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<b>A2</b> Wettability of basal and prismatic plane of graphite by molten aluminum - magnesium alloy	M. Yoshida T. Matsunaga K. Ogata T. Hatayama K. Shinozaki	Material Science Forum, <b>539-543</b> (2007)
<b>A3</b> DEVELOPMENT OF AL/CU DISSIMILAR BRAZING JOINT CONTROLLED FORM OF INTERMETALLIC COMPOUND	K.Shinozaki K.Koyama	Material Science Forum, <b>539-543</b> (2007) pp. 4075-4080
<b>A4</b> Cracking and Local Melting in Mg-alloy and Al-alloy during Friction Stir Spot Welding	M. Yamamoto A. Gerlich T.H. North K. Shinozaki	Proceedings of the 60th Annual, Assembly of International Institute of Welding (IIW), IIW-III-1429-07, (2007)
<b>A5</b> Development of Ultra-High-Speed GTA Welding Process Using Pulse-Heated Hot-Wire	M. Yamamoto K. Shinozaki T. Myoga T. Kanazawa H. Arashin	Proceedings of the 60th Annual, Assembly of International Institute of Welding (IIW), IIW-XII-1927-07, (2007)
<b>A6</b> Cracking in the stir zones of Mg alloy friction stir spot welds	M. Yamamoto A. Gerlich T.H. North K. Shinozaki	Journal of Materials Science, <b>42</b> , 18 (2007) pp. 7657-7666
<b>A7</b> Mechanism of cracking in AZ91 friction stir spot welds	M. Yamamoto A. Gerlich T.H. North K. Shinozaki	Science and Technology of Welding and Joining, <b>12</b> , 3 (2007) pp. 208-216
<b>A8</b> Formation and retention of local melted films in AZ91 friction stir spot welds	P. Su A. Gerlich M. Yamamoto T.H. North	Journal of Materials Science, <b>42</b> , 24 (2007) pp. 9954-9965
<b>A9</b> Effect of welding parameters on the strain rate and microstructure of friction stir spot welded 2024 aluminum alloy	A. Gerlich P. Su M. Yamamoto T.H. North	Journal of Materials Science, <b>42</b> , 14 (2007) pp. 5589-5601
<b>A10</b> Strain Rates and Grain Growth in Al 5754 and Al 6061 Friction Stir Spot Welds	A. Gerlich M. Yamamoto T.H. North	Metallurgical and Materials Transactions A, <b>38</b> , 6 (2007) pp. 1291-1302
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<b>A13</b> Cracking in Mg-alloy Friction Stir Spot Welding	M. Yamamoto A. Gerlich T.H. North K. Shinozaki	Proceedings of UIIW (University-Industry International Workshop) - Frontiers of Science & Technology of Welding- (Nantes, France), (2007)

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<b>B71</b> Pattern Discrimination of Mechanomyogram Using A Delta-sigma Modulated Probabilistic Neural Network	Keisuke Shima Toshio Tsuji	The 1st International Conference on Cognitive Neurodynamics, (2007) pp. 4
<b>B72</b> Active Strobe Imager for Visualizing Dynamic Behavior of Tumors	Makoto. Kaneko Chisashi. Toya Masazumi. Okajima	Proc. of the IEEE Int. Conf. on Robotics and Automation, (2007) pp. 109
<b>B73</b> Real-time and Long-time Quantification of Behavior of Laboratory Mice Scratching	Idaku ISHII Yuman NIE Kenkichi YAMAMOTO Kensuke ORITO Hiroshi MATSUDA	Proceedings of the 3rd Annual IEEE Conference on Automation Science and Engineering, (2007) pp. 629-633
<b>B74</b> A High-Speed 3D Shape Measurement System Using a Multi-Sided Mirror	Kenkichi Yamamoto Hiroaki Fujii Idaku Ishii	Proceedings of the 3rd Annual IEEE Conference on Automation Science and Engineering, (2007) pp. 823-828

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<b>D16</b> Controlled Size Polymer Particle Production via Electrohydrodynamic Atomization	C. J. Hogan K. M. Yun D. Chen I. W. Lenggoro P. Biswas K. Okuyama	Colloid and Surf A: Physicochemical and Engineering Aspects, <b>311</b> , 1-3 (2007) pp. 67-76

