

Publications (Apr.2011 - Mar. 2012)

1. Hiromichi Hoshina, Yusuke Morisawa, Harumi Sato, Hiroaki Minamide, Isao Noda, Yukihiro Ozaki, Chiko Otani, "Polarization and temperature dependent spectra of poly(3-hydroxyalkanoate)s measured at terahertz frequencies," *Phys. Chem. Chem. Phys.*, 13 (20), 9173 - 9179 May (2011)
2. K. Kawase, K. Suizu and T. Shibuya, "Half cycle terahertz pulse generation by prism-coupled Cherenkov phase-matching method," *Journal of Infrared, Millimeter, and Terahertz Waves*, Vol.32, No. 10, pp. 1168-1177, May (2011)
3. 原 武文、伊藤弘昌、"光プローブを用いた遠隔三次元形状計測、" 検査技術, Vol. 16, No. 6, pp. 20-25, 1st Jun. (2011)
4. YY Wang, T Notake, M Tang, K Nawata, H Ito and H Minamide, "Terahertz-wave water concentration and distribution measurement in thin biotissue based on a novel sample preparation," *Physics in Medicine and Biology* 56, pp.4517-4527, 30th Jun. (2011)
5. T. Shibuya, T. Suzuki, K. Suizu and K. Kawase, "Non-destructive characterization of soot in exhaust filters using millimeter-wave imaging," *Journal of Infrared, Millimeter, and Terahertz Waves*, Vol. 32, No. 5, pp. 715-720, Jul. (2011)
6. 南出泰亜、"有機非線形光学結晶を用いた超広帯域テラヘルツ光源・検出、" オプトロニクス 2011 年 8 月号特集、97-101、10 Aug. (2011)
7. Hirohisa Uchida, Takashi Sugiyama, Koji Suizu, Takashi Osumi, Kodo Kawase, "Generation of Widely Tunable Terahertz Waves by Difference-Frequency Generation Using a Configurationally Locked Polyene 2-[3-(4-Hydroxystyryl)-5, 5-Dimethylcyclohex-2-Enylidene] Malononitrile Crystal," *Terahertz Science and Technology*, Vol.4, No.3, 132-136, Sep. (2011)
8. Yu Guan, Koji Mizukoshi, Kazuki Yonekura, Kei Takeya, Kodo Kawase, "Thz techniques using metal mesh sensor for human skin measurement," *Terahertz Science and Technology*, Vol.4, No.3, 128-131, Sep. (2011)
9. M. Koichi, K. Miyamoto, S. Ujita, T. Saito, H. Ito, and T. Omatsu, Dual-frequency picosecond optical parametric generator pumped by a Nd-doped vanadate bounce laser, *Opt. Express*, Vol.19, No.19, 18523-18528, Sep. 2011
10. Takashi Notake, Kouji Nawata, Hiroshi Kawamata, Takeshi Matsukawa, and Hiroaki Minamide, "Solution growth of high-quality organic N-benzyl-2-methyl-4-nitroaniline crystal for ultra-wideband tunable DFG-THz source", *Optical Materials Express*, Vol. 2, Issue 2, pp. 119-125, Jan. (2012)
11. Shin'ichiro Hayashi, Koji Nawata, Hiroshi Sakai, Takunori Taira, Hiroaki Minamide, and Kodo Kawase, "High-power, single-longitudinal-mode terahertz-wave generation pumped by a microchip Nd:YAG laser [Invited]," *Optics express*, Vol. 20 Issue 3, pp.2881-2886, Jan. (2012)
12. Hirohisa Uchida, Hiroaki Ochiai, Koji Suizu, Takayuki Shibuya, and Kodo Kawase, "Improving the Laser-Induced-Damage Tolerance Characteristics of 4-Dimethylamino-N-methyl-4-stilbazoliumtosylate Crystals for THz Wave Generation by Annealing," *Japanese Journal of Applied Physics*, Vol.51, No.2, 022601-1-4, Feb. (2012)

Presentations (Invited)

