

# Poster Presentation

**17 May 2001 (1:30pm-2:30pm)**

**1) Development of laser turning using femtosecond laser ablation**

Kawahara Kousuke, Kurogi Yasunobu, Matsuo Naoyuki, Yokotani Atsushi, Kurosawa Kou, *Miyazaki University*; Sawada Hiroshi, *NEC Machinery Corporation (Japan)*  
[A063]

**2) Precision micro-structuring of organic materials using femtosecond laser pulses**

Liming He, Kok Ann Ngoi, Yuanzi Deng, *Nanyang Technological University (Singapore)*  
[A066]

**3) Photochemical reactions in Ge:SiO<sub>2</sub> glass under ps-THG Nd:YAG laser irradiation**

Takahashi Masahide, Ichii Kentaro, Uchino Takashi, Yoko Toshinobu, *ICR, Kyoto University (Japan)*  
[A075]

**4) Intensity distribution measurement of ultra-short pulses using femtosecond optical polarimetry**

Nagamura Arisune, *Science University of Tokyo (Japan)*  
[A077]

**5) Ablation deposition using phase-shifted ultra-short laser pulse**

Masanori Miyazawa, *Science University of Tokyo (Japan)*  
[A078]

**6) Hole formation process in laser deep drilling with short and ultrashort pulses**

Kononenko T., Klimentov S., Garnov S., Konov V., *General Physics Institute Russian Academy of Science (Russia)*; Breitling D., Fohl C., Ruf A., Radtke J., Dausinger F., *(IFSW) University of Stuttgart (Germany)*  
[A091]

**7) The emission mechanism of charged particles during femtosecond pulsed laser ablation**

Sano Tomokazu, Murai Makoto, Miyamoto Isamu, *Osaka University (Japan)*  
[A119]

**8) Fabrication of microlenses and microlens arrays using local melting of glass plate by CO<sub>2</sub> laser**

Wakaki Moriaki, Hideo Fukumoto, *Tokai University*, Komachi Yuchi, Kanai Genichi, *Machida Endoscope Company Ltd*; Kawabata Shuichi, *Tokyo Institute of Polytechnics (Japan)*  
[A053]

**9) Hole drilling of glass-foam substrates with laser**

Yoshida Y., *Toyo University*, Yajima H., Hashidate Y., Ogura H., *Matsushita Electric Industrial Co. Ltd*; Ueda S., *Shin-Etsu Chemical Co. Ltd. (Japan)*  
[A010]

**10) Characterization of modified surface of indium tin oxide film during process of laser patterning**

Zeng JiNan, Koh Hwee Lin, Ren Zhong Min, Song Wen Dong, Lu Yong Feng, *National University of Singapore, Data Storage Institute (Singapore)*  
[A037]

**11) The comparison of ITO ablation characteristics using KrF excimer and Nd:YAG laser**

Lee Kyung Cheol, *Inha University (Korea)*  
[A141]

**12) Laser ablation of Si in water**

Zhu Sha, Hong M.H., Koh M.L., Lu Y.F., *Data Storage Institute, National University of Singapore (Singapore)*  
[A018]

**13) Direct patterning of magnetic nanostructures by means of interfering beams of a XeCl laser**

Verevkin Yu., Petrykov V. Polushkin N., Salashchenko N., *Russian Academy of Science (Russia)*  
[A023]

**14) Laser-micromachining for Ag ion exchanged glasses**

Koyama Tadashi, Tsunetomo Keiji, *Nippon Sheet Glass Co., Ltd*, Kamada Kenji, *Osaka National Research Institute; Kenichi Nakama, Optical Interconnection NSG Laboratory, Real World Computing Partnership Tsukuba Research Center, Technical Rese (Japan)*  
[A039]

**15) Stereolithography in photopolymer resin by 3-D scanning with simultaneous positioning control in tri-axial directions**

Kamitani, Takayuki, *Osaka Sangyo University (Japan)*  
[A049]

**16) Investigation of carbon nano-particles converted from a polymer by UV pulsed laser irradiation**

Huang S.M., Lu Y.F., Hong M.H., Pang S.I., Wang J.P., *Data Storage Institute, Sun Z., Nanyang Technological University (Singapore)*  
[A006]

**17) Processes in semiconductor materials after laser cutting**

Novosselov A.R., Klimenko A.G., *Institute of Semiconductor Physics, pr. Akad. (Russia)* [A007]

**18) Dynamics studies on laser-induced forward transfer of  $\text{WO}_3$  thin films**

Qiu H, Lu Y.F., Ye K.D., An C.W., Wang W.J., *Data Storage Institute, National University of Singapore (Singapore)*  
[A009]

**19) Selective photon-breaking of C-S bonds in polythiophene to form quasi-one-dimensional carbon chains in cubic nanocrystals**

Ren Z.M., Lu Y.F., Choy H.W., Chong T.C., *Data Storage Institute, National University of Singapore, Ng S.C., Miao P., National University of Singapore (Singapore)*  
[A011]

