seino N. Hata T. Kikkawa | Materials for Advanced Metallization 2006, (2006) pp. 191-192 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|--|--|
| F21 Removal of etching/ashing residues and ashing/wet clean damage in porous silica low-k films | T. Yamanishi T. Ono K. Kohmura N. Fujii T. Nakayama H. Tanaka S. Chikaki T. Kikkawa | Materials for Advanced Metallization 2006, (2006) pp. 85 |
| F22 Effect of Moisture Adsorption on the Properties of Porous Silica Ultralow-k Films | Y. Uchida S. Hishiya N. Fujii K. Takamura T. Nakayama H. Tanaka T. Kikkawa | Materials for Advanced Metallization 2006, (2006) pp. 77 |
| F23 Plasma-enhanced polymerization thin film as a drift barrier for Cu interconnects | T. Yoshino J. Kawahara N. Hata Y. Shishida T. Kikkawa | Extended Abstracts of SSDM 2006, (2006) pp. 1038-1039 |
| F24 Nondestructive characterization of dielectric stack structures with and without trench patterns by laser-pulse generated surface acoustic wave analysis | T. Takimura N. Hata Y. Shishida S. Chikaki T. Kikkawa | Extended Abstracts of SSDM 2006, (2006) pp. 1024-1025 |
| F25 Nondestructive characterization of temperature-dependent backbone Si-O-Si structure in porous silica films by in-situ Fourier-transform infrared spectroscopy | S. Takada N. Hata X. Li N. Fujii T. Nakayama T. Kikkawa | Extended Abstracts of SSDM 2006, (2006) pp. 154-155 |
| F26 The structural origin of Determining the coefficient of thermal expansion for porous silica low-k films | M. Yamaji N. Hata T. Nakayama Y. Shishida Y. Hyougou T. Kikkawa | Extended Abstracts of SSDM 2006, (2006) pp. 1010-1011 |
| F27 Metal Gate Technology for 45nm and beyond | K. Shibahara | Proceedings of 2006 Int. Symp.on VLSI Technology, Systems, and Applications(VLSI-TSA 2006), (2006) pp. 105-106 |
| F28 Mo Gate Deformation Induced by Laser Annealing Process | K. Shibahara A. Matsuno M. Hino K. Kurobe | Proceedings of 2006 Int. Symp.on VLSI Technology, Systems, and Applications(VLSI-TSA 2006), (2006) pp. 50-51 |
| F29 Merits of Heat-assist for Melt Laser Annealing | K. Shibahara T. Eto K. Kurobe | IEEE Trans. Electron Devices, 53 , 5 (2006) pp. 1059-1064 |
| F30 Xe Preamorphization Implantation for Transient Enhanced Diffusion Suppression of As in Ge Substrate | T. Fukunaga K. Hosawa T. Hosoi K. Shibahara | Ext. Abst. Int. Conf. on Solid State Devices and Materials(SSDM'06), (2006) pp. 452-453 |
| F31 Pd ₂ Si Fully-Silicided Gate: Kinetics of Silicide Formation and Workfunction Tuning | T. Hosoi K. Sano K. Hosawa K. Shibahara | Ext. Abst. Int. Conf. on Solid State Devices and Materials(SSDM'06), (2006) pp. 218-219 |
| F32 Effects of Pulse Duration on the Formation of Ultra Shallow Junction Formed by an Excimer Laser Anneal Method | A. Matsuno K. Shibahara | Jpn. J. of Appl. Phys., 45 , 11A (2006) pp. 8537-8541 |
| F33 Fabrication of High-Density Diamond Nanotips by Electron Beam Lithography | T. Tabei T. Miyazaki Y. Nishibayashi S. Yokoyama | Jpn. J. Appl. Phys., 45 , 3A (2006) pp. 1771-1774 |

