

(1)原著論文 (accept を含む) / Original Papers

1. Saroj R. Tripathi, Kousuke Murate, Hirohisa Uchida, Kei Takeya, and Kodo Kawase, "A Fiber-Laser Pumped, High-Power Terahertz Wave Source Based on Optical Rectification of Femtosecond Pulses in 4-Dimethylamino-N-methyl-4-stilbazolium Tosylate Crystal", *Applied Physics Express (APEX)*, vol. 6, pp. 072703-1 (July 4, 2013).
2. Takeshi Matsukawa, Kouji Nawata, Takashi Notake, Feng Qi, Hiroshi Kawamata, and Hiroaki Minamide "Pump-beam-induced optical damage depended on repetition frequency and pulse width in 4-dimethylamino-N'-methyl-4'-stilbazolium tosylate crystal," *Appl. Phys. Lett.*, 103, 023302-1-4, (July 10, 2013).
3. Yandong Gong, Banghong Zhang, Takashi Notake, Hiroaki Minamide, "Investigations on Polarimetric Terahertz Frequency Domain Spectroscopy" *Applied Physics A*, Published online 12 Oct. (2013).
4. Hiroaki Minamide, Shin'ichiro Hayashi, Koji Nawata, Takunori Taira, Jun-ichi Shikata, and Kodo Kawase, "Kilowatt-peak Terahertz-wave Generation and Sub-femtojoule Terahertz-wave Pulse Detection Based on Nonlinear Optical Wavelength-conversion at Room Temperature," *Journal of Infrared, Millimeter, and Terahertz Waves*, Vol. 35, No.1, pp. 25-37, (Dec. 2013).
5. Feng Qi, Koji Nawata, Shin'ichiro Hayashi, Takashi Notake, Takeshi Matsukawa, and Hiroaki Minamide, "Bridging a few terahertz to tens of terahertz: inspection on a cost-effective, room-temperature operated measurement system based on frequency conversion via 4-dimethylamino-N'-methyl-4'-stilbazolium tosylate crystal," *Appl. Phys. Lett.*, vol. 104, 031110-1-4, (Jan. 2014).
6. Takashi Notake, Rihei Endo, Kaori Fukunaga, Iwao Hosako, Chiko Otani, Hiroaki Minamide, "State-of-the-art Database of Terahertz Spectroscopy based on Modern Web Technology" *IEEE Transactions of Terahertz Technology and Science*, Vol. 4, No. 1, 110-115 Jan. (2014).
7. Yuzuru Tadokoro, Yuma Takida, Hiroshi Kumagai, Shigeki Nashima, and Masanori Hangyo, "Coherent time-domain detection of terahertz pulses generated from a noncollinear phase-matched, picosecond terahertz parametric oscillator," *Appl. Phys. Express*, Vol. 7, No. 2, 022701 (Jan. 2014).
8. Zaichun Chen, Yandong Gong, Hui Dong, Takashi Notake, Hiroaki Minamide, "Terahertz achromatic quarter wave plate: Design, fabrication, and characterization," *Optics Communications*, Vol.311C, pp1-5, (Feb. 2014).
9. Feng Qi, Shuzhen Fan, Takashi Notake, Koji Nawata, Takeshi Matsukawa, Yuma Takida, and Hiroaki Minamide, "10 aJ-level detection of ns pulse below 10 THz by frequency upconversion detection via DAST crystal: more than a 4 K bolometer," *Optics Letters*, Vol.39, No.5, pp. 1294-1297, (Mar. 2014).
10. Takeshi Matsukawa, Takashi Notake, Kouji Nawata, Shunsuke Inada, Shuji Okada, Hiroaki Minamide, "Terahertz-wave generation from 4-dimethylamino-N'-methyl-4'-stilbazolium p-bromobenzenesulfonate crystal: Effect of halogen substitution in a counter benzenesulfonate of stilbazolium derivatives *Optical Materials*," *Optical Materials*, (in press).
11. Shuzhen Fan, Feng Qi, Takashi Notake, Kouji Nawata, Takeshi Matsukawa, Yuma Takida, and Hiroaki Minamide, "Real-time terahertz wave imaging by nonlinear optical frequency up-conversion in a 4-dimethylamino-N-methyl-4-stilbazolium tosylate crystal", *Applied Physics Letters*, Vol.104, Issue 10, No.101106-1-4 (Mar. 2014).
12. K. Nawata, T. Notake, H. Ishizuki, F. Qi, Y. Takida, S. Fan, S. Hayashi, T. Taira, and H. Minamide, "Effective terahertz-to-near-infrared photon conversion in slant-stripe-type periodically poled LiNbO₃," *Applied Physics Letters* Vol. 104, No. 091125-1-3 (Mar. 2014).
13. Saroj R. Tripathi, Yuusuke Taira, Shin'ichiro Hayashi, Kouji Nawata, Kousuke Murate, Hiroaki Minamide and Kodo Kawase, "Terahertz wave parametric amplifier", *Optics Letters*, vol. 39, No. 6, pp. 1649-1652 (Mar. 13, 2014).

