

- 1 Hoshina Hiromichi, Hayashi Aya, Miyoshi Norio, Miyamaru Fumiaki, Otani Chiko, "Terahertz pulsed imaging of frozen biological tissues" *Applied Physics Letters* Vol.94 pp123901-1-123901-3 (2009)
- 2 YOSHIDA Hisa, Ogawa Yuichi, KAWAI Yasuhide, Hayashi Shinichiro, Hayashi Aya, Otani Chiko, KATO Eiji, MIYAMARU Fumiaki, Kawase Kodo, "Terahertz sensing method for protein detection using a thin metallic mesh" *Applied Physics Letters* Vol.91 25 pp253901-1-253901-3 (2007)
- 3 Maki Kenichiro, Shibuya Takayuki, Otani Chiko, Suizu Koji, Kawase Kodo, "Terahertz beam steering via tilted-phase difference-frequency mixing" *Applied Physics Express* Vol.2 2 pp022301-1-022301-3 (2009)
- 4 Yoshida Shigeki, KATO Eiji, Suitsu Koji, Nakagomi Yoichi, Ogawa Yuichi, Kawase Kodo, "Terahertz Sensing of Thin Poly(ethylene Terephthalate) Film Thickness Using a Metallic Mesh" *Applied Physics Express* Vol.2 pp012301-1-012301-3 (2009)
- 5 Hoshina Hiromichi, Sasaki Yoshiaki, Hayashi Aya, Otani Chiko, Kawase Kodo, "Noninvasive Mail Inspection System with Terahertz Radiation" *Applied Spectroscopy* Vol.63 pp81-86 (2009)
- 6 Ogawa Yuichi, Hayashi Shinichiro, OIKAWA Masato, Otani Chiko, Kawase Kodo, "Interference terahertz label-free imaging for protein detection on a membrane" *Optics Express* Vol.16 26 pp22083-22089 (2008)
- 7 Takayanagi Jun, Kanamori So, Suizu Koji, Yamashita Masatsugu, Ouchi Toshihiko, Kasai Shintaro, Ohtake Hideyuki, Uchida Hirohisa, Nishizawa Norihiko, Kawase Kodo, "Generation and detection of broadband coherent terahertz radiation using 17-fs ultrashort pulse fiber laser" *Optics Express* Vol.16 17 pp12859-12865 (2008)
- 8 Yamashita Masatsugu, Otani Chiko, Kawase Kodo, Nikawa Kiyoshi, Tonouchi Masayoshi, "Noncontact inspection technique for electrical failures in semiconductor devices using a laser terahertz emission microscope" *Applied Physics Letters* Vol.93 4 pp041117-1-041117-3 (2008)
- 9 Theuer Michael, Molter Daniel, Maki Kenichiro, Otani Chiko, L'huillier Johannes, Beigang Rene, "Terahertz generation in an actively controlled femtosecond enhancement cavity" *Applied Physics Letters* Vol.93 pp041119-1-041119-3 (2008)
- 10 Maki Kenichiro, Otani Chiko, "Terahertz beam steering and frequency tuning by using the spatial dispersion of ultrafast laser pulses" *Optics Express* Vol.16 14 pp10158-10169 (2008)
- 11 Hoshina Hiromichi, Seta Takamasa, Iwamoto Toshiyuki, Hosako Iwao, Otani Chiko, Kasai Yasuko, "Precise measurement of pressure broadening parameters for water vapor with a terahertz time-domain spectrometer" *Journal of Quantitative Spectroscopy & Radiative Transfer* Vol.109 pp2303-2314 (2008)
- 12 Suizu Koji, Shibuya Takayuki, Akiba Takuya, Tutui Toshihiro, Otani Chiko, Kawase Kodo, "Cherenkov phase-matched monochromatic THz-wave generation using difference frequency generation with a lithium niobate crystal" *Optics Express* Vol.16 10 pp7493-7498 (2008)
- 13 Cheng Li, Hayashi Shinichiro, Dobroiu Adrian, Otani Chiko, Kawase Kodo, Miyazawa Teruo, OGAWA Yuichi, "Terahertz-wave absorption in liquids measured using the evanescent field of a silicon waveguide" *Applied Physics Letters* Vol.92 pp181104-1-181104-3 (2008)
- 14 Shibuya Takayuki, Akiba Takuya, Suizu Koji, Uchida Hirohisa, Otani Chiko, Kawase Kodo, "Terahertz-Wave Generation Using a 4-Dimethylamino-N-methyl-4-stilbazolium tosylate Crystal Under Intra-Cavity Conditions" *Applied Physics Express* Vol.1 4 pp042002-1-042002-3 (2008)
- 15 Seta Takamasa, Hoshina Hiromichi, Kasai Yasuko, Hosako Iwao, Otani Chiko, Lossow Stefan, Urban Joachim, Ekstrom Mattias, Eriksson Patric, Murtagh Donal, "Pressure broadening coefficients of the water vapor lines at 556.936 and 752.033 GHz" *Journal of Quantitative Spectroscopy & Radiative Transfer* Vol.109 pp144-150 (2008)
- 16 Dobroiu Adrian, Sasaki Yoshiaki, Shibuya Takayuki, Otani Chiko, Kawase Kodo, "THz-wave spectroscopy applied to the detection of illicit drugs in mail (Invited paper)" *Proceedings of the IEEE* Vol.95 8 pp1566-1575 (2007)
- 17 Miyamaru Fumiaki, Takeda Mutsuo, Suzuki Takahiro, Otani Chiko, "Highly sensitive surface plasmon terahertz imaging with planar plasmonic crystals" *Optics Express* Vol.15 22 pp14804-14809 (2007)