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<b>D18</b> Heating Profile Effect on Morphology, Crystallinity and Photoluminescent Properties of Y <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> Phosphor Nanofibers Prepared Using an Electrospinning Method	M. M. Munir K. M. Yun F. Iskandar A. Yabuki K. Okuyama	Jpn. J. Appl. Phys., <b>46</b> , 10A (2007) pp. 6705-6709
<b>D19</b> A pulse combustion-spray pyrolysis process for the preparation of nano- and submicron-sized oxide particles	Widiyastuti W.-N. Wang A. Purwanto I. W. Lenggoro K. Okuyama	J. Am. Ceram. Soc., <b>90</b> , 12 (2007) pp. 3779-3785
<b>D20</b> Barrier and self-healing abilities of corrosion protective polymer coatings and metal powders for aluminum alloys	A. Yabuki H. Yamagami K. Noishiki	Materials and Corrosion, <b>58</b> , 7 (2007) pp. 497-501
<b>D21</b> Corrosion of an aluminum alloy chilled in flowing seawater and the effect of cathodic prevention	A. Yabuki David T. Yasunaga T. Shibusaki K. Shinkai	Materials and Corrosion, <b>58</b> , 5 (2007) pp. 340-344
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<b>D23</b> Technology Innovation in the Nanoparticle Project -Synthesis of Nanoparticles and Nanocomposites-	Kikuo Okuyama Wei-Ning Wang Ferry Iskandar	KONA, <b>25</b> (2007) pp. 237-243
<b>D24</b> Study on phase behaviors of supercritical CO <sub>2</sub> including surfactant and water	Masashi Haruki Hiroyuki Yawata Mari Nishimoto Masashi Tanto Shin-ichi Kihara Shigeki Takishima	Fluid Phase Equilibria, <b>261</b> (2007) pp. 92-98
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<b>D31</b> Dewatering of Organic Slurries Using Reinforced Thermosensitive Porous Gels -Effect of preparation conditions on the dewatering performance of the gel-	Takehiko Gotoh Hiroshi Okamoto Shuji Sakohara	Polymer Bulletin, <b>58</b> (2007) pp. 213-223
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<b>D38</b> Gas permeation and diffusion in small and intermediate pore zeolite membranes	Y.S. Lin Masakoto Kanezashi	Studies in Surface Science and Catalysis, <b>170</b> (2007) pp. 847-854
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<b>D49</b> Conductive, Magnetic, and Optical Properties of Sterically Hindered Dodecithiophenes. Evidence for the Coexistence of Bipolaron and pi-Dimer	T. Kurata T. Mohri K. Takimiya T. Otsubo	Bull. Chem. Soc. Jpn., <b>80</b> , 9 (2007) pp. 1799-1807
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<b>D63</b> Synthesis of Bis(diarylphosphino)dithienosilole Derivatives as Novel Photo- and Electroluminescence Materials	J. Ohshita Y. Kurushima K.H. Lee A. Kunai Y. Ooyama Y. Harima	Organometallics, <b>26</b> (2007) pp. 6591-6595
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<b>D65</b> Straightforward construction of diaryl-methane skeletons via aryne insertion into carbon-carbon $\sigma$ -bonds	H. Yoshida M. Watanabe T. Morishita J. Ohshita A. Kunai	Chem. Commun., (2007) pp. 1505-1507
<b>D66</b> Three-component coupling of arynes, aminosilanes, and aldehydes	H. Yoshida T. Morishita H. Fukushima J. Ohshita A. Kunai	Org. Lett., <b>9</b> (2007) pp. 3367-3370
<b>D67</b> Three-component coupling using arynes and isocyanides: straightforward access to benzo-annulated nitrogen or oxygen heterocycles	H. Yoshida H. Fukushima T. Morishita J. Ohshita A. Kunai	Tetrahedron, <b>63</b> (2007) pp. 4793-4805
<b>D68</b> Preparation of polyaniline coated activated carbon and their electrode performance for supercapacitor	H. Tamai M. Hakoda T. Shiono H. Yasuda	J. Mater. Sci., <b>42</b> , 4 (2007) pp. 1293-1298
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<b>D72</b> Copolymerization of propylene with 1,3-butadiene using isospecific zirconocene catalysts	T. Ishihara H. T. Ban H. Hagihara T. Shiono	J. Polym. Sci., Part A: Polym. Chem., <b>45</b> , 24 (2007) pp. 5731-5740
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<b>D80</b> Influence of film structure on mobilities of charge carriers in conducting polymers	Y. Harima X. Jiang R. Patil K. Komaguchi H. Mizota	Electrochim. Acta, <b>52</b> (2007) pp. 8088-8095
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<b>D91</b> Dye-sensitized solar cells based on novel donor-acceptor $\pi$ -conjugated benzofuro[2,3-c]oxazolo[4,5-a]carbazole-type fluorescent dyes exhibiting solid-state fluorescence	Y. Ooyama A. Ishii Y. Kagawa I. Imae Y. Harima	New J. Chem., <b>31</b> (2007) pp. 2076-2082
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<b>D96</b> Bilayer Polymer Coating Containing a Polyaniline for Corrosion Protection of Iron	Jun Yano Kazumasa Nakatani Yutaka Harima Akira Kitani	Material Letters, <b>61</b> (2007) pp. 1500-1503
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<b>D100</b> Raman and x-ray diffraction studies of Ba doped germanium clathrate Ba <sub>8</sub> Ge <sub>43</sub> at high pressures	H. Shimizu T. Iitaka T. Fukushima T. Kume S. Sasaki N. Sata Y. Ohishi H. Fukuoka S. Yamanaka	J. Appl. Phys., <b>101</b> (2007) pp. 0635491-0635497
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<b>D102</b> High-pressure Raman study on type-I germanium clathrate	T. Fukushima T. Kume S. Sasaki H. Shimizu H. Fukuoka S. Yamanaka	Phys. Status Solidi B, <b>244</b> , 1 (2007) pp. 392-396
<b>D103</b> Water-tolerant, highly active solid acid catalysts composed of the keggin-type polyoxometalate H <sub>3</sub> PW <sub>12</sub> O <sub>40</sub> immobilized in hydrophobic nanospaces of organomodified mesoporous silica	K. Inumaru T. Ishihara Y. Kamiya T. Okuhara S. Yamanaka	Angew. Chem.-Int. Edit., <b>46</b> , 40 (2007) pp. 7625-7628
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<b>E61</b> <i>Bellilinea caldifistulae</i> gen. nov., sp. nov. and <i>Longilinea arvoryzae</i> gen. nov., sp. nov., strictly anaerobic, filamentous bacteria of the phylum Chloroflexi isolated from methanogenic propionate-degrading consortia.	T. Yamada H. Imachi A. Ohashi H. Harada S. Hanada Y. Kamagata Y. Sekiguchi	International Journal of Systematic and Evolutionary Microbiology, <b>57</b> , 10 (2007) pp. 2299-2306
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<b>F27</b> Gate-Extension Overlap Control by Sb Tilt Implantation	K. Shibahara N. Maeda	IEICE Trans. Electron., <b>E90-C</b> , 5 (2007) pp. 973-977
<b>F28</b> Dual-Pearson Parameter Extraction for In Tilt Implantation	K. Shibahara T. Eto T. Fukunaga	Ext. Abs. the 7th International Workshop on Junction Technology 2007 (IWJT'07), (2007) pp. 25-26
<b>F29</b> Study of Stress from Discontinuous SiN Liner for Fully-Silicided Gate Process	Tomohiro Yamashita Yukio Nishida Takeshi Okagaki Yoshihiro Miyagawa Jiro Yugami Hidekazu Oda Yasuo Inoue Kentaro Shibahara	Ext. Abst. of the 2007 Int. Conf. on Solid State Devices and Materials (SSDM'07), (2007) pp. 870-871
<b>F30</b> In-Situ TEM Observation of Silicide Formation and Dopant Segregation in Ni Fully Silicided Gates	Takuji Hosoi Kentaro Shibahara Minghui Song Kazuo Furuya	Proc. of Fifth Int. Symp. on Control of Semiconductor Interfaces (ISCSI-V), (2007) pp. 147-148
<b>F31</b> Transient Response in Monolithic Mach-Zehnder Optical Modulator using (Ba,Sr)TiO <sub>3</sub> Film Sputtered at Low Temperature on Silicon	M. Suzuki K. Nagata Y. Tanushi S. Yokoyama	Jpn. J. App. Phys., <b>46</b> , 4B (2007) pp. 2462-2466
<b>F32</b> Compact Multi-Mode Optical Ring Resonators for Interconnection on Si Chips	Y. Tanushi S. Yokoyama	Jpn. J. App. Phys., <b>46</b> , 4B (2007) pp. 2364-2368
<b>F33</b> Imprint Property of Optical Mach-Zehnder Interferometer Using Sputter Deposited (Ba,Sr)TiO <sub>3</sub> at Low Temperature	M. Suzuki K. Nagata S. Yokoyama	Abst. Int. Conf. on Solid State Devices and Materials (SSDM2007), (2007) pp. 116-117
<b>F34</b> Photoelastic Effect in Silicon Ring Resonator	Y. Amemiya Y. Tanushi T. Tokunaga S. Yokoyama	Abst. Int. Conf. on Solid State Devices and Materials (SSDM2007), (2007) pp. 282-283
<b>F35</b> Magneto-optic Effect in Amorphous Bi <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> Waveguide Sputtered at Room Temperature	H. Taura Y. Shishido Y. Tanushi S. Yokoyama	Abst. Int. Conf. on Solid State Devices and Materials (SSDM2007), (2007) pp. 284-285
<b>F36</b> Improvement of Mobility and Negative Bias Temperature Instability in Metal-Oxide-Semiconductor Field-Effect Transistors with Atomic-Layer-Deposited Si-nitride/SiO <sub>2</sub> Stack Dielectrics	Shiyang Zhu Anri Nakajima Takuo Ohashi Hideharu Miyake	Jpn. J. Appl. Phys., <b>46</b> , 4B (2007) pp. 1874-1878
<b>F37</b> Ar Annealing for Suppression of Gate Oxide Thinning at Shallow Trench Isolation Edge	Takuo Ohashi Taishi Kubota Anri Nakajima	IEEE Electron Device Lett., <b>28</b> , 7 (2007) pp. 562-564
<b>F38</b> Electron detrapping characteristics in positive bias temperature stressed n-channel metal-oxide-semiconductor field-effect transistors with ultrathin HfSiON gate dielectrics	Shiyang Zhu Anri Nakajima	Appl. Phys. Lett., <b>91</b> , 3 (2007) pp. 033501-033503