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|---|---|---|
| F34 Design and Simulation of Ring Resonator Switches using Electro-Optic Materials | Y. Tanushi S. Yokoyama | Jpn. J. Appl. Phys., 45 , 4B (2006) pp. 3493-3497 |
| F35 Structural and Optical Properties of Electro-Optic Material: Sputtered (Ba,Sr)TiO ₃ | M. Suzuki Zhimou Xu Y. Tanushi S. Yokoyama | Jpn. J. Appl. Phys., 45 , 4B (2006) pp. 3488-3492 |
| F36 Groove-Buried Optical Waveguides Based on Metal Organic Solution-Derived Ba _{0.7} Sr _{0.3} TiO ₃ Thin Films | Zhimou Xu M. Suzuki Y. Tanushi K. Wakushima S. Yokoyama | Jpn. J. Appl. Phys., 45 , 4B (2006) pp. 3482-3487 |
| F37 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 | Jpn. J. Appl. Phys., 45 , 4B (2006) pp. 3498-3503 |
| F38 Monolithically integrated optical modulator based on polycrystalline Ba _{0.7} Sr _{0.3} TiO ₃ thin films | Zhimou Xu M. Suzuki Y. Tanushi S. Yokoyama | Appl. Phys. Lett., 88 , 16 (2006) pp. 161107-1-161107-3 |
| F39 Effect of H ₂ Addition during Cu Thin Film Sputtering | M. Ooka S. Yokoyama | Jpn. J. Appl. Phys., 45 , 12 (2006) pp. 9058-9062 |
| F40 Optical properties of amorphous Ba _{0.7} Sr _{0.3} TiO ₃ thin films obtained by metal organic decomposition technique | Zhimou Xu Y. Tanushi M. Suzuki K. Wakushima S. Yokoyama | Thin Solid Films, 515 (2006) pp. 2326-2331 |
| F41 Low Temperature Fabrication of Monolithic Mach-Zehnder Optical Modulator on Silicon using Sputtered (Ba,Sr)TiO ₃ and Mechanism of Transient Response | M. Suzuki K. Nagata Y. Tanushi S. Yokoyama | Abst. Int. Conf. on Solid State Devices and Materials(SSDM2006), (2006) pp. 48-49 |
| F42 Compact Multi-Mode Optical Ring Resonators for Interconnection on Si Chips | Y. Tanushi S. Yokoyama | Abst. Int. Conf. on Solid State Devices and Materials(SSDM2006), (2006) pp. 44-45 |
| F43 Influence of bulk bias on negative bias temperature instability of p-channel metal-oxide-semiconductor field-effect transistors with ultrathin SiON gate dielectrics | Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake | J. Appl. Phys., 99 , 6 (2006) pp. 064510-064515 |
| F44 Mechanism of Dynamic Bias Temperature Instability in P- and N- MOSFETs: the Effect of Pulse Waveform | Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake | IEEE Trans. Electron Devices, 53 , 8 (2006) pp. 1805-1814 |
| F45 Atomic Layer Deposition of HfO ₂ using Hf[N(C ₂ H ₅) ₂] ₄ and H ₂ O | Yuichi Yokoyama Shiyang Zhu Anri Nakajima | Jpn. J. Appl. Phys., 45 , 9A (2006) pp. 7091-7093 |
| F46 Cotunneling current in Si single-electron transistor based on multiple islands | Kensaku Ohkura Tetsuya Kitade Anri Nakajima | Appl. Phys. Lett., 89 , 18 (2006) pp. 183520-183522 |
| F47 Improvement of mobility and NBTI reliability in MOSFETs with ALD-Si-nitride/SiO ₂ stack dielectrics and p ⁺ -poly-Si gate | Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake | 2006 Int. Conf. on Solid State Devices and Materials (SSDM2006), (2006) pp. 420-421 |
| F48 Cotunneling Current in Si Single-Electron Transistor Based on Multiple Islands | Kensaku Ohkura Tetsuya Kitade Anri Nakajima | the 2006 International Microprocesses and Nanotechnology Conference (MNC 2006), (2006) pp. 166-167 |
| F49 Bias Temperature Instability in MOSFETs with Atomic-Layer-Deposited Si-Nitride/SiO ₂ Stack Gate Dielectrics | Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake | 8th Int. Conf. on Solid State and Integrated-Circuit Technology (IC-ICT2006), (2006) pp. 1126-1128 |

Published Papers

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|---|---|
| F50 High-aspect-ratio structure formation techniques for three-dimensional metal-oxide-semiconductor transistors | H. Sunami S. Matsumura K. Yoshikawa K. Okuyama | Microelectronic Engineering, 83 (2006) pp. 1740-1744 |
| F51 Characterization of Subthreshold Behavior of Narrow-Channel SOI nMOSFET with Additional Side-Gate Electrodes | K. Okuyamam K. Yoshikawa H. Sunami | Extended Abstracts of International Symp. on Solid State Devices and Materials, (2006) pp. 506-507 |
| F52 Plasma-Doping Induced Damages Associated with Source/Drain FDamagi-179.0961 0Td Td (pp.)TBeamnegDamagT.35 0475 Td (age)Tstorson | | |

