

2010 —NAKAJIMA Hideo

Scientific Papers/Commentary Articles

1. M. Tane, T. Kawashima, H. Yamada, K. Horikawa, H. Kobayashi, H. Nakajima, Strain-Rate Dependence of Anisotropic Compression Behavior in Porous Iron with Unidirectional Pores, *Journal of Materials Research*, 25(6), 1179-1190, 2010
2. Y.H. Song, M. Tane, T. Ide, Y. Seimiya, B.Y. Hur, H. Nakajima, Fabrication of Al-3.7%Si-0.18%Mg Foam Strengthened by AlN Particle Dispersion and its Compressive Properties, *Metallurgical and Materials Transactions A*, 40A(8), 2104-2111, 2010
3. M. Kashihara, S. Suzuki, Y. Kawamura, S.Y. Kim, H. Yonetani, H. Nakajima, Fabrication of Lotus-type Porous Carbon Steel Slabs by Continuous Casting Technique in Nitrogen Atmosphere, *Metallurgical and Materials Transactions A*, 41A(9), 2377-2382, 2010
4. H. Utsunomiya, T. Yukimoto, T. Sakai, S. Suzuki H. Nakajima, Pore Closure in Multi-Pass Cold Rolling of Lotus-type Porous Copper, *Steel Research International*, 81(9), 158-161, 2010
5. S. Suzuki, J. Lobos, H. Utunomiya, H. Nakajima, Effect of pass route and pass number of ECAE on structure and strength of lotus-type porous copper, *Steel Research International*, 81(9), 482-485, 2010
6. H. Nakajima, Fabrication, properties, and applications of porous metals with directional pores, *Proceedings of the Japan Academy, Series B*, 86(9), 884-899, 2010
7. M. Tane, R. Okamoto, H. Nakajima, Tensile Deformation of Anisotropic Porous Copper with Directional Pores, *Journal of Materials Research*, 25(10), 1975-1982, 2010
8. T.B. Kim, M. Tane, S. Suzuki and H. Nakajima, Pore Morphology of Porous Al-Ti Alloys Fabricated by Continuous Casting in Hydrogen Atmosphere, *Materials Transactions*, 51(10), 1871-1877, 2010
9. S.K. Hyun, M. Uchikoshi, K. Miura, M. Isshiki, H. Nakajima, Fabrication of Porous High-Purity Iron with Directional Pores by Continuous Zone Melting Technique, *Materials Transactions*, 51(11), 2076-2079, 2010
10. M. Tane, S. Akita, T. Nakano, K. Hagihara, Y. Umakoshi, M. Niinomi, H. Mori and H. Nakajima, Low Young's Modulus of Ti-Nb-Ta-Zr Alloys Caused by Softening in Shear Moduli c' and c_{44} near Lower Limit of Body-centered Cubic Phase Stability, *Acta Materialia*, 58(20), 6970-6978, 2010
11. H. Nakajima, Fabrication of Porous Metals with Directional Pores through Unidirectional Solidification of Gas-Dissolved Melt, *Materials Science Forum*, 654-656, 1452-1455, 2010
12. Y.H. Song, M. Tane, T. Ide, Y. Seimiya, H. Nakajima, Effect of Foaming Temperature on Pore Morphology of Al/AlN Composite Foam Fabricated by Melt Foaming Method, *Materials*