1. Hiroaki Minamide and Hiromasa Ito, "Frequency-agile terahertz-wave sources and applications to sensitive diagnosis of semiconductor wafers," *SPIE Defense, Security and Sensing, Proceedings of SPIE Vol. 8023*, 17, Florida, Apr. (2011)
2. K. Kawase, A. Iwasaki, T. Shibuya, "Terahertz spectral imaging for drug inspection," *ATuE5, 2011 Conference on Lasers and Electro-Optics (CLEO)*, Baltimore, USA, May 1-6, (2011)
3. Hiroaki Minamide, "Ultra-broadband Terahertz generation and detection using a nonlinear optical technique," *The 2011 International Symposium on Microwave/Terahertz Science and Applications (MTSA 2011)*, T3-2, Nanjing, June 19 to 22, (2011)

4. K. Kawase, S. Hayashi, "Nonlinear optical THz generations and sensing applications," The Bioelectromagnetics Society 33rd Annual Meeting, AFI-2, Dalhousie University, Halifax, Canada, Jun. 12-17, (2011)
5. K. Kawase, "Industrial THz sensing applications," Terahertz Science and Technology - the castle meeting - , Marburg, Germany, Jul. 2-6, (2011)
6. K. Kawase, T. Shibuya and K. Suizu, "Wideband terahertz generation using nonlinear optical waveguide," OSA Topical Meeting on Nonlinear Optics in 2011, NMC3, Lihue- Kauai, USA, Jul. 17-22, (2011)
7. K. Kawase "Nonlinear optical waveguide for THz tomography," The XXX General Assembly and d f Scientific Symposium of the International Union of Radio Science (Ursigass 2011), DAF1.6, Istanbul, Turkey, Aug. 13-20, (2011)
8. K. Kawase, S. Hayashi, "THz techniques for human skin measurement," The International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz 2011), M4D.1, Hyatt Regency Downtown Houston, USA, Oct. 2-7, (2011)
9. H. Minamide, "High-peak-power Terahertz-wave generation and sensitive detection using nonlinear optical wavelength-conversion," Joint Conference of International Symposium on Terahertz Nanoscience (TeraNano 2011) Workshop of International Terahertz Research Network (GDR-I), Osaka, Japan, 24-29 Nov. (2011)
10. K. Kawase, "Tunable THz wave sources and real life application," 3rd Shenzhen International Conference on Advanced Science and Technology (SICAST2011)" , Shenzhen University, China, Nov.21- 25, (2011)
11. K. Kawase, S. Hayashi, "Widely tunable THz sources using nonlinear optical effects," 4th Japan-Korea joint Workshop on Terahertz Technology, S4-4, Nagoya University, Dec. 19-20, (2011)
12. K. Kawase, S. Hayashi Terahertz techniques for human skin measurement Photonics West 2012, (BiOS) Conference on Optical Interactions with Tissue and Cells XXIII, Paper No. 8221-27, Moscone Center, San Francisco, USA , Jan. 21-26, (2012)
13. K. Kawase, M. Yamaguchi, S. Hayashi, "THz techniques for measuring human skin," 3rd International THz-Bio Workshop, O6, Seoul National University, Seoul, Korea , Feb. 6-9, (2012)
14. H. Minamide, "High-power Terahertz-wave Generation Based on Nonlinear Optics and Its Sensing Application," 1st Annual Conference and EXPO of AnalytiX-2012, Beijing, China, Mar. (2012)
15. 南出泰重、伊藤弘昌, "非線形光学技術による最先端テラヘルツ波発生・検出," 第9回レーザー学会「マイクロ固体フォトリソグラフィの新展開ーギャイアントマイクロフォトリソグラフィの創成一」専門委員会講演会、パシフィコ横浜、Apr. 20, (2011)
16. 川瀬晃道, 水津光司, 内田裕久, 澁谷孝幸, "テラヘルツトモグラフィの高分解能化," 電子情報通信学会エレクトロニクスソサイエティー「超高速光エレクトロニクス研究会」, 慶應義塾大学日吉校舎, Apr. 19, (2011)
17. 南出泰重, "テラフォトリソグラフィ研究の新展開," 理研シンポジウム「第12回理研・分子研合同シンポジウム：エクストリームフォトリソグラフィ研究」, 和光, Jun. (2011)
18. 川瀬晃道, "テラヘルツ・ミリ波を用いた生体計測," 名古屋産業振興公社技術講演会「テラヘルツ波の産業応用」, 名古屋市工業研究所電子技術総合センター, Nov. 17, (2011)
19. 川瀬晃道, 林伸一郎, "広帯域テラヘルツ光源とセンシング応用可能性," IEEE MTT-S Kansai Chapter テラヘルツワークショップ, 大阪大学豊中キャンパス , Feb. 4, (2012)