**20) Temperature effect for exciton dynamics in  $\text{ZnCdSe/ZnSe QWs}$**

Zeng JiNan, Lu Yong Feng, *Dept. of ECE, Data Storage Institute, National University of Singapore (Singapore); Oka Yasuo, RISM Tohoku University (Japan)*  
[A038]

**21) Diagnostics and real-time monitoring of pulsed laser ablation**

Hong MingHui, Lu Y.F., *DSI, National University of Singapore (Singapore)*  
[A042]

**22) Laser reflow PBGA**

Liu DaMing, Lu Y.F., Yuan Y., Chen T., Hong M.H., *DSI, and National University of Singapore (Singapore)*  
[A015]

**23) Orientation dependence of kinetics of laser induced liquid-solid phase transitions in  $\text{A}_3\text{B}_5$  single crystals**

Gatskevich Elena, Ivlev Gennadii, *Institute of Electronics, NASB (Belarus)*  
[A050]

**24) UV laser ablation and etching of polymer-like materials**

Bityurin Nikita, *Institute of Applied Physics Russian Academy of Sciences, (Russia)*  
[A054]

**25) All-optical full logic unit with femtosecond switching**

Schmid Reiner P. Reif Juergen, *Brandenburgische Technische Universitaet Cottbus (Germany)*  
[A056]

**26) Excimer laser ablation of mathematical functions profiles on a-C:H (amorphous hydrogenated carbon) polymers surfaces**

Bednarczyk S., Legaie O., Baclet Ph., *Commissariat a Energie Atomique, Centre de Valduc (France)*  
[A083]

**27) Molecular dynamics simulation on lattice defect generation due to laser irradiation**

Fukumoto Ichiro, JAERI (*Japan Atomic Energy Research Institute*) (*Japan*)  
[A112]

**28) Laser singulation of IC packages**

An ChengWu, Ye K.D, Yuan Y, Hong M.H, Lu Y.F, *Data Storage Institute, National University of Singapore (Singapore)*  
[A031]

**29) Laser marking on IC package by micro-encapsulated tapes**

Ye Kaidong, An ChengWu, Yuan Yuan, Lu Yong Feng, *Data Storage Institute (Singapore)*  
[A008]

# Poster Presentation

**18 May 2001 (1:20pm-2:20pm)**

**1) Advancements in very short wavelength emission in solid state lasers**

Muddassir M., Gualini S., *Pakistan Institute of Lasers and Optics (Pakistan)*  
[A044]

**2) In-process Monitoring Technology for VIA Hole Laser Processing for Printed Wiring Boards**

Kubo Masao, Uchida Yuichi, Ken'ichiro Tanaka, *Matsushita Electric Works, Ltd.*; Miyamoto Isamu, Sano Tomokazu, Nakayama Takayuki, *Osaka University (Japan)*  
[A144]

**3) Development of a high-performance UV- DPSS laser drilling system for PWB**

Kawazoe Kenji, Yokohagi Daisuke, Nagatoshi Hideaki, Ukita Katsuichi, Karasaki Hidehiko, *Matsushita Industrial Equipment Co., Ltd. (Japan)*  
[A059]

**4) High-power, high-brightness diode-pumped solid-state laser for precise laser processings**

Fujikawa Shuichi, Furuta Keisuke, Seguchi Masaaki, Kojima Tetsuo, Takenaka Yushi, Yasui Koji, *Mitsubishi Electric Corporation (Japan)*  
[A093]

**5) Uniformity initialization optical system for phase-change optical disk**

Takita Masaaki, *Takita Research & Development Co., Ltd.*; Okino Yoshihiro, Nakahara Sumio, *High-Technology Research Center of Kansai University (Japan)*  
[A099]

**6) Temperature dependence of SHG conversion efficiency of nonlinear optical crystal**

Ohmura Etsuji, *Osaka University (Japan)*  
[A113]

**7) The optical and surface properties of ZnO thin films by PLD**

Lu Y.F, Ni H.Q, Ren Z.M., *Data Storage Institute, National University of Singapore (Singapore)* [A017]

**8) Preparation of highly oriented PMN thin films via controlled epitaxial MgO buffer layer on amorphous SiO<sub>2</sub>/Si substrate by pulsed laser deposition**

Su Ying, Lu Li, Lai Man-On, *National University of Singapore*; Song Wen-Dong, Lu Yong-Feng, *Data Storage Institute (Singapore)*  
[A060]

**9) The fabrication of TiNi thin films by pulsed laser deposition**

Chen XiaoYu, Lu Y. F., Ren Z. M., Zhu S. *Data Storage Institute, National University of Singapore (Singapore)*  
[A022]

**10) Composition and structure of B-C-N films prepared by ion beam-assisted pulsed laser deposition**

Ling Hao, Ying Zhi Feng, Wu Jia Da, Sun Jian, Shi Wei, Du Yuan Cheng, Li Fu Ming, *Fudan University (China)*  
[A024]