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|--|---|---|
| F59 Completely Surface-Potential-Based Compact Model of the Fully-Depleted SOI-MOSFET Including Short-Channel Effects | N. Sadachika D. Kitamaru Y. Uetsuji D. Navarro M. M. Yusoff T. Ezaki H. J. Mattausch M. Miura-Mattausch | IEEE Trans. on Electron Devices, 53 , 9 (2006) pp. 2017-2024 |
| F60 HiSIM2: Toward Solving the Speed versus Accuracy Crisis in Circuit Simulation | H. J. Mattausch M. Miyake T. Yoshida S. Hazama D. Navarro N. Sadachika T. Ezaki M. Miura-Mattausch | IEEE Circuits and Devices Magazine, 22 , 9 (2006) pp. 29-38 |
| F61 A Reliability-Enhanced TCAM Architecture with Associated Embedded DRAM and ECC | H. Noda K. Dosaka H. J. Mattausch T. Koide F. Morishita K. Arimoto | IEICE Trans. on Electronics, E89-C (2006) pp. 1612-1619 |
| F62 Image Segmentation and Pattern Matching Based FPGA/ASIC Implementation of Real-Time Object Tracking | K. Yamaoka T. Morimoto H. Adachi T. Koide H. J. Mattausch | Proceedings of the Asia and South Pacific Design Automation Conference (ASP-DAC 2006), (2006) pp. 176-181 |
| F63 HiSIM2: Advanced MOSFET Model for RF-Circuit Simulation | M. Miura-Mattausch D. Navarro N. Sadachika G. Suzuki Y. Takeda M. Miyake T. Warabino Y. Mizukane K. Machida R. Inagaki T. Ezaki H. J. Mattausch T. Ohguro T. Iizuka M. Taguchi S. Kumashiro S. Miyamoto | Proceedings of the International Workshop on Compact Modeling(IWCM 2006), (2006) pp. 57-62 |
| F64 Efficient non-quasi-static MOSFET Model for both Time-Domain and Frequency-Domain Analysis | K. Machida D. Navarro M. Miyake R. Inagaki N. Sadachika T. Ezaki H. J. Mattausch M. Miura-Mattausch | Proceedings of the IEEE International Conference on Silicon Monolithic Integrated Circuits in RF Systems (SiRF'06), (2006) pp. 73-76 |
| F65 Multi-Object Tracking VLSI Architecture using Image-Scan based Region Growing and Feature Matching | K. Yamaoka T. Morimoto H. Adachi K. Awane T. Koide H. J. Mattausch | Proc. IEEE Int. Symposium on Circuits and Systems (ISCAS'06), (2006) pp. 5575-5578 |
| F66 Minimum Euclidean Distance Associative Memory Architecture with Fully-Parallel Search Capability | Md. A. Abedin K. Kamimura A. Ahmadi T. Koide H. J. Mattausch | 13 th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI 2006), (2006) pp. 350-354 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|--|---|
| F67 Advanced Compact MOSFET Model HiSIM2 Based on Surface Potentials with a Minimum Number of Approximations | M. Miura-Mattausch D. Navarro N. Sadachika G. Suzuki Y. Takeda M. Miyake T. Warabino K. Machida T. Ezaki H. J. Mattausch T. Ohguro T. Iizuka M. Taguchi S. Kumashiro R. Inagaki S. Miyamoto | Proceedings of the 2006 NIST Nanotechnology Conference and Trade Show (NIST-Nanotech 2006), in press, (2006) |
| F68 A Learning OCR System Using Short/Long-term Memory Approach and Hardware Implementation in FPGA | A. Ahmadi M. A. Ritonga Md. A. Abedin H. J. Mattausch T. Koide | Proceedings of the 2006 IEEE Congress on Evolutionary Computation (WCCI 2006), (2006) pp. 2702-2708 |
| F69 Analysis and Compact Modeling of MOSFET High-Frequency Noise | T. Warabino M. Miyake N. Sadachika D. Navarro Y. Takeda G. Suzuki T. Ezaki M. Miura-Mattausch H. J. Mattausch T. Ohguro T. Iizuka M. Taguchi S. Kumashiro S. Miyamoto | Proceedings of the IEEE International Conference on Simulation of Semiconductor Processes and Devices (SISPAD 2006), in press, (2006) |
| F70 Multi-Bank Register File for Increased Performance of Highly-Parallel Processors | K. Johuchi K. Aoyama T. Sueyoshi H. J. Mattausch T. Koide M. Maeda T. Hironaka K. Tanigawa | Proceedings of the 32 nd European Solid-State Circuits Conference (ESSCIRC 2006), (2006) pp. 154-157 |
| F71 Nearest Euclidean-Distance-Search Associative Memory Architecture with Fully Parallel Mixed Digital-Analog Match Circuitry | Md. A. Abedin Y. Tanaka A. Ahmadi T. Koide H. J. Mattausch | Extended Abstracts of the 2006 International Conference on Solid State Devices and Materials (SSDM 2006), (2006) pp. 282-283 |
| F72 Image-Scan Video Segmentation Architecture and FPGA Implementation | T. Morimoto H. Adachi K. Yamaoka K. Awane T. Koide H. J. Mattausch | Extended Abstracts of the 2006 International Conference on Solid State Devices and Materials (SSDM 2006), (2006) pp. 590-591 |
| F73 Surface-Potential-Based Varactor Model for RF Applications | MOS- M. Miyake N. Sadachika D. Navarro Y. Mizukane T. Ezaki M. Miura-Mattausch H. J. Mattausch T. Ohguro T. Iizuka M. Taguchi S. Kumashiro S. Miyamoto | Extended Abstracts of the 2006 International Conference on Solid State Devices and Materials (SSDM 2006), (2006) pp. 1044-1045 |

