

PUBLICATIONS

Journal

2005

1. Abdul-Aziz, D. L. Krause, P. A. Bartolotta, and M. T. Tong, "Characterization of a Viscoplastic Constitutive Model and Elastoplastic Finite Element Analyses of a Stirling Space Power Converter Heater Head," International Journal of Computers and Structures, Vol. xx, No. x, ed. xxxxxx, (New York, NY, Elsevier B.V., 2005?), xxx-xxx.
2. D. L. Krause, J. K. Sutter, J. C. Thesken, E. E. Shin, P. J. Marchetti, and J. D. Tippett, "Structural Benchmark Testing of a Composite Combustion Chamber Support," Journal of High Performance Polymers, Vol. xx, No. x, eds. J. Connell and M. A. Meador (Thousand Oaks, CA, SAGE Publishing, 2005), xxx-xxx.

2003

3. A. Abdul-Aziz, D. L. Krause, and M. T. Tong, "Characterization of a Viscoplastic Constitutive Model and Its Application for the Finite Element Analyses of a Stirling Space Power Converter Heater Head," Mechanics of Advanced Materials and Structures, an International Journal, Vol. 10, No. 2, ed. J. N. Reddy (Philadelphia, PA: Taylor and Francis Inc., 2003), 109-125.

2000

4. D. L. Krause and P. A. Bartolotta, "An In-Plane Biaxial Contact Extensometer," Multiaxial Fatigue and Deformation: Testing and Prediction, ASTM STP 1387 (West Conshohocken, PA: American Society for Testing and Materials, 2000), 369-381.

1999

5. P. A. Bartolotta and D. L. Krause, "Titanium Aluminide Applications in the High Speed Civil Transport," Gamma Titanium Aluminides, eds. Y-W. Kim, D. M. Dimiduk, and M. H. Loretto (Warrendale, PA: The Minerals, Metals & Materials Society, 1999), 3-10.

1997

6. P. A. Bartolotta, P. T. Kantzos, and D. L. Krause, "In-plane Biaxial Yield Surface Study of Cast Titanium Aluminide (TiAl)," Proceedings of the 5th International Conference on Biaxial/Multiaxial Fatigue & Fracture, eds. E. Macha and Z. Mroz (Opole, Poland: Wydawnictwo Instytut Slaski Sp. z o. o., European Structural Integrity Society, 1997) 389-402.

1987

7. R. M. Puzak and D. L. Krause, "Supersonic Wind Tunnel Primary Air Cooler Repair," The Welding Innovation Quarterly, Fall 1987 (Cleveland, OH: James F.

Lincoln Arc Welding Foundation, 1987), 14-16. (Note: Gold Award winning paper, James F. Lincoln Arc Welding Foundation 1987 Professional Awards Program)

NASA Technical Reports

2005

1. D. L. Krause, G. R. Halford, R. R. Bowman, "Benchmark Calibration Tests Completed for Stirling Convertor Heater Head Life Assessment," Research and Technology 2004, NASA TM-2005-xxxxxxx (2005), xxx-xxx.
2. D. L. Krause, J. C. Thesken, E. E. Shin, J. K. Sutter, "Structural Benchmark Tests of Composite Combustion Chamber Support Completed," Research and Technology 2004, NASA TM-2005-xxxxxxx (2005), xxx-xxx.

2004

3. D. L. Krause and S. L. Draper, "TiAl Scramjet Inlet Flap Subelement Benchmark Tested," Research and Technology 2004, NASA TM-2005-xxxxxxx (2005), xxx-xxx.
4. D. L. Krause, G. R. Halford, R. R. Bowman, "Benchmark Tests for Stirling Convertor Heater Head Life Assessment Conducted," Research and Technology 2003, NASA TM-2004-212729 (2004), 150-151.
5. D. L. Krause, J. D. Whittenberger, P. T. Kantzos, M. G. Hebsur, "Structural Benchmark Testing of Superalloy Lattice Block Subelements Completed," Research and Technology 2003, NASA TM-2004-212729 (2004), 148-149.
6. M. V. Nathal, J. D. Whittenberger, M. G. Hebsur, P. T. Kantzos, and D. L. Krause, "Superalloy Lattice Block Structures," NASA TM-2004-213109 (2004).

2003

7. M. G. Hebsur, J. D. Whittenberger, D. L. Krause, "Superalloy Lattice Block Developed for Use in Lightweight, High-Temperature Structures," Research and Technology 2002, NASA TM-2003-211990 (2003), 19-20.

