

## 2007 — KIRIHARA Soshu

### Scientific Papers/Commentary Articles

1. E. Semouchkina, Y. Miyamoto, S. Kirihara, G. Semouchkina and M. Lanagan, Analysis of Electromagnetic Response of 3-D Dielectric Fractals of Menger Sponge Type, *IEEE Trans. on Microwave Theory and Techniques*, 55, 6, 1305-1313, 2007
2. W. Chen, S. Kirihara and Y. Miyamoto, Fabrication and Measurement of Micro Three-Dimensional Photonic Crystals of SiO<sub>2</sub> Ceramic for Terahertz Wave Applications, *J. Am. Ceram. Soc.*, 90, 7, 2078-2081, 2007
3. W. Chen, S. Kirihara and Y. Miyamoto, Freeform Fabrication of Photonic Crystals with 3-Dimensional Diamond Structure by Micro-Stereolithography, *Ceram. Trans.*, 198, 407-412, 2007
4. T. Nakagawa, K. Kageyama, N. Wada, Y. Sakabe, S. Kirihara and Y. Miyamoto, Fabrication and Microwave Properties of Three-Dimensional Photonic Crystals with a Diamond Structure Composed of Ceramic Spheres in Resin, *J. Am. Ceram. Soc.*, 90, 4, 1112-1115, 2007
5. W. Chen, S. Kirihara and Y. Miyamoto, Three-dimensional Microphotonic Crystals of ZrO<sub>2</sub> Toughened Al<sub>2</sub>O<sub>3</sub> for Terahertz Wave Applications, *Appl. Phys. Lett.*, 91, 153507/1-3, 2007
6. T. Nakagawa, K. Kageyama, H. Takagi, Y. Sakabe, S. Kirihara and Y. Miyamoto, Diamond-Structure Photonic Crystals Composed of Ceramic Spheres in Resin and Their Microwave Properties, *JPN. J. Appl. Phys.*, 45, 10B, 1月5日, 2008
7. T. Nakagawa, K. Kageyama, H. Takagi, Y. Sakabe, S. Kirihara and Y. Miyamoto, Photonic Band Gaps in Diamond Structures Composed of Ceramic Spheres, *Smart Processing Technology*, 2, 167-170, 2008
8. H. Kanaoka, S. Kirihara and Y. Miyamoto, Terahertz Wave Properties of Alumina Micro Photonic Crystals with a Diamond Structure, *Journal of Materials Research*, 印刷中
9. W. Wang, S. Kirihara, Y. Miyamoto and Z. Jin, Fabrication of Metallodielectric Photonic Crystals with Diamond Structure and their Microwave Properties, *Journal of the American Ceramic Society*, 印刷中

### International Conference Proceedings

1. Y. Miyamoto, W. Chen, H. Kanaoka and S. Kirihara, Smart Processing Development on 3D Ceramic Structures for Terahertz Wave, *Proc. 31st Int. Conf. on Adv. Ceramics and Composites*, 79-90, 2007
2. S. Kirihara, T. Hibino, H. Kanaoka and Y. Miyamoto, Design and Fabrication of Terahertz

Wave Control Devices by Micro-stereolithography, Proc. Ceramic Interconnect and Ceramic Microsystems Technologies, 4, 125-130, 2007

3. T. Horii, Y. Yamamoto, S. Kirihara, Y. Miyamoto and N. Yamanaka Freeform Fabrication of Metals by 3D Micro Welding, Proc. 3rd Int. Conf. on Adv. Research in Virtual and Rapid Prototyping, 3, 509-513, 2007
4. H. Kanaoka, S. Kirihara and Y. Miyamoto, Micro-Fabrication and Terahertz Wave Properties of Alumina Photonic Crystals with Diamond Structure, Proc. 31st Int. Conf. on Adv. Ceramics and Composites, 99-104, 2007
5. Y. Nakahata, S. Kirihara and Y. Miyamoto, Fabrication of New Dielectric Fractal Structures and Localization of Electromagnetic Wave, Proc. 31st Int. Conf. on Adv. Ceramics and Composites, 91-98, 2007

#### **Publications**

1. S. Kirihara and Y. Miyamoto, Nanoparticle Technology Handbook, ELSEVIER, 375-377, 2007

#### **Symposia**

1. The Second International Symposium on Smart Processing Technology (SPT' 07)
2. The 7th Korea/Japan Joint Workshop on Smart Processing Developments for Environmental-friendly Advanced Materials