

## Yukinori Yamamoto

Ph.D., Research Staff  
Processing & Joining Group  
Materials Science & Technology Division  
Oak Ridge National Laboratory  
P.O. Box 2008 Oak Ridge, TN 37831-6083  
Phone: (865) 576-7095  
Fax: (865) 574-4357  
e-mail: [yamamotoy@ornl.gov](mailto:yamamotoy@ornl.gov)

### **PUBLICATION LIST**

#### **Journal Articles (26, including 1 Science paper)**

1. Y. Yamamoto, M.P. Brady, M.L. Santella, H. Bei, P.J. Maziasz, B.A. Pint, “Overview of strategies for high-temperature creep and oxidation resistance of alumina-forming austenitic stainless steels”, Invited paper for *Metallurgical and Materials Transaction A*, Volume 42, Issue 4 (2011), Page 922-931.
2. M.P. Brady, K.A. Unocic, M.J. Lance, M.L. Santella, Y. Yamamoto, and L.R. Walker, “Increasing the Upper Temperature Oxidation Limit of Alumina Forming Austenitic Stainless Steels in Air with Water Vapor”, *Corrosion Science*, Volume 75, Numbers 5-6 (2011) Page 337-357.
3. H. Bei, Y. Yamamoto, M. P. Brady, and M. L. Santella, “Aging effects on the mechanical properties of alumina-forming austenitic stainless steels”, *Materials Science and Engineering A*, Volume 527, Issue 7-8 (2010), Page 2079-2086.
4. Y. Yamamoto, M. L. Santella, M.P. Brady, H. Bei, and P. J. Maziasz, “Effect of Alloying Additions on Phase Equilibria and Creep Resistance of Alumina-Forming Austenitic Stainless Steels”, *Metallurgical and Materials Transactions A*, Volume 40, Issue 8 (2009), Page 1868-1880.
5. Y. Yamamoto, M.L. Santella, C.T. Liu, N.D. Evans, M.P. Brady, and P.J. Maziasz, “High Mn containing alumina-forming austenitic stainless steels”, *Materials Science and Engineering A*, Volume 524 Nos. 1-2 (2009), Page 176–185.
6. M. P. Brady, Y. Yamamoto, M. L. Santella and L. R. Walker , “Composition, Microstructure, and Water Vapor Effects on Internal/External Oxidation of Alumina-Forming Austenitic Stainless Steels”, *Oxidation of Metals*, Volume 72, Numbers 5-6 (2009), 311-333.
7. N. D. Evans, P. J. Maziasz, J. P. Shingledecker, Y. Yamamoto, “Microstructure Evolution of

Alloy 625 Foil and Sheet during Creep at 750°C,” in *Materials Science and Engineering A*, Volume 498, Issues 1-2 (2008), Pages 412-420.