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<b>F39</b> Electrical Characteristics of Si Single-Electron Transistor Based on Multiple Islands	Kensaku Ohkura Tetsuya Kitade Anri Nakajima	Jpn. J. Appl. Phys., <b>46</b> , 9B (2007) pp. 6233-6236
<b>F40</b> Atomic Layer Deposition of HfO <sub>2</sub> and Si Nitride on Ge Substrates	Shiyang Zhu Anri Nakajima	Jpn. J. Appl. Phys., <b>46</b> , 12 (2007) pp. 7699-7701
<b>F41</b> Mechanism of Static and Dynamic Bias Temperature Instability in p- and n-MOSFETs	Anri Nakajima Shiyang Zhu	the Ninth International Symposium on Silicon Nitride, Silicon Dioxide Thin Insulating Films and Emerging Dielectrics, (2007)
<b>F42</b> Si single-electron memory having in-plane dot with double gates	Tomo Fujiaki Kensaku Ohkura Anri Nakajima	the 2007 International Microprocesses and Nanotechnology Conference (MNC 2007), (2007) pp. 122-123
<b>F43</b> Real-Time Huffman Encoder with Pipelined CAM-Based Data Path and Code-Word-Table Optimizer	T. Kumaki Y. Kuroda M. Ishizaki T. Koide H.J. Mattausch H. Noda K. Dosaka K. Arimoto K. Saito	IEICE Trans. on Information & Systems, <b>E90-D</b> (2007) pp. 334-345
<b>F44</b> Scalable FPGA/ASIC Implementation Architecture for Parallel Table-lookup Coding Using Multi-ported Content Addressable Memory	T. Kumaki Y. Kono M. Ishizaki T. Koide H.J. Mattausch	IEICE Trans. on Information & Systems, <b>E90-D</b> (2007) pp. 346-354
<b>F45</b> A 2-stage-pipelined 16 Port SRAM with 590 Gbps Random Access Bandwidth and Large Noise Margin	K. Johguchi Y. Mukuda K. Aoyama H.J. Mattausch T. Koide	IEICE Electronics Express, <b>4</b> , 2 (2007) pp. 21-25
<b>F46</b> Mixed Digital-Analog Associative Memory Enabling Fully-Parallel Nearest Euclidean Distance Search	M.A. Abedin Y. Tanaka A. Ahmadi T. Koide H.J. Mattausch	Jpn. J. Appl. Phys., <b>46</b> , 4B (2007) pp. 2231-2237
<b>F47</b> Realization of K-Nearest-Matches Search Capability in Fully-Parallel Associative Memories	M.A. Abedin Y. Tanaka A. Ahmadi S. Sakakibara T. Koide H.J. Mattausch	IEICE Trans. on Fundamentals, <b>E90-A</b> , 6 (2007) pp. 1240-1243
<b>F48</b> Acceleration of DCT Processing with Massive-Parallel Memory-Embedded SIMD Matrix Processor	T. Kumaki M. Ishizaki T. Koide H.J. Mattausch Y. Kuroda H. Noda K. Dosaka K. Arimoto K. Saito	IEICE Trans. on Information & Systems, <b>E90-D</b> (2007) pp. 1312-1315
<b>F49</b> 4-Port Unified Data/Instruction Cache Design with Distributed Crossbar and Interleaved Cache-Line Words	K. Johguchi H.J. Mattausch T. Koide T. Hironaka	IEICE Trans. on Electronics, <b>E90-C</b> (2007) pp. 2157-2160

