

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

1. T. Matsukawa, H. Hoshina, A. Hoshikawa, C. Otani, T. Ishigaki, “Temperature dependence of crystal structure and THz absorption spectra of organic nonlinear optical stilbazolium material for high-output THz-wave generation”, *Journal of Infrared, Millimeter, and Terahertz Waves*, Vol. 37, pp. 540-550, (2016).
2. S. Ariyoshi, K. Nakajima, A. Saito, T. Taino, C. Otani, H. Yamada, S. Ohshima, J. Bae, S. Tanaka, “Terahertz Response of NbN-based Microwave Kinetic Inductance Detector with Rewound Spiral Resonator”, *Superconductor Science and Technology*, vol. 29, 035012-1-5, (2016).
3. H. Hoshina, H. Suzuki, C. Otani, M. Nagai, K. Kawase, A. Irizawa, G. Isoyama, “Polymer Morphological Change Induced by Terahertz Irradiation”, *Scientific Reports*, 6, 27180, (2016).
4. K. Murate, S. Hayashi, K. Kawase, “Expansion of the tuning range of injection-seeded terahertz-wave parametric generator up to 5 THz”, *Applied Physics Express*, vol. 9, No. 8, pp. 082401, (2016).
5. P. Tapsanit, M. Yamashita, T. Ishihara, C. Otani, “Quasi-analytical solutions of hybrid platform and the optimization of highly sensitive thin-film sensors for terahertz radiation”, *Journal of the optical society of America B*, Vol. 33, Issue 12, page 2535-2544, (2016).
6. H. Suzuki, M. Ishida, M. Yamashita, C. Otani, K. Kawachi, Y. Kasama, E. Kwon, “Rotational Dynamics of Li<sup>+</sup> Ions Encapsulated in C60 Cages at Low Temperatures”, *Phys. Chem. Chem. Phys. (Commu.)*, vol. 18, pp. 31384-31387, (2016).
7. 八重柏典子, 大槻聖, 林伸一郎, 川瀬晃道, “ヒト培養細胞における70-300 GHz照射の影響”, *電子情報通信学会技術研究報告*, Vol. 116, No. 375, pp. 61-65, (2016).
8. S. Oguri, J. Choi, T. Damayanthi, M. Hattori, M. Hazumi, H. Ishitsuka, K. Karatsu, S. Mima, M. Minowa, T. Nagasaki, C. Otani, Y. Sekimoto, O. Tajima, N. Tomita, M. Yoshida, E. Won, the GroundBIRD group “GroundBIRD: Observing cosmic microwave polarization at large angular scale with kinetic inductance detectors and high-speed rotating telescope,” *J. Low Temperature Physics*, vol. 184, pp. 786-792, (2016).
9. N. Tomita, H. Jeong, J. Choi, H. Ishitsuka, S. Mima, T. Nagasaki, S. Oguri, O. Tajima, “World’s Cheapest Readout Electronics for Kinetic Inductance Detector by Using RedPitaya,” *J. Low Temperature Physics*, vol. 184, pp. 443–448, (2016).
10. S. Yamamoto, M. Miyada, H. Sato, H. Hoshina, Y. Ozaki, “Low-Frequency Vibrational Modes of Poly(glycolic acid) and Thermal Expansion of Crystal Lattice Assigned On the Basis of DFT-Spectral Simulation Aided with a Fragment Method”, *The Journal of Physical Chemistry B*, 121,1128-1138, (2017).
11. H. Watanabe, S. Mima, S. Oguri, M. Yoshida, M. Hazumi, H. Ishino, H. Ishitsuka, A.

Kibayashi, C. Otani, N. Sato, O. Tajima, N. Tomita, “Development of an Optical Coupling with Ground-side Absorption for Antenna-coupled Kinetic Inductance Detectors”, IEICE TRANSACTIONS on Electron, vol. E100-C, pp.298-304, (2017).

