テラヘルツ光源研究チーム ／ Tera-Photonics Research Team

(1)原著論文(accept を含む) ／ Original Papers

1. Y. Moriguchi, Y. Tokizane, Y. Takida, K. Nawata, S. Nagano, M. Sato, T. Otsuji, and H. Minamide, "Frequency-agile injection-seeded terahertz-wave parametric generation" , Optics Letters, Vol. 45, Issue 1, pp. 77-80, Jan., (2020).
2. C. Bernerd, P. Segonds, J. Debray, J-F. Roux, E. Hérault, J-L. Coutaz, I. Shoji, H. Minamide, H. Ito, D. Lupinski, K. Zawilski, P. Schunemann, X. Zhang, J. Wang, Z. Hu, and B. Boulanger, "Evaluation of eight nonlinear crystals for phase-matched TeraHertz second-order difference-frequency generation at room temperature" , Optical Materials Express, Vol. 10, No. 2, PP. 561-576, 22 Jan, (2020).
3. M. Koyama, H. Ito, T. Notake, H. Minamide, "Second-order Nonlinear Coefficient measurement by a Tunable Continuous-Wave Pump Laser", The Review of Laser Engineering, Vol. 48, No. 9, pp.374-380, (2019).
4. T. Notake, K. Kamata, T. Iyoda, C. Otani and H. Minamide, "Expression of various polarization effects by using Spirulina-templated metal μcoils at the terahertz frequency region" , Jap. J. Appl. Phys. 58, 032007, (2019).
5. T. Notake, M. Takeda, S. Okada, T. Hosobata, Y. Yamagata and H. Minamide , "Characterization of all second-order nonlinear-optical coefficients of organic N-benzyl-2-methyl-4-nitroaniline crystal" , Scientific Reports, volume 9, Article number: 14853, 16 Oct, (2019).
6. Y. Takida, T. Ikeo, K. Nawata, Y. Wada, Y. Higashi, and H. Minamide, "Terahertz differential absorption spectroscopy using multifurcated subnanosecond microchip laser," Appl. Phys. Lett., Vol. 115, Issue 12, 121102, 16 Sep., (2019).

(2)招待講演 ／ Invited Talks

1. H. Minamide, "RIKEN Terahertz-wave research based on nonlinear photonics", Philippine-Japan Conference on Photonics and Optical Materials, Quezon City, Philippines, 13 December, (2019).
2. H. Minamide, "Laser-based, Palmtop-size Terahertz-wave Parametric Oscillator", The 5th International Symposium on Microwave/Terahertz Science and Applications (MTSA2019), Busan, Korea, 29 September-3 October, (2019).
3. T. Notake and H. Minamide, "Ultra-precise processing and optical nonlinearity characterization of organic N-benzyl-2-methyl-4-nitroaniline (BNA) crystal", Global Experts Meeting on Frontiers in Material Science & Nanotechnology, Roma, Italy, Oct.17-19, (2019).
4. H. Minamide, "Giant single-crystal of BNA and nonlinearity characterization", 8th International

Symposium on Optical Materials (IS-OM8), Wroclaw, Poland, June 9-14, (2019).

5. Y. Moriguchi, Y. Tokizane, S. Nagano, T. Otsuji, and H. Minamide, “Development of a High-speed Terahertz-wave Spectrometer for THz-OCT”, EMN Terahertz 2019, A52, Grandior Hotel Prague, Prague, Czech Republic, Jun. 13, (2019).
6. H. Minamide, K. Nawata, and Y. Takida, “Security screening system with an injection-seeded terahertz-wave parametric generator”, The 7th Laser Ignition and Giant-microphotonics Conference 2019 (LIC2019), Yokohama, Apr. 23, (2019).

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

1. レーザー学会学術講演会第40 回年次大会，仙台，1 月20 日～ 22 日,(2020).

(4)特許出願 ／ Patent Applications

1. 大野誠吾，南出泰亜，時実悠，“電磁波制御装置、電磁波制御方法、及び電磁波伝達装置”， 特願2020-030068, 2 月26 日, (2020).
2. 縄田耕二，南出泰亜，范 書振，祁 峰，伊藤弘昌，“光応答計測装置および光応答計測法”, US 登録10345224, July 9, (2019).

(5)特筆すべき事項・トピックス／ Topics

1. 理研ニュース 研究最前線 “テラヘルツ波は未踏から実用へ”, 9月, (2019).
2. 日本経済新聞 かがくアゴラ,“テラヘルツ波光源小型化に道”, 3 月 20 日, (2020).