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<b>F50</b> HiSIM231: Toward Solving the Speed versus Accuracy Crisis in Circuit Simulation	H. J. Mattausch N. Sadachika M. Miyake D. Navarro T. Warabino K. Matsumoto T. Ezaki M. Miura-Mattausch T. Yoshida R. Inagaki Y. Furui S. Hazama T. Ohguro T. Iizuka M. Taguchi S. Kumashiro S. Miyamoto	Proceedings of the International Workshop on Compact Modeling (IWCM2006), (2007) pp. 93-96
<b>F51</b> Developing a Reliable Learning Model for Cognitive Classification Tasks Using an Associative Memory	A. Ahmadi H.J. Mattausch M.A. Abedin T. Koide Y. Shirakawa M. A. Ritonga	Proceedings of the 2007 IEEE Symposium on Computational Intelligence in Image and Signal Processing (CIISP2007), (2007) pp. 214-219
<b>F52</b> Efficient Vertical/Horizontal-Space 1D-DCT Processing Based on Massive-Parallel Matrix-Processing Engine	T. Kumaki T. Koide H.J. Mattausch Y. Kuroda H. Noda K. Dosaka K. Arimoto K. Saito	Proc. IEEE Int. Symposium on Circuits and Systems (ISCAS'07), (2007) pp. 525-528
<b>F53</b> HiSIM2.4.0: Advanced MOSFET Model for the 45nm Technology Node and Beyond	M. Miura-Mattausch N. Sadachika M. Miyake D. Navarro T. Ezaki H.J. Mattausch T. Ohguro T. Iizuka M. Taguchi S. Miyamoto R. Inagaki Y. Furui N. Fudanuki T. Yoshida	Proceedings of the 2007 NIST Nanotechnology Conference and Trade Show (NIST-Nanotech2007), (2007) pp. 479-484
<b>F54</b> CAM Enhanced Super Parallel SIMD Processor with High-Speed Pattern Matching Capability	T. Kumaki Y. Kono M. Ishizaki M. Tagami T. Koide H.J. Mattausch T. Gyohten H. Noda K. Kuroda K. Dosaka K. Arimoto K. Saito	Proceedings of the 50th IEEE International Midwest Symposium on Circuits and Systems (MWSCAS2007), (2007) pp. 803-806
<b>F55</b> A 0.6-Tbps, 16-Port SRAM Design with 2-Stage-Pipeline and Multi-Stage-Sensing Scheme	K. Johguchi Y. Mukuda S. Izumi H.J. Mattausch T. Koide	Proceedings of the 33rd European Solid-State Circuits Conference (ESSCIRC2007), (2007) pp. 320-323