8. M. P. Brady, Y. Yamamoto, M. L. Santella, P. J. Maziasz, B. A. Pint, C. T. Liu, Z. P. Lu, H. Bei, “Development of Alumina-Forming Austenitic Stainless Steels for High-Temperature Structural Use,” in *JOM* 60(7) (July, 2008), p.12-18.
9. M.P. Brady, Y. Yamamoto, B.A. Pint, M.L. Santella, P.J. Maziasz, L.R. Walker, “On the Loss of Protective Scale Formation in Creep-Resistant, Alumina-Forming Austenitic Stainless Steels at 900°C in Air,” in *Materials Science Forum* 595-598 (December, 2008), p. 725-732.
10. M. P. Brady, Y. Yamamoto, Z. P. Lu, P. J. Maziasz, C. T. Liu, B. A. Pint, M. L. Santella, “Alumina-Forming Austenitics: A New Class of Heat-Resistant Stainless Steels,” in *Stainless Steel World Magazine*, March (2008), p. 23-29.
11. Y. Yamamoto, M. Takeyama, C. T. Liu, Z. P. Lu, N. D. Evans, P. J. Maziasz, M. P. Brady, “Alloying Effects on Creep and Oxidation Resistance of Austenitic Stainless Steel Alloys Employing Intermetallic Precipitates,” in *Intermetallics* 16(3) (2008), p. 453-462.
12. Y. Yamamoto, M. P. Brady, Z. P. Lu, C. T. Liu, M. Takeyama, P. J. Maziasz, B. A. Pint, “Alumina-Forming Austenitic Stainless Steels Strengthened by Laves Phase and MC Carbide Precipitates,” in *Metallurgical and Materials Transaction A*, 38(11) (2007), pp. 2737-2746.
13. P. J. Maziasz, B. A. Pint, J. P. Shingledecker, N. D. Evans, Y. Yamamoto, K. L. More, E. Lara-Curzio, “Advanced alloys for compact, high-efficiency, high-temperature heat-exchangers,” in *International Journal of Hydrogen Energy*, 32 (2007), p. 3622-3630.
14. M.P. Brady, Y. Yamamoto, M. L. Santella, and B.A. Pint, “Effects of Minor Alloy Additions and Oxidation Temperature on Protective Alumina Scale Formation in Creep-Resistant Austenitic Stainless Steels,” in *Scripta Materialia*, 57(12) (2007), p. 1117-1120.
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17. Y. Yamamoto, M. Takeyama, T. Matsuo, “Stability of Lamellar Microstructure Consisting of  $\gamma/\gamma$  Interfaces in Ti-48Al-8Nb Single Crystal at Elevated Temperatures,” in *Materials Science and Engineering*, A329-331 (2002), p. 631-636.
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22. Y. Yamamoto, M. Moriyama, M. Kajihara, T. Mori, "Kinetics of Diffusion Induced Grain Boundary Migration of [100] Twist Boundaries in the Cu(Zn) System," in *Acta Materialia*, 47(6) (1999), p.1757-1766.
23. Y. Yamamoto, M. Kajihara, "Quantitative Analysis of Observations on Diffusion Induced Grain Boundary Migration for Random Boundaries in the Cu(Zn) System using a Driving Force Model," in *Acta Materialia*, 47(4) (1999), p.1195-1201.
24. Y. Yamamoto, J.O. Kiggans, M.B. Clark, S.D. Nunn, A.S. Sabau, and W.H. Peter, "Consolidation Process in Near Net Shape Manufacturing of Armstrong CP-Ti/Ti-6Al-4V Powders", *Key Engineering Materials* Vol. 436 (2010) pp. 103-111.
25. W. Chen, Y. Yamamoto, and W.H. Peter, "Investigation of pressing and sintering processes of CP-Ti powder made by Armstrong Process", *Key Engineering Materials* Vol. 436 (2010) pp. 123-130.
26. Y. Yamamoto, M. Kajihara, "Kinetics of diffusion-induced recrystallization in the Cu(Ni) system at low temperatures", *Journal of Electronic Materials*, Vol. 37, Issue 11 (2008), pp. 1710-1720.

#### **Conference Proceedings (25)**

1. Y. Yamamoto, W.H. Peter, A.S. Sabau, G.B. Sarma, J.O. Kiggans, S.D. Nunn, M.B. Clark, C.A. Blue, J.E. Barnes, C. Henry, J.A. Capone, M. Paliwal, B. Fuller, and K. Akhtar, "Low Cost Titanium Near-Net-Shape Manufacturing Using Armstrong and/or Hydride-Dehydride CP-Ti and Ti-6Al-4V Powders", submitted for proceedings of the 2010 International Conference on Powder Metallurgy & Particulate Materials, PowderMet 2010, June 27-30, Hollywood, FL.
2. A.S. Sabau, G.B. Sarma, W.H. Peter, and Y. Yamamoto, "PROCESS SIMULATION OF COLD PRESSING AND SINTERING OF TITANIUM ARMSTRONG CP-Ti/Ti-6Al-4V POWDERS", submitted for proceedings of the 2010 International Conference on Powder Metallurgy & Particulate Materials, PowderMet 2010, June 27-30, Hollywood, FL.
3. M.P. Brady, J. H. Magee, Y. Yamamoto, P.J. Maziasz, M.L. Santella, B.A. Pint, and H. Bei, "Development and Exploratory Scale-Up of Alumina-Forming Austenitic (AFA) Stainless Steels", Proceedings of Stainless Steel World 2009 Conference & Expo Maastricht, The Netherlands, November 10th -12th, 2009
4. B. A. Pint, M.P. Brady, Y. Yamamoto, M. L. Santella, P.J. Maziasz, and W.J. Matthews, "Evaluation Of Alumina-Forming Austenitic Foil For Advanced Recuperators", Proceedings of

GT2010 ASME Turbo Expo 2010: Power for Land, Sea, and Air June 14-18, 2010, Glasgow, Scotland.