- 18 Suizu Koji, Shibuya Takayuki, Nagano Shigehiro, Akiba Takuya, Edamatsu Keiichi, Ito Hiromasa, Kawase Kodo, "Pulsed High Peak Power Millimeter Wave Generation via Difference Frequency Generation Using Periodically Poled Lithium Niobate" *Japanese Journal of Applied Physics, Pt.2* Vol.46 40 ppL982-L984 (2007)
- 19 Morita Yasuyuki, Dobroiu Adrian, Otani Chiko, Kawase Kodo, "Real-Time Terahertz Diagnostics for Detecting Microleak Defects in the Seal of Flexible Plastic Packaging" *Journal of Advanced Mechanical Design, Systems, and Manufacturing* Vol.1 3 pp338-345 (2007)
- 20 Miyamaru Fumiaki, Hayashi Shinichiro, Otani Chiko, Kawase Kodo, Ogawa Yuichi, Yoshida Hisa, Kato Eiji, "Terahertz surface-wave resonant sensor with a metal hole array" *Optics Letters* Vol.31 8 pp1118-1120 (2006)

- 21 Nakajima Sachiko, Hoshina Hiromichi, Yamashita Masatsugu, Otani Chiko, Miyoshi Norio, "Terahertz imaging diagnostics of cancer tissues with a chemometrics technique" *Applied Physics Letters* Vol.90 pp041102-1-041102-3 (2007)
- 22 Hayashi Shinichiro, Minamide Hiroaki, Ikari Tomofumi, Ogawa Yuichi, Shikata Junichi, Ito Hiromasa, Otani Chiko, Kawase Kodo, "Output power enhancement of terahertz-wave parametric generator" *Applied Optics* Vol.46 1 pp117-123 (2007)
- 23 Mori Yuko, Okaniwa Takashi, Nakahashi Misato, Ariyoshi Seiichiro, Otani Chiko, Sato Hiromi, Matsuo Hiroshi, "Development of superconductive imaging submillimeter-wave camera with nine detector elements (SISCAM-9)" *Proceedings of SPIE-The International Society for Optical Engineering* Vol.6275 pp627523-1-627523-12 (2006)
- 24 Matsuo Hiroshi, Nagata H, Mori Yuko, Kobayashi J, Okaniwa Takashi, Yamakura T, Otani Chiko, Ariyoshi Seiichiro, "Performance of SIS photon detectors for superconductive imaging submillimeter-wave camera (SISCAM)" *Proceedings of SPIE-The International Society for Optical Engineering* Vol.6275 pp627504-1-627504-9 (2006)
- 25 Ariyoshi Seiichiro, Otani Chiko, Dobroiu Adrian, Matsuo Hiroshi, Sato Hiromi, Taino Toru, Kawase Kodo, Shimizu Hirohiko, "Superconducting Detector Array for Terahertz Imaging Applications" *Japanese Journal of Applied Physics, Pt.2* Vol.45 37 ppL1004-L1006 (2006)
- 26 Miyamaru Fumiaki, Tanaka Masaki, Hangyo Masanori, "Resonant electromagnetic wave transmission through strontium titanate hole arrays with complex surface waves" *Physical Review B* Vol.74 pp115117-1-115117-5 (2006)
- 27 Dobroiu Adrian, Kawase Kodo, Ogawa Yuichi, Yamashita Masatsugu, Otani Chiko, "THz imaging applications (invited)" *Proceedings of SPIE-The International Society for Optical Engineering* Vol. 6038 pp60380K-1-60380K-8 (2006)
- 28 Theuer Michael, Torosyan Garik, Rau Christian, Beigang Rene, Maki Kenichiro, Otani Chiko, Kawase Kodo, "Efficient generation of Cherenkov-type terahertz radiation from a lithium niobate crystal with a silicon prism output coupler" *Applied Physics Letters* Vol.88 pp071122-1-071122-3 (2006)
- 29 Otani Chiko, Nakano Ran, Taino Toru, Shibuya Takayuki, Ariyoshi Seiichiro, Yoshimura Syota, Myoren Hiroaki, Sato Hiromi, Shimizu Hirohiko, Takada Susumu, Kawase Kodo, "Direct and Indirect Detection of Terahertz Waves using a Nb-based Superconducting Tunnel Junction" *Journal of Physics: Conference Series* Vol.43 pp1303-1306 (2006)
- 30 Hayashi Shinichiro, Maki Kenichiro, Otani Chiko, Kawase Kodo, "Terahertz Wave Parametric Sources" *Proceedings of SPIE-The International Society for Optical Engineering* Vol.5975 pp59750N-1-59750N-10 (2006)
- 31 Mizuno Maya, Otani Chiko, Kawase Kodo, Kurihara Yousuke, Shindo Kenji, Ogawa Yuichi, Matsuki Hidetoshi, "Monitoring the frozen state of freezing media by using millimeter waves" *Journal of Electromagnetic Waves and Applications* Vol.20 3 pp341-349 (2006)
- 32 Ariyoshi Seiichiro, Otani Chiko, Dobroiu Adrian, Sato Hiromi, Kawase Kodo, Shimizu Hirohiko, Taino Toru, Matsuo Hiroshi, "Terahertz imaging with a direct detector based on superconducting tunnel junctions" *Applied Physics Letters* Vol.88 pp203503-1-203503-3 (2006)