

ASI 田中 メタマテリアル研究室

誌 上 発 表 Publications

[雑誌]

(原著論文) *印は査読制度がある論文誌

Ohshiro T., Zako T., Tamaki-Watanabe R., Tanaka T., and Maeda M.: "A facile method towards cyclic assembly of gold nanoparticles using DNA template alone", *Chem. Commun.* **46**, 6132–6134 (2010). *

Ishikawa A., Oulton R. F., Zentgraf T., and Zhang X.: "Extremely low-loss slow-light modes in plasmonic dielectric hybrid systems", *Proc. SPIE-Int. Soc. Opt. Eng.* **7757**, 77571B-1–77571B-6 (2010). *

(総説)

田中拓男: “2光子多層メモリの進展”, *オプトロニクス* **28**, No. 335, pp. 105–110 (2009).

田中拓男: “プラズモニック・メタマテリアル”, *New Glass* **25**, No. 96, pp. 9–11 (2010).

口 頭 発 表 Oral Presentations

(国際会議等)

Tanaka T.: "Towards Three-Dimensional Plasmonic Metamaterials", International Symposium of Joint Research Network on Advanced Materials and Devices: Chou, (Hokkaido University), Tomakomai, Mar. (2010).

Tanaka T.: "Two-photon reduction technique for isotropic metamaterials", 15th European Conference on Integrated Optics and Technical Exhibition (ECIO 2010), (ECIO), Cambridge, UK, Apr. (2010).

Tanaka T.: "Design and Fabrication of Plasmonic Metamaterials", 7th International Conference on Optics-photonics Design and Fabrication, (ODG(Optics Design Group of OSJ)), Yokohama, Apr. (2010).

Aoki K.: "Connecting quantum dots and a nanocavity in a 3D photonic crystal", 2010 CMOS Emerging Technologies Workshop, (CMOS), Whistler, Canada, May (2010).

Aoki K.: "Evaluation of 3D photonic crystal cavities on a volumetric basis", 12th International Conference on Transparent Optical Networks (ICTON 2010), (Technische Universität München (TUM)), Munich, Germany, June–July (2010).

Tanaka T.: "Three-Dimensional Metal Nano-Structures for Plasmonic Metamaterials", 15th OptoElectronics and Communications Conference (OECC2010), (Information Processing Society of Japan), Sapporo, July (2010).

Ishikawa A., Oulton R. F., Zentgraf T., and Zhang X.: "Extremely low-loss slow-light modes in plasmonic dielectric hybrid systems", SPIE Optics + Photonics Symposium, (International Society for Optics and Photonics), San Diego, USA, Aug. (2010).

Kubo W.: "Au Double Nanopillars with Gap for Ultra-sensitive Plasmonic Sensor", 17th China-Japan Bilateral Symposium on Intelligent Electrophotonic Materials and

Molecular Electronics (SIEMME'17) 2010, (Institute of Chemistry, Chinese Academy of Sciences, University of Tokyo), Beijing, China, Sept. (2010).

Ishikawa A. and Tanaka T.: "Towards three-dimensional isotropic metamaterials", Metamaterials 2010, (Metamaterials 2010), Karlsruhe, Germany, Sept. (2010).

Tanaka T.: "Plasmon enhanced three-dimensional multi-layer optical disk", International Symposium on Optical Memory 2010 (ISOM10), (International Symposium on Optical Memory (ISOM)), Hualien, Taiwan, Oct. (2010).

Tanaka T.: "Plasmonic metamaterials and their fabrication techniques", 7th Japanese-German Frontiers of Science Symposium, (Japan Society for the Promotion of Science), Potsdam, Germany, Nov. (2010).

Aoki K.: "Assembly of Three-Dimensional Photonic Structures", 19th Australian Institute of Physics Congress 2010, (AIP), Melbourne, Australia, Dec. (2010).

Tanaka T.: "Towards Three-dimensional Metamaterials - Their Design and Fabrication Technique", 2010 International Conference on Optics and Photonics in Taiwan (OPT'10), (OPT10), Tainan, Taiwan, Dec. (2010).

Kubo W. and Fujikawa S.: "Au double nanopillars with nanogap for plasmonic sensor", International Chemical Congress of Pacific Basin Societies (PACIFICHEM 2010), (Pacifichem), Honolulu, USA, Dec. (2010).

Tanaka T.: "Plasmonic metamaterials for novel functional photonic materials", International Chemical Congress of Pacific Basin Societies (PACIFICHEM 2010), (Pacifichem), Honolulu, USA, Dec. (2010).

(国内会議)

田中拓男: “プラズモニック・メタマテリアル”, 第 57 回応用物理学関係連合講演会, ((社)応用物理学会), 平塚, 3月 (2010).

武安伸幸, 田中拓男, 河田聰: “高感度光重合開始剤を用いた 2光子重合における造形分解能向上”, 第 57 回応用物理学関係連合講演会, ((社)応用物理学会), 平塚, 3月 (2010).

石川篤: “金属・誘電体ハイブリッドメタマテリアルとその新奇光機能”, NAIST メタマテリアルセミナー, (奈良先端科学技術大学院大学), 生駒, 7月 (2010).

田中拓男: “Plasmonic Metamaterials for Artificial Magnetic Materials in Optical Frequency Regime”, 第 34 回日本磁気学会学術講演会, (日本磁気学会), つくば, 9月 (2010).

久保若奈, 藤川茂紀, 田中拓男: “ウェハースケールにおけるギャップアレイ構造の作製とプラズモンセンサーへの展開”, 第 71 回応用物理学会学術講演会, ((社)応用物理学会), 長崎, 9月 (2010).