5. L. Tan, J.T. Busby, P.J. Maziasz, and Y. Yamamoto, “Effect of Thermomechanical Treatment on 9Cr Ferritic-Martensitic Steels”, submitted to proceedings in embedded topical meeting “Nuclear Fuels and Structural Materials for the Next Generation Nuclear Reactors” in American Nuclear Society: 2010 Annual Meeting, June 14-18, San Diego, CA.
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7. M.P. Brady, Y. Yamamoto, H. Bei, M.L. Santella, P.J. Maziasz, “Development of Alumina-Forming Austenitic Stainless Steels”, Proceedings of 23rd Annual Conference on Fossil Energy Materials, May 12<sup>th</sup>-14<sup>th</sup>, 2009, Pittsburgh, PA.
8. Y. Yamamoto, M. P. Brady, M. L. Santella, B. A. Pint, P. J. Maziasz, “Creep-Resistant, Alumina-Forming Austenitic Stainless Steels For Higher Temperature Use In Power Generation Systems,” in *proc. the 33rd International Technical Conference on Coal Utilization & Fuel Systems* (June 1-5, 2008, Clearwater, FL), B. A. Sakkestad, ed., Coal Technology Association, Gaithersburg, MD (2008).
9. Y. Yamamoto, M.P. Brady, M.L. Santella, H. Bei, P.J. Maziasz, B.A. Pint, “Development of Alumina-Forming Austenitic Stainless Steels”, Proceedings of 22nd Annual Conference on Fossil Energy Materials, July 8<sup>th</sup>-10<sup>th</sup>, 2008, Pittsburgh, PA.
10. M.P. Brady, Y. Yamamoto, Z.P. Lu, P.J. Maziasz, M.L. Santella, B.A. Pint, “MULTI-PHASE HIGH TEMPERATURE ALLOYS: EXPLORATION OF ALUMINA-FORMING, CREEP-RESISTANT AUSTENITIC STAINLESS STEELS”, Proceedings of 21st Annual Conference on Fossil Energy Materials, April 30<sup>th</sup> – May 2<sup>nd</sup>, 2007, Knoxville, TN.
11. Y. Yamamoto, Z. P. Lu, M. P. Brady, C. T. Liu, P. F. Tortorelli, “Multi-Phase High Temperature Alloys: Exploration of Laves Phase Strengthening of Steels”, Proceedings of 20st Annual Conference on Fossil Energy Materials, June 12<sup>th</sup> – 14<sup>th</sup>, 2006, Knoxville, TN.
12. P. J. Maziasz, J. P. Shingledecker, N. D. Evans, Y. Yamamoto, K. L. More, R. Trejo, E. Lara-Curzio, “Creep Strength And Microstructure Of Al20-25+Nb Alloy Sheets And Foils For Advanced Microturbine Recuperators,” GT2006-90195, in *Proc. 2006 ASME Turbo Expo* (May 9-11, 2006, Barcelona, Spain), Am. Soc. Mech. Engin., New York, NY (2006).
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Compact Heat-Exchangers,” GT2005-68927, in *Proc. 2005 ASME Turbo Expo* (June 6-9, 2005, Reno, NV), Am. Soc. Mech. Engin., New York, NY (2005).

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## References

Dr. Michael P. Brady, Materials Science and Technology Division, Oak Ridge National Laboratory  
Contact: [bradymp@ornl.gov](mailto:bradymp@ornl.gov), 865-574-5153

Dr. Philip J. Maziasz, Materials Science and Technology Division, Oak Ridge National Laboratory  
Contact: [maziaszpj@ornl.gov](mailto:maziaszpj@ornl.gov), 865-574-5082

Dr. Michael L. Santella, Materials Science and Technology Division, Oak Ridge National Laboratory  
Contact: [santellaml@ornl.gov](mailto:santellaml@ornl.gov), 865-574-4805