- Science Forum, 658, 189-192, 2010
13. M. Tane, T. Kawashima, K. Horikawa, H. Kobayashi, H. Nakajima, Dynamic Compression Behavior of Lotus-type Porous Iron, Materials Science Forum, 658, 193-196, 2010
 14. R. Nakamura, H. Nakajima, Formation of Hollow and Porous Nanostructures of Iron Oxides via Oxidation of Iron Nanoparticles and Nanowires, Materials Science Forum, 658, 197-200, 2010
 15. K. Sugihara, S. Suzuki, H. Nakajima, Fabrication of Lotus-type Porous Magnesium with Anisotropic Directional Pores by Mold Casting Technique, Materials Science Forum, 658, 201-206, 2010
 16. T.B. Kim, S. Suzuki, H. Nakajima, Fabrication of Lotus-type Porous Al-Ti Alloys using the Continuous Casting Technique, Materials Science Forum, 658, 207-211, 2010
 17. Y. Iio, T. Ide, H. Nakajima, Effect of Transfer Velocity on Porosity of Lotus-Type Porous Aluminum Fabricated by Continuous Casting Technique, Materials Science Forum, 658, 211-214, 2010
 18. M. Kashihara, H. Yonetani, S. Suzuki, H. Nakajima, Effect of Addition of NiO Powder on Pore Formation in Lotus-type Porous Carbon Steel Fabricated by Continuous Casting, Materials Science Forum, 658, 215-219, 2010
 19. H. Chiba, T. Ogushi, S. Ueno, H. Nakajima, Effect of Pore Diameter Distribution on Heat Transfer Capacity of Lotus-Type Porous Copper Heat Sink for Air Cooling, Materials Science Forum, 658, 220-223, 2010
 20. G. Matsubayashi, R. Nakamura, H. Tsuchiya, S. Fujimoto, H. Nakajima, Formation of Oxide Nanotubes and Bamboo-like Structures via Oxidation of Cu, Fe and Ni Nanowires, Materials Science Forum, 658, 232-235, 2010
 21. T. Ide, T. Wada, H. Nakajima, Fabrication of Lotus-Type Porous Iron by Thermal Decomposition Method, Materials Science Forum, 658, 240-243, 2010
 22. H. Utsunomiya, T. Yukimoto, T. Sakai, S. Suzuki, H. Nakajima, Deformation of Lotus-type Porous Copper in Rolling, Materials Science Forum, 658, 328-331, 2010
 23. M. Tane, H. Nakajima, Elastic and Plastic Deformation Behaviors of Lotus-type Porous Metals, Materials Science Forum, 658, 332-335, 2010
 24. R. Nakamura, T. Shudo, A. Hirata, M. Ishimaru, H. Nakajima, Nanovoid Formation through the Annealing of Amorphous Al₂O₃ and WO₃ Films, Scripta Materialia, 64(2), 197-200, 2011
 25. T.B. Kim, M. Tane, S. Suzuki, H. Utsunomiya, T. Ide, H. Nakajima, Strength and Pore Morphology of Porous Aluminum and Porous Copper with Directional Pores Deformed by Equal Channel Angular Extrusion, Materials Science and Engineering A, 528(6), 2363-2369, 2011
 26. 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

27. H. Nakajima, S. Suzuki, Fabrication of Lotus-type Porous Metals, Encyclopedia of Materials: Science and Technology, 6-10, 2010
28. H. Nakajima, M. Tane, Properties of Lotus-type Porous Metals, Encyclopedia of Materials: Science and Technology, 1-5, 2010
29. H. Chiba, T. Ogushi, H. Nakajima, Heat Transfer Capacity of Lotus-type Porous Copper Heat Sink for Air Cooling, Journal of Thermal Science and Technology, 5(2), 222-237, 2010
30. T. Kujime, H. Nakajima, Investigation of The Mechanical Properties of Lotus-Type Porous Carbon Steel Made by Continuous Zone Melting Technique, Materials Science Forum, 638-642, 1866-1871, 2010

International Conference Proceedings

1. H. Nakajima, Application of Lotus-type Porous Metals to Heat Sink for Air Cooling, Proceedings of the International Cellular Materials (CELLMAT2010), 143-147, 2010
2. T. Ide, Y. Iio, H. Nakajima, Fabrication of Lotus-type Porous Aluminum by Continuous Casting Technique, Proceedings of the 12th International Conference on Aluminium Alloys, 1639-1644, 2010
3. H. Chiba, T. Ogushi, H. Nakajima, Development of Heat Sinks for Air Cooling and Water Cooling Using Lotus-type Porous Metals, Proceedings of the ASME/JSME 2011 8th Thermal Engineering Joint Conference (AJTEC2011), 1-9, 2011

Awards

1. T. B. Kim, M. Tane, S. Suzuki, T. Ide, H. Utsunomiya, H. Nakajima, The 12th International Symposium on Eco-materials Processing and Design "Excellence Award of Poster Presentation", 2011.1.10