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|---|--|---|
| F74 HiSIM-SOI: Complete Surface-Potential-Based Fully-Depleted SOI-MOSFET Model for Circuit Simulation | N. Sadachika D. Kitamaru Y. Uetsuji D. Navarro M. M. Yusoff T. Ezaki H. J. Mattausch M. Miura-Mattausch S. Baba | Proc. 2006 China-Ireland International Conference on Information and Communication Technologies (CIICT 2006), (2006) pp. 242-245 |
| F75 Noise Modeling Based on Self-Consistent Surface-Potential Description for Advanced MOSFETs aiming at RF Applications | T. Ezaki T. Warabino M. Miyake N. Sadachika D. Navarro H. J. Mattausch M. Miura-Mattausch T. Ohguro T. Iizuka M. Taguchi S. Kumashiro S. Miyamoto | Proceedings of the 8 th International Conference on Solid-State and Integrated-Circuit Technology (ICSICT 2006), (2006) pp. 1264-1267 |
| F76 Fully Parallel Associative Memory Architecture with Mixed Digital-Analog Match Circuit for Nearest Euclidean Distance Search | Md. A. Abedin Y. Tanaka A. Ahmadi T. Koide H. J. Mattausch | Proc. of the IEEE Asia Pacific Conference on Circuits and Systems (APCCAS 2006), (2006) pp. 1311-1314 |
| F77 An FPGA-Based Region-Growing Video Segmentation System with Boundary-Scan-Only LSI Architecture | T. Morimoto H. Adachi K. Yamaoka T. Koide H. J. Mattausch | Proc. of the IEEE Asia Pacific Conference on Circuits and Systems (APCCAS 2006), in press, (2006) |
| F78 Application of Multi-ported CAM for Parallel Coding | T. Kumaki Y. Kouno M. Ishizaki T. Koide H. J. Mattausch | Proc. of the IEEE Asia Pacific Conference on Circuits and Systems (APCCAS 2006), in press, (2006) |
| F79 Unified Data/Instruction Cache with Hierarchical Multi-Port Architecture and Hidden Precharge Pipeline | K. Johguchi Z. Zhu H. J. Mattausch T. Koide T. Hironaka K. Tanigawa | Proc. of the IEEE Asia Pacific Conference on Circuits and Systems (APCCAS 2006), in press, (2006) |
| F80 Huffman Encoding Architecture with Self-Optimizing Performance and Multiple CAM-Match Utilization | M. Ishizaki T. Kumaki Y. Kouno T. Koide H. J. Mattausch Y. Kuroda T. Gyoten H. Noda K. Dosaka K. Arimoto K. Saito | Proc. of the IEEE TENCON (TENCON 2006), CA2.3 (2006) |
| F81 Access Queues for Multi-Bank Register Files Enabling Enhanced Performance of Highly Parallel Processors | Y. Mukuda K. Aoyama K. Johguchi H. J. Mattausch T. Koide M. Maeda T. Hironaka K. Tanigawa | Proc. of the IEEE TENCON (TENCON 2006), No. CA2.4 (2006) |

Published Papers

| Paper Title | Author Name | Journal, Vol., No. (Year) Page |
|--|---|--|
| F82 Physics-Based Photodiode Model Enabling Consistent Opto-Electronic Circuit Simulation | T. Ezaki G. Suzuki K. Konno O. Matsushima Y. Mizukane D. Navarro M. Miyake N. Sadachika H. J. Mattausch M. Miura-Mattausch | Proceedings of the 2006 IEEE International Electron Devices Meeting (IEDM 2006), (2006) pp. 187-190 |