(2) 著書・解説など / Book Editions, Review Papers

1. 大谷知行, “テクノロジトレンド～テラヘルツ技術の最新動向～”, オプトニュース, vol. 10, no. 6, pp.31-33, (2016).
2. 保科宏道, “テラヘルツ光照射で誘起される高分子構造の変化”, 化学工業, 68, 195-201, (2017)

(3) 招待講演 / Invited Talks

1. C. Otani, Y. Yamada, M. Yamashita, “Non-destructive evaluation of organic conducting polymer by ultrabroadband THz-IR-Vis spectroscopy”, Energy Materials Nanotechnology (EMN) Hong Kong, Hong Kong, China, December, (2015).
2. C. Otani, “Terahertz spectroscopy and imaging applications”, Spain-Japan Joint Workshop on Millimeter-wave and Terahertz, Madrid, Spain, March, (2016).
3. K. Kawase, M. Kato, R. Yamazaki, K. Murate, “THz spectroscopic imaging of chemicals through thicker obstacles”, SPIE DCS Conference Terahertz Physics, Baltimore, USA, April, (2016).
4. H. Hoshina, H. Suzuki, C. Otani, S. Yamamoto, H. Sato, Y. Ozaki, “Intermolecular Conformation and Macromolecular Properties Studied by Terahertz Spectroscopy”, EMN Meeting on Terahertz 2016, San Sebastian, Spain, May, (2016).
5. M. Yamashita, S. Ikeda, C. Otani, “Ultra-broadband THz time domain spectroscopy of photo-excited graphene”, EMN Meeting on Terahertz 2016, San Sebastian, Spain, May, (2016).
6. K. Kiuchi, C. Otani, GroundBIRD collaboration, “Development of Superconducting Microwave Kinetic Inductance Detectors for Ground-Based CMB Polarization Experiment GroundBIRD”, 13th International Workshop of High-Temperature Superconductivity in High Frequency Fields (HTSHFF 2016), San Francisco, USA, May, (2016).
7. K. Kawase, K. Murate, S. Hayashi, “THz spectrometer using is-TPG”, 10th Asia-Pacific Laser Symposium (APLS 2016), Jeju, Korea, May, (2016).
8. 大谷知行, “テラヘルツ波の基礎とセンシング・イメージングへの応用・例”, JTC セミナー, 東京, 6月, (2016).
9. C. Otani, “テラヘルツ光を用いた測定・判別法～ポリマー、医薬、生体への応用”, 三菱東京 UFJ 技術説明会, 東京, 6月, (2016).

10. 大谷知行, “Terahertz Spectroscopy and Beyond”, 岡山大セミナー, 岡山市, 7 月, (2016).
11. C. Otani, “Development of microwave kinetic inductance detectors for ground-based CMB polarization experiment GroundBIRD”, Science and Applications of Thin Films, Conference & Exhibition (SATF 2016), Izmir, Turkey, September, (2016).
12. 大谷知行, “(基調講演)テラヘルツ波の応用可能性と展望”, 第 8 回テラテクビジネスセミナー(THz-biz 2016), 展示会 All about Photonics, 横浜市, 9 月, (2016).
13. 山下将嗣, 池田翔, 大谷知行, “グラフェンホットキャリアダイナミクスの THz 分光解析”, テラヘルツ若手研究者サマースクール 2016, 岡山市, 9 月, (2016).
14. 保科宏道, “テラヘルツ分光の工業分析への応用”, 日本分光学会第 52 回夏期セミナー, 千葉市, 9 月, (2016).
15. H. Hoshina, “Observation and Manipulation of Macromolecules by Terahertz Waves”, 第 77 回応用物理学会秋季学術講演会, 新潟市, 9 月, (2016).
16. 八重柏典子, 多氣 昌生, 宮越 順二, 川瀬晃道, “超高周波の電波ばく露による影響の調査”, 総務省 生体電磁環境に関する検討会(第 13 回), 東京都千代田区, 9 月, (2016).
17. C. Otani, “(Plenary) Terahertz imaging, spectroscopy and applications of soft materials and beyond”, 7th International Symposium on Terahertz Nano Science (TeraNano VII), Porquerolle, France, October, (2016).
18. M. Yamashita, Y. Yamada, C. Otani, “High conductivity mechanism of conducting polymer PEDOT:PSS studied by terahertz and infrared spectroscopy”, SPIE Photonics Asia 2016 Infrared, Millimeter-Wave, and Terahertz Technologies IV, Beijing, China, October, (2016).
19. H. Hoshina, “Application of terahertz waves for polymer science”, SPIE Photonics Asia 2016, Beijing, China, October, (2016).
20. S. Mima, J. Choi, T. Damayanthi, M. Hattori, M. Hazumi, H. Ishitsuka, K. Kiuchi, R. Koyano, H. Kutsuma, K. Lee, M. Minowa, M. Nagai, T. Nagasaki, S. Oguri, C. Otani, Y. Sekimoto, M. Semoto, J. Suzuki, T. Taino, O. Tajima, N. Tomita, E. Won, T. Uchida, M. Yoshida, “Development of focal plane detectors for GroudBIRD experiment”, The 10th International Symposium on Intrinsic Josephson Effects and Plasma Oscillations in High-Tc Superconductors (Plasma+2016), Nanjing, China, October, (2016).
21. 美馬覚, “宇宙マイクロ波背景放射偏光観測実験 GroundBIRD の MKID 検出器アレイの開発”, 超伝導エレクトロニクス研究会(SCE), 仙台市, 10 月, (2016).
22. 大谷知行, “見えないものをみる光-テラヘルツ波が拓くイノベーション”, 政策セミナー, 東京, 11 月, (2016).
23. 保科宏道, “テラヘルツ光による高分子高次構造の解明と操作”, シンポジウム「テラヘルツ科学の最先端 III」, 福井県坂井市, 11 月, (2016).
24. 保科宏道, “テラヘルツ光による高分子構造の解明と操作”, 第 4 回「光量子工学研