(2)招待講演 / Invited Talks

1. Hiroaki Minamide, "Intense Terahertz-wave Generation and Sensitive Detection Using Nonlinear Optical Effect," The 10th Conference on Lasers and Electro-Optics Pacific Rim (CLEO-PR 2013), MC1-1, Kyoto, Japan (30 June - 4 July, 2013).
2. Hiroaki Minamide, "EFFICIENT WAVELENGTH-CONVERSION BETWEEN TERAHERTZ WAVE AND INFRARED LIGHT USING NONLINEAR OPTICAL SUSCEPTIBILITY $\chi^{(2)}$," International Symposium on Microwave/Terahertz Science and Application (MTSA 2013), T1-3, Shanghai Institute of Microsystem and Information Technology, Shanghai, China (July 22-23, 2013).
3. Shinichiro Hayashi, Kouji Nawata, Kodo Kawase, and Hiroaki Minamide, "High-peak-power and Tunable Terahertz-wave Generation by Using Nonlinear Parametric Conversion," PIERS 2013 Stockholm (Progress In Electromagnetics Research Symposium), Session 1P5, 4 FocusSession, SC4: Advances in Millimeter-Wave and THz Circuit, Techniques and Applications, the Kistamassan exhibition centre, Stockholm, Sweden, (12-15 Aug., 2013).
4. Hiroaki Minamide, Feng Qi, Shuzhen Fan, "Terahertz - Wave Detection using Nonlinear Optical Up - Conversion by DAST," 21st International Conference on Applied Electromagnetics and Communications (ICECom 2013), Dubrovnik, Croatia 14-16 Oct. (2013).
5. Hiroaki Minamide, "Efficient wavelength-conversion between terahertz wave and near-infrared beam using lithium niobate crystal," GDR-I and GDR Workshop, Montpellier, France, Dec. 9-11, (2013).
6. Kodo Kawase, Shin'ichiro Hayashi, Hiroaki Minamide, "Nonlinear optical terahertz sources and applications," Nano and Giga Challenges in Electronics, Photonics and Renewable Energy From Materials to Devices to System Architecture Symposium and Spring School (Tutorial Lectures), ,Terahertz Electronics and Photonics, Arizona State University, Phoenix, Arizona, March 10-14, (2014).
7. 南出泰亜、"非線形光学波長変換による最先端テラヘルツ波発生および検出技術の開発"、電子情報通信学会電子デバイス研究会ミリ波・テラヘルツ波デバイス・システム、東北大学、仙台、12月17日(2013)
8. 南出泰亜、"非線形光学効果によるテラヘルツ波発生検出技術開発の最先端"、CI-3-7、電子情報通信学会総合大会、新潟大学、3月18日、(2014)

(3)特許出願 / Patent Applications

1. 縄田耕二、南出泰亜、伊藤弘昌、林伸一郎："テラヘルツ波検出装置と方法"、特願 2013-081055、2013年4月9日。

(4)会議、シンポジウム、セミナー主催 / Meetings, Symposiums and Seminars

1. 理研セミナー、"Photonic terahertz sources and their applications", 仙台, 4月22日(2013)
2. 理研セミナー、"エンジン点火用マイクロレーザーの研究と進展", 仙台, 7月17日(2013)
3. 理研セミナー、"Nature Photonics 誌への投稿セミナー", 仙台, 10月25日(2013)
4. 理研セミナー、"Near-infrared OPO in an AlGaAs/AlOx waveguide", 仙台, 11月25日(2013)