

Recent TMS Articles: Nuclear Waste

Provided Courtesy of Materials Technology@TMS



For additional resources, visit <http://www.materialstechnology.org>

PAPER TITLE	AUTHOR(S)	REFERENCE	READ MORE
Radiation Effects in a Model Ceramic for Nuclear Waste Disposal	Ram Devanathan and William J. Weber	JOM, April 2004, pp. 32-35	Read the Full Paper
Dynamic Strain Aging of Ni-Base Alloys Inconel 600 and 690	H. Hänninen, M. Ivanchenko, Y. Yagodzinsky, V. Nevdacha, U. Ehrnstén, and P. Aaltonen	<i>Environmental Degradation of Materials in Nuclear Power Systems XII</i> , 2005, pp.1423-1430	Read the Full Paper
Stiffling of Crevice Corrosion in Alloy 22	K.G. Mon, G.M. Gordon, and R.B. Rebak	<i>Environmental Degradation of Materials in Nuclear Power Systems XII</i> , 2005, pp.1431-1438	Read the Full Paper
Materials Degradation Issues in the U.S. High-Level Nuclear Waste Repository	K.G. Mon, and F. Hua	<i>Environmental Degradation of Materials in Nuclear Power Systems XII</i> , 2005, pp.1439-1456	Read the Full Paper
SCC Initiation and Growth Rate Studies on Titanium Grade 7 and Base Metal, Welded and Aged Alloy 22 in Concentrated Groundwater	P.L. Andresen, G.M. Catlin, P.W. Emigh, and G.M. Gordon	<i>Environmental Degradation of Materials in Nuclear Power Systems XII</i> , 2005, pp.1457-1474	Read the Full Paper
Dynamic Strain Ageing and EAC of Deformed Nitrogen-Alloyed AISI 316 Stainless Steels	U. Ehrnstén, M. Ivanchenko, V. Nevdacha, Y. Yagodzinsky, A. Toivonen, and H. Hänninen	<i>Environmental Degradation of Materials in Nuclear Power Systems XII</i> , 2005, pp.1475-1482	Read the Full Paper
Materials Issues in Nuclear-Waste Management	Man-Sung Yim and K. Linga Murty	JOMe	Launch Site
Materials Issues in Nuclear-Waste Management	Man-Sung Yim and K. Linga Murty	JOM, September 2000, pp.26-29	Read the Full Paper
Uranium Processing during the Treatment of Sodium-Bonded Spent Nuclear Fuel	B.R. Westphal and R.D. Mariani	JOM, September 2000, pp.21-25	Read the Full Paper
Materials Performance Issues for High-Level Radioactive Waste Packages	D.B. Bullen, A.A. Sagüés, P.P. Craig, C.A.W. Di Bella, and K.D. Severson	JOM, September 2000, pp.30-33	Read the Full Paper
The Pyro- and Hydrometallurgical Processing of Uranium-Containing Waste	R.G. Reddy	JOM, January 2001, pp.21-24	Read the Full Paper
An Overview of the Yucca Mountain Project	Vimal Desai	JOM, January 2005, pp.18-19	Read the Full Paper
Modeling the Hydrogen-Induced Cracking of Titanium Alloys in Nuclear Waste Repository Environments	Fred Hua, Kevin Mon, Pasu Pasupathi, Gerald Gordon, and David Shoemith	JOM, January 2005, pp.20-26	Read the Full Paper

