

## 2011 —NAKAJIMA Hideo

### Scientific Papers/Commentary Articles

1. Y.H. Song, M. Tane and H. Nakajima, Appearance of a Plateau Stress Region during Dynamic Compressive Deformation of Porous Carbon Steel with Directional Pores, *Scripta Materialia*, 64(8), 797-800, 2011
2. M. Tane, S. Nakano, R. Nakamura, H. Ogi, M. Ishimaru, H. Kimizuka and H. Nakajima, Nanovoid Formation by Change in Amorphous Structure through the Annealing of Amorphous Al<sub>2</sub>O<sub>3</sub> Thin Films, *Acta Materialia*, 59(11), 4631-4640, 2011
3. M. Tane, T. Nakano, S. Kuramoto, M. Hara, M. Niinomi, N. Takesue, T. Yano, H. Nakajima, Low Young's Modulus in Ti-Nb-Ta-Zr-O Alloys: Cold Working and Oxygen Effects, *Acta Materialia*, 59(18), 6975-6988, 2011
4. R. Nakamura, M. Ishimaru, A. Hirata, K. Sato, M. Tane, H. Kimizuka, T. Shudo, T.J. Konno, H. Nakajima, Enhancement of nanovoid formation in annealed amorphous Al<sub>2</sub>O<sub>3</sub> including W, *Journal of Applied Physics*, 110(6), 64324, 2011
5. R. Nakamura, K. Tanaka, M. Ishimaru, K. Sato, T.J. Konno, H. Nakajima, Self-elongated growth of nanopores in annealed amorphous Ta<sub>2</sub>O<sub>5</sub> films, *Scripta Materialia*, 66(3-4), 182-185, 2012
6. Y.H. Song, M. Tane and H. Nakajima, Peculiar Formation Mechanism of a Plateau Stress Region during Dynamic Compressive Deformation of Porous Carbon Steel with Oriented Cylindrical Pores, *Acta Materialia*, 60(3), 1149-1160, 2012
7. Y.H. Song, M. Tane and H. Nakajima, Dynamic and Quasi-static Compression of Porous Carbon Steel S30C and S45C with Directional Pores, *Materials Science and Engineering A*, 534, 504-513, 2012
8. T. Fiedler, C. Veyhl, I.V. Belova, M. Tane, H. Nakajima, T. Bernthaler, M. Merkel, A. Ochsner, G.E. Murch, On the Anisotropy of Lotus-Type Porous Copper, *Advanced Engineering Materials*, 14(3), 144–152, 2012
9. T.B. Kim, M. Tane, S. Suzuki, T. Ide, H. Utsunomiya, H. Nakajima, Improvement of Strength of Lotus-type Porous Aluminum through ECAE Process, *Materials Science Forum*, 695, 263-266, 2011
10. R. Nakamura, T. Shudo, A. Hirata, M. Ishimaru, H. Nakajima, TEM Analysis on Nanovoid Formation in Annealed Amorphous Oxides, *Materials Science Forum*, 695, 541-544, 2011
11. M. Tane, R. Okamoto, H. Nakajima, Anisotropic Tensile Deformation of Lotus-type Porous Copper, *Materials Science Forum*, 695, 545-548, 2011