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<b>F56</b> Accuracy and Speed Performance of HiSIM Versions 231 and 240	H.J. Mattausch M. Miura-Mattausch N. Sadachika M. Miyake T. Iizuka T. Ohguro H. Koike S. Yamaguchi R. Inagaki Y. Furuji	33rd European Solid-State Circuits Conference (ESSCIRC2007), MOS-AK Workshop on Compact Modeling for Nano CMOS/SOI Technologies, (2007)
<b>F57</b> Performance Evaluation of Region-Growing Image Segmentation Using Two-Dimensional Image-Block Scanning	K. Okazaki K. Awane K. Yamaoka T. Koide H.J. Mattausch	14th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI2007), (2007) pp. 69-73
<b>F58</b> Associative Memory Design Realizing Reference-Pattern Recognition and Learning based on Short/Long-Term Storage Concept	S. Sakakibara Md. Anwarul Abedin Y. Tanaka A. Ahmadi H.J. Mattausch T. Koide	14th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI2007), (2007) pp. 21-25
<b>F59</b> Acceleration of Advanced Encryption Standard (AES) Processing on a CAM Enhanced Super Parallel SIMD Processor	M. Tagami M. Ishizaki T. Kumaki Y. Kono T. Koide H.J. Mattausch T. Gyohten H. Noda K. Dosaka K. Arimoto K. Saito	14th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI2007), (2007) pp. 26-31
<b>F60</b> Area Efficient Fully Parallel Associative Memory with Fast Winner Search Capability	Y. Tanaka Md. Anwarul Abedin S. Sakakibara T. Koide H.J. Mattausch	14th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI2007), (2007) pp. 38-41
<b>F61</b> An Effective Parallel Coding Architecture Utilizing Characteristics of Multimedia Application	T. Kumaki M. Ishizaki M. Tagami T. Koide H.J. Mattausch	14th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI2007), (2007) pp. 74-80
<b>F62</b> Hardware Realization of Two-Stage Pattern Matching System using Fully-Parallel Associative Memories	Md. Anwarul Abedin A. Ahmadi Y. Tanaka S. Sakakibara T. Koide H.J. Mattausch	14th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI2007), (2007) pp. 32-37
<b>F63</b> Static-Noise-Margin Analysis of Major SRAM-Cell Type under Production Variation for a 90nm CMOS Process	S. Izumi K. Johguchi H.J. Mattausch T. Koide	14th Workshop on Synthesis and System Integration of Mixed Information Technologies (SASIMI2007), (2007) pp. 261-265