究], 和光市, 11 月, (2016).

25. 平等拓範, 川瀬晃道, 南出泰丞, “マイクロ固体フォトニクスによる高輝度テラヘルツ波生成”, テラヘルツ応用技術講演会, 名古屋市, 11 月, (2016).
26. H. Hoshina, “Application of Terahertz Wave for Polymer Science”, JTMSIS (Japan-Taiwan Medical Spectroscopy International Symposium), Awaji Island, Japan, December, (2016).
27. 保科宏道, “テラヘルツ光による高分子構造の解明と操作”, 応用物理学会・量子エレクトロニクス研究会「光-物質相互制御 ～制御技術の進展と新しい物理の探求～」, 長野県北佐久郡軽井沢町, 12 月, (2016).
28. 美馬覚, “KID の応用アイデア紹介”, 簡単・便利な超電導計測—100 倍制度の計測を非専門家の手で, つくば市, 1 月, (2017).
29. H. Hoshina, “Terahertz Spectroscopy and Irradiation for Polymer Materials”, 1st. Philippine-Japan Terahertz Research Workshop, Biñan City, Laguna, Republic of the Philippines, February, (2017).
30. 八重柏典子, 多氣昌生, 宮越順二, 川瀬晃道, “(依頼講演) テラヘルツ波等における非熱作用の有無に関する研究”, 総務省 先進的な無線システムに関するワーキンググループ 第 3 回 (生体電磁環境に関する検討会), 東京都千代田区, 2 月, (2017).

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

1. “テラヘルツテクノロジーフォーラム 2016 年度総会・講演会”, 東京, 5 月 27 日, (2016).
2. 理研セミナー“Applications of THz radiation: how to clear the way to industrial applications”, Prof. René Beigang (Department of Physics, University of Kaiserslautern, Germany), August 5, (2016).
3. “第 8 回テラヘルツビジネスセミナー”, 横浜, 9 月 14 日, (2016).
4. 理研セミナー“Two-Dimensional Correlation Spectroscopy and Development of Novel Bioplastics Nodax<sup>TM</sup>”, Prof. Isao Noda (Department of Materials Science and Engineering, University of Delaware, USA), October 25, (2016).
5. 理研セミナー“Imaging ultrafast dynamics on the nanoscale with terahertz scanning tunneling microscopy”, Prof. Frank Hegmann (Department of Physics, University of Alberta, Canada), February 2, (2017).
6. 理研シンポジウム&NICT 研究会 第 3 回「理研 NICT 合同テラヘルツワークショップ」, 小金井, 2 月 27-28 日, (2017).

(5) 特筆すべき事項・トピックス(雑誌表紙などの掲載記事) / Topics

1. RIKEN Research, “Tuning in to soft vibrations” March 11, (2016).
2. フジサンケイビジネスアイ, “テラヘルツ光照射による高次構造変化を実現”, 2016年7月21日.