## **International Conference Proceedings**

1. M. Tane , Y.H. Song, and H. Nakajima, Dynamic Compression Behavior of Lotus-type Porous Metals, Proceedings of International Symposium on Materials Science and Innovation for Sustainable Society (ECO-MATES 2011), 1, 69-70, 2011
2. R. Nakamura, H. Nakajima, Formation of Nanoporous Structures via Annealing of Amorphous Oxides, Proceedings of International Symposium on Materials Science and Innovation for Sustainable Society (ECO-MATES 2011), 2, 51-52, 2011
3. A. Tsunemi, T. Ide, H. Nakajima, The Distribution of Pores of Lotus-type Porous Copper, Proceedings of International Symposium on Materials Science and Innovation for Sustainable Society (ECO-MATES 2011), 2, 61-62, 2011
4. Y.H. Song, M. Tane and H. Nakajima, Compressive Deformation Behavior of Porous Carbon Steels with Directional Pores, Proceedings of International Symposium on Materials Science and Innovation for Sustainable Society (ECO-MATES 2011), 2, 63-64, 2011
5. K. Tanaka, R. Nakamura, H. Nakajima, Formation and Growth of Nanovoids in Annealed Amorphous Ta<sub>2</sub>O<sub>5</sub> Films, Proceedings of International Symposium on Materials Science and Innovation for Sustainable Society (ECO-MATES 2011), 2, 65-66, 2011
6. T. Ide, H. Nakajima, Fabrication of Lotus-type Porous Aluminum through Continuous Casting Technique under High Humidity, Proceedings of International Symposium on Materials Science and Innovation for Sustainable Society (ECO-MATES 2011), 2, 89-90, 2011
7. R. Nakamura, T. Shudo, H. Nakajima, Fabrication of Nanoporous Oxides through Annealing of Amorphous Oxide Films, Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 645-648, 2012
8. Y. H. Song, M. Tane, H. Nakajima, Anisotropic Dynamic Compressive Properties of Lotus-type Porous Carbon Steel, Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 481-484, 2012
9. M. Tane, S. Nakano, R. Nakamura, H. Ogi, M. Ishimaru, H. Kimizuka, and H. Nakajima, Elastic Properties of Nanoporous Amorphous Al<sub>2</sub>O<sub>3</sub>, Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 649-652, 2012
10. M. Kashihara, H. Yonetani, S. Suzuki, H. Nakajima, "Effects of NiO Powder on Pore Formation of Lotus-type Porous Carbon Steel during Continuous Casting", Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 33-36, 2012
11. H.Nakajima, T.Ide, A.Tsunemi, "Fabrication of Porous Metals with Slender Directional Pores through Thermal Decomposition of Gaseous Compounds", Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 39-43, 2012
12. T. Ide, Y. Iio, H. Nakajima, "Fabrication of Lotus-type Porous Aluminum through Continuous Casting Technique", Proceedings of 7th International Conference on Porous Metals and Metallic

Foams (MetFoam2011), 81-84, 2012

13. "J.-W. Lee, S.-K. Hyun, M.-S. Kim, T. Ide, H. Nakajima", "Compressive Properties of Porous NiAl Fabricated by Unidirectional Solidification", Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 333-338, 2012
14. T. Kujime, T. Ide, Y. Seimiya, H. Nakajima, Fabrication of Porous AlN/Al Composites and its Compressive Properties, Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 463-468, 2012
15. O. Yoshinari, T. Kobayashi, H. Nakajima, T. Ide, Internal Friction of Lotus-type Porous Copper, Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 491-497, 2012
16. H. Tsuruoka, H. Utsunomiya, T. Sakai, S. Suzuki, T. Ide, H. Nakajima, Forming of Profiled Strip from Porous Metal by Rolling, Proceedings of 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), 593-597, 2012
17. J.W. Lee, S.K. Hyun, M.S. Kim, T. Ide, H. Nakajima, Mechanical Behavior of Porous NiAl Fabricated By Unidirectional Solidification, "Supplemental Proceedings: Volume 2: Materials Properties, Characterization, and Modeling TMS (The Minerals, Metals & Materials Society), 2012", 579-580, 2012

## **Publications**

1. R. Nakamura. H. Nakajima, Nanowires - Implementations and Applications, InTech, 2011, pp. 101-116,

## **Invited/Plenary Presentations**

1. H. Nakajima, T. Ide, A. Tsunemi, 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), Sep. 18-21, 2011, Busan, Korea, Plenary
2. M. Tane, S. Nakano, R. Nakamura, H. Ogi, M. Ishimaru, H. Kimizuka, H. Nakajima, 7th International Conference on Porous Metals and Metallic Foams (MetFoam2011), Sep. 18-21, 2011, Busan, Korea, Invited
3. M. Tane, Y.H. Song, and H. Nakajima, Internaitonal Symposium on Materials Science and Innovation for Sustainable Society (Eco-Mates 2011), Nov. 28-30, Osaka, Japan, Invited

## **Awards**

1. O. Yoshinari, T. Kobayashi, H. Nakajima, T. Ide, The 7ht International Conference on Porous

Metals and Metallic Foams "Best paper Award", 2011.9.21