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## Published Books

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Book Title (Editor Name)	Author Name	Publisher	Year
Proceedings of 2007 International Workshop on Recent Advances in Stochastic Operations Research	T. Dohi S. Osaki K. Sawaki	Systems Reliability Engineering Laboratory, Department of Information Engineering, Hiroshima University	2007
Nanoparticle Technology Handbook	Kikuo Okuyama	Elsevier	2007
Polymeric Microspheres	Tetsuya Yamamoto K. Higashitani	Kyoto University Press	2007
Nanoparticle Technology Handbook	Manabu Shimada	Elsevier	2007
Production of Allelochemicals by an Aquatic Plant, <i>Myriophyllum spicatum</i> L. Allelopathy: New Concepts and Methodology (Fujii Y. and Hiradate S. eds.)	S. Nakai	Science Publishers, New Hampshire	2007
The Management and Measurement of Infrastructure; Performance, Efficiency and Innovation	Makoto Tsukai Ryo Ejiri Kiyoshi Kobayashi Makoto Okumura	Edwad Elger	2007
Flow and Sediment Transport in Compound Channels	Yoshihisa Kawahara	Belkema Press	2007
Very Large Floating Structures	Chien Ming Wang Eiichi Watanabe Tomoaki Utsunomiya Masahiko Fujikubo Shigeru Ueda Tetsuya Hiraishi Hideyuki Suzuki Shigeo Ohmatsu	Taylor & Francis	2007
Silicon Nitride, Silicon Dioxide, and Emerging Dielectrics 9	Anri Nakajima Shiyang Zhu	The Electrochemical Society	2007

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## Registered Patents

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**Patent Name (Registered Number)**

**Inventor Name**

**Registered  
Date**