Curriculum Vitae

Satoshi Tomita

Assistant Professor
Graduate School of Materials Science
Nara Institute of Science and Technology (NAIST)

Mailing address: 8916-5 Takayama, Ikoma, Nara 630-0192, Japan
Telephone: +81-743-72-6015 (ex. 6015)
FAX: +81-743-72-6015
Email: tomita@ms.naist.jp
URL: http://mswebs.naist.jp/LABs/optics/tomita/index.htm

Personal Data:

Date of birth:	7 November 1973
Place of birth:	Kobe
Marital status:	Married
Nationality:	Japanese
Languages:	Japanese, English

Education:

Ph.D	Kobe University, 2002
M.E.	Kobe University, 1999

Appointments:

Apr. 2006 - present	Assistant Professor, Nara Institute of Science and Technology
Dec. 2002 - Mar. 2006	Research Scientist, PRESTO, Japan Science and Technology Agency (JST) , (based at RIKEN)
Apr. 2002 - Nov. 2002	Postdoctoral Researcher, RIKEN
Apr. 1999 - Mar. 2002	Japan Society for the Promotion of Science (JSPS) Research Fellow, (based at Kobe University)

Professional Activities:

Author or co-author, 49 scholarly publications in condensed matter physics and metamaterials science. *Member*, Physical Society of Japan (JPS), Japan Society of Applied Physics (JSAP), Magnetic Society of Japan (MSJ), and related academic societies. Hold three Japanese patent related to nanotechnology.

Research Experience:

Preparation of metal, carbon, or magnetic nanoparticles by physical and chemical techniques. Structural analysis using analytical transmission electron microscope (TEM). Experimental and numerical studies on optical and magnetic properties of the nanostructures. Preparation, characterization, and measurements of meta-atoms, meta-molecules, and meta-materials.

Selected Publications:

1. "Direct Observation of Magnetochiral Effects through a Single Metamolecule in Microwave Regions", Satoshi Tomita, Kei Sawada, Andrey Porokhnyuk, Tetsuya Ueda, *Physical Review Letters* **113**, 235501 (2014).
2. "Chiral meta-interface: Polarity reversal of ellipticity through double layers consisting of transparent chiral and absorptive achiral media", Satoshi Tomita, Yuuka Kosaka, Hisao Yanagi, Kei Sawada, *Physical Review B* **87**, 041404 (R) (2013).
3. "Resonant photon tunneling via surface plasmon polaritons through one-dimensional metal-dielectric metamaterials", Satoshi Tomita, Takashi Yokoyama, Hisao Yanagi, Ben Wood, John B. Pendry, Minoru Fujii and Shinji Hayashi, *Optics Express* **16**, 9942 (2008).
4. "Magneto-Optical Kerr Effects of Yttrium Iron Garnet Thin Films Incorporating Gold Nanoparticles", Satoshi Tomita, Takeshi Kato, Satoshi Iwata, Shigeru Tsunashima, Minoru Fujii, Shinji Hayashi, *Physical Review Letters* **96**, 167402 (2006).
5. “Tuning magnetic interactions in ferromagnetic-metal nanoparticle systems”, Satoshi Tomita, Kensuke Akamatsu, Hiroyuki Shinkai, Shingo Ikeda, Hidemi Nawafune, Chiharu Mitsumata, Takanari Kashiwagi, Masayuki Hagiwara, *Physical Review B* **71**, 180414 (R) (2005).
6. " Structure and electronic properties of carbon onions", Satoshi Tomita, Takahiro Sakurai, Hitoshi Ohta, Minoru Fujii, Shinji Hayashi, *The Journal of Chemical Physics* **114**, 7477 (2001).