2002

8. G. R. Halford, A. Shah, V. K. Arya, D. L. Krause, and P. A. Bartolotta, "Structural Analyses of Stirling Power-Convertor Heater Head for Long-Term Reliability, Durability, and Performance," NASA TM-2002-211327 (2002).
9. D. L. Krause, J. D. Whittenberger, P. T. Kantzos, and M. G. Hebsur, "Mechanical Testing of IN718 Lattice Block Structures," NASA TM-2002-211325 (2002).
10. D. L. Krause and J. D. Whittenberger, "Initial Mechanical Testing of Superalloy Lattice Block Structures," Research and Technology 2001, NASA TM-2002-211333 (2002), 143-144.
11. D. L. Krause, "High-Strength Composite Fabric Testing at Structural Benchmark Test Facility," Research and Technology 2001, NASA TM-2002-211333 (2002), 141-142.

2001

12. P. A. Bartolotta and D. L. Krause, "Benchmark Testing of the Largest Titanium Aluminide Sheet Subelement Conducted," Structures and Acoustics Division Annual Report for 1997 to 1999, ed. C. S. Acquaviva, NASA TM-2001-210366 (2001), 9.
13. D. L. Krause and P. A. Bartolotta, "Biaxial Testing of High-Strength Fabric Improves Design of Inflatable Radar Domes," Research and Technology 2000, NASA TM-2001-210605 (2001), 114-115.
14. D. L. Krause and P. A. Bartolotta, "Strain Measurement System Developed for Biaxially Loaded Cruciform Specimens," Structures and Acoustics Division Annual Report for 1997 to 1999, ed. C. S. Acquaviva, NASA TM-2001-210366 (2001), 22-23.

2000

15. P. A. Bartolotta and D. L. Krause, "Benchmark Testing of the Largest Titanium Aluminide Sheet Subelement Conducted," Research and Technology 1999, NASA TM-2000-209639 (2000), 98-99.
16. P. A. Bartolotta, R. R. Bowman, D. L. Krause, and G. R. Halford, "Long-Term Durability Analysis of a 100,000+ Hr Stirling Power Converter Heater Head," NASA TM-2000-210213 (2000).
17. D. L. Krause, "Strain Measurement System Developed for Biaxially Loaded Cruciform Specimens," Research and Technology 1999, NASA TM-2000-209639 (2000), 102-103.

1999

18. P. A. Bartolotta and D. L. Krause, "Titanium Aluminide Applications in the High Speed Civil Transport," NASA TM-1999-209071 (1999).

1997

19. P. A. Bartolotta and D. L. Krause, "Yield Surface Study of Cast Gamma Titanium Aluminide (TiAl)," Structures Division 1995 Annual Report, NASA TM-107300 (1997), 25.
20. P. A. Bartolotta, G. R. Halford, and D. L. Krause, "EPM Structural Component Successfully Tested Under Pseudo-Operating Conditions," Structures Division 1995 Annual Report, NASA TM-107300 (1997), 26-27.

Conference Proceedings and Presentations

2004

1. M. V. Nathal, J. D. Whittenberger, M. G. Hebsur, P. T. Kantzos, and D. L. Krause, "Superalloy Lattice Block Structures," The 10th International Symposium on Superalloys, eds. K. A. Green, T. M. Pollock, H. Harada, T. E. Howson, R. C.

Reed, J. J. Schirra, and S. Walston (Warrendale, PA: The Minerals, Metals & Materials Society, 2004), 431-440.

2002

2. G. R. Halford, A. Shah, V. K. Arya, D. L. Krause, and P. A. Bartolotta, "Structural Analyses of Stirling Power-Convertor Heater Head for Long-Term Reliability, Durability, and Performance," Space Technology and Applications International Forum (STAIIF-2002): American Institute of Physics Conference Proceedings 608, ed. M. S. El-Genk (Melville, NY: American Institute of Physics, 2002), 880-887.
3. D. L. Krause, J. D. Wittenberger, P. T. Kantzos, and M. G. Hebsur, "Mechanical Testing of IN718 Lattice Block Structures," Processing and Properties of Lightweight Cellular Metals and Structures, Third Global Symposium on Materials Processing and Manufacturing, eds. A. K. Ghosh, T. H. Sanders, and T.D. Claar (Warrendale, PA: The Minerals, Metals & Materials Society, 2002), pp 233-242.

2001

4. G. R. Halford, A. Shah, V. K. Arya, D. L. Krause, and P. A. Bartolotta, "Structural Analyses of Stirling Power-Convertor Heater Head for Long-Term Reliability, Durability, and Performance," 2001 Proceedings of the 36th Intersociety Energy Conversion Engineering Conference: Volume 1 (IECEC), eds. S. Somasundaram, D.H. Allen, et. al. (New York, NY, ASME, 2001), 2001-CT-35.

2000

5. P. A. Bartolotta, R. R. Bowman, D. L. Krause, and G. R. Halford, "Long-Term Durability Analysis of a 100,000+ Hr Stirling Power Convertor Heater Head," 35th Intersociety Energy Conversion Engineering Conference and Exhibit 2000, Vol. 1 (IECEC), AIAA-2000-2841 (2000) 259-265.