Recent TMS Articles: Nuclear Waste

Provided Courtesy of Materials Technology@TMS



For additional resources, visit <http://www.materialstechnology.org>

PAPER TITLE	AUTHOR(S)	REFERENCE	READ MORE
The Stress-Corrosion-Cracking Model for High-Level Radioactive-Waste Packages	<i>P.L. Andersen, G.M. Gordon, and S.C. Lu</i>	JOM, January 2005, pp.27-30	Read the Full Paper
The Open-Circuit Ennoblement of Alloy C-22 and Other Ni-Cr-Mo Alloys	<i>A.C. Lloyd, J.J. Noël, N.S. McIntyre, and D.W. Shoesmith</i>	JOM, January 2005, pp.31-35	Read the Full Paper
The Evaluation of Corrosion Processes for Engineered Barrier Systems	<i>A. Csontos, T. Ahn, A. Passarelli, Y. Pan, D. Dunn, and L. Yang</i>	JOM, January 2005, pp.36-42	Read the Full Paper
In the Final Analysis	<i>James J. Robinson</i>	JOM, January 2005, p.4	Read the Full Paper
The Unlikelihood of Localized Corrosion of Nuclear Waste Packages Arising from Deliquescent Brine Formation	<i>M. Apted, F. King, D. Langmuir, R. Arthur, and J. Kessler</i>	JOM, January 2005, pp.43-48	Read the Full Paper
The Localized Corrosion Resistance and Mechanical Properties of Alloy 22 Waste Package Outer Containers	<i>D.S. Dunn, Y.-M. Pan, K.T. Chiang, L. Yang, G.A. Cragolino, and X. He</i>	JOM, January 2005, pp.49-55	Read the Full Paper
Using Electrochemical Methods to Determine Alloy 22's Crevice Corrosion Repassivation Potential	<i>Kenneth J. Evans, Ahmet Yilmaz, S. Daniel Day, Lana L. Wong, John C. Estill, and Raúl B. Rebak</i>	JOM, January 2005, pp.56-61	Read the Full Paper
Actinides in Metallic Waste from Electrometallurgical Treatment of Spent Nuclear Fuel	<i>D.E. Janney and D.D. Keiser, Jr.</i>	JOM, September 2003, pp.59-60	Read the Full Paper
Ceramic Coatings for a Corrosion-Resistant Nuclear Waste Container Evaluated in Simulated Ground Water at 90 C	<i>Jeffery J. Haslam, Joseph C. Farmer, Robert W. Hopper and Keith R. Wilfinger</i>	Metallurgical & Materials Transactions A: May 2005, pp.1085-1095	Read the Abstract/Acquire this Paper
Corrosion Behavior of Carbon Steel Rock Bolt in Simulated Yucca Mountain Ground Waters	<i>A. Yilmaz, R. B. Rebak and D. Chandra</i>	Metallurgical & Materials Transactions A: May 2005, pp.1097-1105	Read the Abstract/Acquire this Paper
Case Reviews on the Effect of Microstructure on the Corrosion Behavior of Austenitic Alloys for Processing and Storage of Nuclear Waste	<i>V. Kain, P. Sengupta, P. K. De and S. Banerjee</i>	Metallurgical & Materials Transactions A: May 2005, pp.1075-1084	Read the Abstract/Acquire this Paper
Corrosion-Creep Interaction of Stainless Alloys in Acid Chloride Solutions	<i>K. S. Raja, S. A. Namjoshi and D. A. Jones</i>	Metallurgical & Materials Transactions A: May 2005, pp.1107-1120	Read the Abstract/Acquire this Paper

Recent TMS Articles: Nuclear Waste

Provided Courtesy of Materials Technology@TMS



For additional resources, visit <http://www.materialstechnology.org>

PAPER TITLE	AUTHOR(S)	REFERENCE	READ MORE
Risk Assessment of Uniform and Localized Corrosion of Alloy 22	<i>A. Passarelli, T. Bloomer, T. Ahn, D. Dunn and O. Pensado</i>	Metallurgical & Materials Transactions A: May 2005, pp.1121-1127	Read the Abstract/Acquire this Paper
General Corrosion of Alloy 22: Experimental Determination of Model Parameters from Electrochemical Impedance Spectroscopy Data	<i>L. Glen McMillion, D. A. Jones, Adan Sun and Digby D. MacDonald</i>	Metallurgical & Materials Transactions A: May 2005, pp.1129-1141	Read the Abstract/Acquire this Paper
Topologically Close-Packed Phase Precipitation and Thermal Stability in Alloy 22	<i>Y. -M. Pan, D. S. Dunn and G. A. Cragolino</i>	Metallurgical & Materials Transactions A: May 2005, pp.1143-1151	Read the Abstract/Acquire this Paper
The Effect of Potential and Aging on the Pb-Assisted Stress Corrosion Cracking Susceptibility of Alloy 22 Gas Tungsten Arc-Welded Weldments	<i>Aladar A. Csontos, Yi-Ming Pan, Darrell S. Dunn, Leitai Yang and Gustavo A. Cragolino</i>	Metallurgical & Materials Transactions A: May 2005, pp.1169-1177	Read the Abstract/Acquire this Paper
Influence of Halide Ions and Alloy Microstructure of the Passive and Localized Corrosion Behavior of Alloy 22	<i>Martín A. Rodríguez, Ricardo M. Carranza and Raúl B. Rebak</i>	Metallurgical & Materials Transactions A: May 2005, pp.1179-1185	Read the Abstract/Acquire this Paper
Stress-Corrosion-Crack Initiation and Growth-Rate Studies on Titanium Grade 7 and Alloy 22 in Concentrated Groundwater	<i>P. L. Andresen, G. M. Catlin, P. W. Emigh, L. M. Young and G. M. Gordon</i>	Metallurgical & Materials Transactions A: May 2005, pp.1187-1198	Read the Abstract/Acquire this Paper