Published Books

| Book Title (Editor Name) | Author Name | Publisher | Year |
|---|---|--|------|
| Progress of Machining Technology, Proc. on the 8th Int. conf. on Progress of Machining Technology | Wuyi Chen Yasuo Yamane Rui Fan Hiroshi Usuki Ako Ochi | Technical Committee of Machining Difficult-to-cut Materials of the Japan Society for Precision Engineering | 2006 |
| Reconfigurable Manufacturing Systems and Transformable Factories | Hiromi Ebara Daisuke Hirotani Katsuhiko Takahashi Katsumi Morikawa | Springer | 2006 |
| Reconfigurable Manufacturing Systems and Transformable Factories | Katsuhiko Takahashi Katsumi Morikawa Myreshka Takamasa Ohiro Akihito Takubo | Springer | 2006 |
| A Recurrent Probabilistic Neural Network for EMG Pattern Recognition | Toshio Tsuji Nan Bu Osamu Fukuda | Neural Networks in Healthcare: Potential and Challenges (R. Begg, J. Kamruzzaman) | 2006 |
| Myoelectric Teleoperation of a Dual-Arm Manipulator Using Neural Networks | Toshio Tsuji Kouji Tsujimura Yoshiyuki Tanaka | Neural Networks in Healthcare: Potential and Challenges (R. Begg, J. Kamruzzaman, R. Sarker, Ed.) | 2006 |
| Formal Models, Languages and Applications, Chapter 18: Pattern generation and parsing by array grammars | Kenichi Morita Jin-Shan Qi Katsunobu Imai | World Scientific | 2006 |
| Recent Advances in Stochastic Operations Research | Tadashi Dohi Shunji Osaki K. Sawaki | World Scientific | 2006 |
| Reliability Modeling, Analysis and Optimization: Discrete-time stochastic EMQ models with machine breakdown and repair | Bibhas C. Giri Tadashi Dohi | World Scientific | 2006 |
| Advanced Reliability Modeling II – Reliability Testing and Improvement | Won Young Yun Tadashi Dohi | World Scientific | 2006 |
| Recent Advances in Stochastic Operations Research: Discrete-time opportunistic replacement policies and their application | Tadashi Dohi Naoto Kaio Shunji Osaki | World Scientific | 2006 |
| Recent Advances in Stochastic Operations Research: Estimating age replacement policies with small sample data | Koichiro Rinsaka Tadashi Dohi | World Scientific | 2006 |
| Powder Technology Handbook (Third Edition) | Kikuo Okuyama Shinichi Yuu Ko Higashitani Motoaki Adachi | Taylor & Francis | 2006 |
| Nanocrystalline Materials: Their Synthesis-Structure-Property Relationships and Applications (S.C. Tjong Ed.)(chap.9) | M. Abdullah Khairurrijal F. Iskandar K. Okuyama | Elsevier | 2006 |
| Powder Technology Handbook Third Ed. | Hiroaki Masuda Ko Higashitani Hideto Yoshida | Taylor and Francis | 2006 |
| Powder Technology Handbook, Third Edition (Chap. II.7.1) | Manabu Shimada Shuji Matsusaka | Taylor and Francis | 2006 |
| Process in olefin polymerization catalysts and polyolefin materials, studies in surface science and catalysis 161 | Takeshi Shiono Kotohiro Nomura Minoru Terano | Elsevier | 2006 |

Published Books

| Book Title (Editor Name) | Author Name | Publisher | Year |
|--|--------------------|----------------------------------|-------------|
| Japan Society of Civil Engineers, JSCE Guidelines for Concrete No.7 Recommendation of Environmental Performance Verification for Concrete Structures (Draft) | Kenji Kawai | Japan Society of Civil Engineers | 2006 |

Registered Patents

| Patent Name (Registered Number) | Inventor Name | Registered Date |
|--|---|-----------------|
| Method for extracting component from material to be processed and apparatus used in the method (WO2006/046392) | Masashi Haruki Hiromi Uematsu Yukio Nakanishi | 2006.5.4 |
| Associative memory apparatus for searching data in which Manhattan distance is minimum (TW093124390) | T. Koide H. J. Mattausch Y. Yano | 2006.1.31 |
| Associative memory apparatus for searching data in which Manhattan distance is minimum (JP2004-017429) | T. Koide H. J. Mattausch Y. Yano | 2006.2.27 |