**11) Gallium nitride films synthesized by reactive pulsed laser deposition from GaAs target**

Sun Jian, Wu Jia Da, Shi Wei, Ling Hao, Ying Zhi Feng, Du Yuan Cheng, Li Fu Ming, *Fudan University (China)*  
[A025]

**12) Electron cyclotron resonance plasma-assisted pulsed laser deposition of carbon nitride thin films**

Wu Jia Da, Shi Wei, Sun Jian, Ling Hao, Ying Zhi Feng, Du Yuan Cheng, Li Fu Ming, *Fudan University (China)*  
[A026]

**13) Laser deposition and characterization of Er: YAG and Er: YAP thin films**

Miroslav Jelinek, *Institute of Physics Czech Republic (Czech)*  
[A114]

**14) Laser deposition and characterization of waveguiding Nd : KGW films**

Miroslav Jelinek, *Institute of Physics Czech Republic (Czech)*  
[A115]

**15) Influence of laser fluence and laser repetition rate on the syntheses of Aluminium Nitride thin films by nitrogen-ion-assisted pulsed laser deposition**

Goh Yeow Whatt, Lu Yong Feng, Ren Z.M, *Data Storage Institute, National University of Singapore (Singapore)*  
[A027]

**16) Laser microprocessing hard disk surface**

Liu DaMing, Liu D.M., Lu Y.F., Wee T.S., Wang W. J., An C.W., Yuan Y., Ye K.D., Hong M.H., *Data Storage Institute, National University of Singapore (Singapore)*  
[A014]

**17) Surface micro topography of laser-textured cold-rolled steel sheet**

JianFeng Jian, *Postdoctoral Station of ShangHai Baosteel Group Co. & ShangHai JiaoTong University*; Yonghui He, Yonggen Yan, *Baosteel Research Institute*; Guangyu Cao, Wansheng Zhao, *Harbin Institute of Technology (China)*  
[A016]

**18) Microstructure and properties of Fe base alloy fabricated using selective laser melting**

Sun Manlong, Lu Li, and J.Y.H. Fuh, *National University of Singapore (Singapore)*  
[A001]

**19) Formation of W-Cu composites by laser sintering**

C.C. Leong, L. Lu, Y.H. Fuh, *National University of Singapore (Singapore)*  
[A003]

**20) Steam-assisted laser ablation of metal substrates**

Koh M.L, Hong MingHui, Lu Y.F, Zhu S., *Data Storage Institute, National University of Singapore (Singapore)*  
[A041]

**21) Laser thinning of the thickness of a-GeS<sub>2</sub> films**

Kawabata Shuichi, *Tokyo Institute of Polytechnics*; Murakami Yoshihisa, *Tsukuba College of Technology*; Ozawa Yasunori, Wakaki Moriaki, *Tokai University (Japan)*  
[A048]

**22) Steam Laser Cleaning: The Process and Applications**

Tam A.C., *IBM Almaden Research Center (USA)*; Zapka W., Lilischkis R., Ehrmann A., XaarJet AB, Jarfalla (*Sweden*)  
[A134]

**23) Laser Cleaning of Particles from Surfaces - Issues Relating to Sample Preparation**

Kane D.M., Fernandes A. J., *Macquarie University Sydney (Australia)*  
[A135]

**24) Laser cleaning technology and its application**

W.D. Song, Y.F. Lu, M.H. Hong, *Data Storage Institute, National University of Singapore (Singapore)*  
[A020]

**25) Laser surface cleaning of materials: modeling and diagnostics**

R. Oltra, D. Bauerle, P. Leiderer, J. Boneberg, W. Kautek, C. Fotakis, S. Georgiou, D. Anglos, M. Autric, C. Afonso, J. Solis, P. Wazen, (*Members of European Network "Laser cleaning"*)  
[A082]

**26) Optical Near Field Effects in Surface Nanostructuring and Laser Cleaning**

Muenzer H.J, Mosbacher M., Bertsch M., Dubbers O., Schrems G., Runge B.U., Baeuerle D., Leiderer P., Boneberg J. *University of Konstanz, Center for Modern Optics, (Germany); Johannes-Kepler University, Institute of Applied Physics (Austria)*  
[A136]

**27) On the theory of nanosecond dry laser cleaning**

Arnold N., Schrems G., Muhlberger T., Bauerle D., Johannes Kepler Uni. Linz (*Austria*)

[A137]

**28) Laser removal of micron contaminated colloidal silicon dioxide particles from the super-smooth optical glass substrate by pulse Nd:YAG laser**

Shi XingKuan, Lu ShiQiang, *City University of Hong Kong (Hong Kong)*  
[A139]

**29) UV laser ablation and it's applications**

Lou QiHong, *Shanghai Institute of Optics and Fine Mechanics (China)*  
[A140]