Record Nr. UNINA9910164278203321

Autore Grossbeck M. L.

Titolo Effects of Radiation on Materials: 21st International Symposium

Pubbl/distr/stampa [Place of publication not identified], : American Society for Testing &

Materials, 2004

ISBN 0-8031-5494-1

Descrizione fisica 1 online resource (770 pages)

Disciplina 620.11228

Soggetti Materials - Effect of radiation on

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Bibliographic Level Mode of Issuance: Monograph

Nota di contenuto Properties of 20 % Cold-Worked 316 Stainless Steel Irradiated

Properties of 20 % Cold-Worked 316 Stainless Steel Irradiated at Low Dose Rate / TR Allen, H Tsai, JI Cole, J Ohta, K Dohi, H Kusanagi --Study on Ductile Fracture Strain and Fracture Toughness of Irradiated Austenitic Stainless Steels / S Nishimura, H Sakamoto, T Kato --Investigation of Microstructure and Mechanical Properties of 18Cr-10Ni-Ti Steel Irradiated in the Core of VVER-1000 Reactor / VS Neustroev, VG Dvoretzky, ZE Ostrovsky, VK Shamardin, GA Shimansky -- Influence of Oversized Solute Additions on Radiation-Induced Microstructure and Microchemistry in Austenitic Stainless Steel / BH Sencer, GS Was, L Fournier, EA Kenik, EP Simonen, SM Bruemmer --Solute Addition Effect for Fe-15Cr-20Ni Austenitic Steels Irradiated in Joyo / K Fukumoto, H Matsui, T Donomae, I Yamagata, N Akasaka --The Effect of Void Swelling on Electrical Resistance and Elastic Moduli in Austenitic Steels / AV Kozlov, EN Scherbakov, SA Averin, FA Garner --The Role of Fine Defect Clusters in Irradiation-Assisted Stress Corrosion Cracking of Proton-Irradiated 304 Stainless Steel / JT Busby, MM Sowa, GS Was, EA Kenik -- The Effect of Hardening Source in Proton Irradiation-Assisted Stress Corrosion Cracking of Cold Worked Type 304 Stainless Steel / MC Hash, JT Busby, GS Was -- Martensitic Transformations in Neutron Irradiated and Helium Implanted Stainless Steels / KK Kadyrzhanov, OP Maksimkin -- Fracture Toughness and Atom Probe Characterization of a Highly Embrittled RPV Weld / MA Sokolov, RK Nanstad, MK Miller -- On the Mechanism of Irradiation Embrittlement Enhancement in Reactor Pressure Vessel Steels at High

Neutron Fluences / VA Pechenkin, YV Konobeev, IA Stepanov, YA Nikolaev -- Irradiation and Post-Annealing Reirradiation Effects on Fracture Toughness of RPV Steel Heat JRQ / RK Nanstad, P Tipping, RD Kalkhof, MA Sokolov -- Dependence of Re-embrittlement Rate After Annealing on the Copper, Nickel and Phosphorus Contents in Model Alloys / M Valo, U Ehrnsten, J Kohopaa, L Debarberis, A Kryukov, R Rintamaa -- Evaluation of Irradiation Embrittlement of A508 Gr 4N and Comparison to Other Low-Alloy Steels / GL Wire, WJ Beggs, TR Leax --Microstructural Aspects of Irradiation Damage in A508 Gr 4N Forging Steel: Composition and Flux Effects / MG Burke, RJ Stofanak, JM Hyde, CA English, WL Server -- Effect of Stress Relief Time on the Transition Temperature of Linde 80 Welds / JB Hall, KK Yoon -- Critical Review of Through-Wall Attenuation of Mechanical Properties in RPV Steels / CA English, WL Server, ST Rosinski -- A Mechanistically-Guided Charpy Embrittlement Correlation for Reactor Pressure Vessel Integrity Assessment / ST Rosinski, WL Server, RG Lott -- Development of RPV Embrittlement Evaluation Technology for Charpy Upper Shelf Region / S Hatano, K Sakamoto, T Osaki -- Master Curve of Irradiated JRQ Material / M Serrano, FJ Perosanz, J Lapena -- Development of International Guidelines for Application of the Master Curve Approach to Reactor Pressure Vessel Integrity / WL Server, ST Rosinski, RG Lott -- The Technical Foundations of a Unified Adjusted Reference Temperature for RPV Fracture Toughness / RG Lott, ST Rosinski, WL Server -- A Statistical Analysis of the Effect of Neutron Irradiation Dose and Dose Spectrum on Changes of Charpy Impact Energy for C-Mn Steels / R Moskovic, MJ Crowde, PEJ Flewitt -- The Effect of Neutron Flux on Radiation-Induced Embrittlement in Reactor Pressure Vessel Steels / RE Stoller -- Hardening Mechanisms in Ferritic/Martensitic Steels / N Baluc, R Schaublin, P Spatig, M Victoria -- Effects of Copper Content on the Tensile Properties of Iron-Copper Alloys / MB Toloczko, AS Kumar, ML Hamilton, S Jumel, JC Van Duysen, LL Snead -- Irradiation Hardening and Microstructural Evolution in Fe-Cu Model Alloys / T Kitao, R Kasada, A Kimura, H Nakata, K Fukuya, H Matsui, M Narui --Effect of Heat Treatment and Tantalum on Microstructure and Mechanical Properties of Fe-9Cr-2W-0.25V Steel / RL Klueh, N Hashimoto, MA Sokolov -- Oxide Particle Stability in Oxide Dispersion Strengthened Ferritic Steels During Neutron Irradiation / S Yamashita, K Oka, T Yoshitake, N Akasaka, S Ukai, S Ohnuki -- Examination of Postirradiation Deformation Microstructures in F82H / DS Gelles, R Schaublin -- Fracture Toughness Characterization of Irradiated F82H in the Transition Region / MA Sokolov, RL Klueh, GR Odette, K Shiba, H Tanigawa -- Incubation Period for Void Swelling and Its Dependence on Temperature, Dose Rate, and Dislocation Structure Evolution / MP Surh. JB Sturgeon, WG Wolfer -- Determination of the Lower Temperature Limit of Void Swelling of Stainless Steels at PWR-Relevant Displacement Rates / SI Porollo, YV Konobeev, AM Dvoriashin, VM Krigan, FA Garner -- Dependence of Maximum Swelling Temperature on Damage Dose in Cold Worked 16Cr-15Ni-2Mo-1Mn Cladding Irradiated in BN-600 / AV Kozlov, IA Portnykh, SV Bryushkova, EA Kinev -- Stress and Temperature Dependence of Irradiation Creep of Selected FCC and BCC Steels at Low Swelling / MB Toloczko, FA Garner -- Irradiation Creep and Swelling of Russian Ferritic-Martensitic Steels Irradiated to Very High Exposures in the BN-350 Fast Reactor at 305-335°C / YV Konobeev, AM Dvoriashin, SI Porollo, SV Shulepin, NI Budylkin, EG Mironova, FA Garner -- Kinetics of Helium Bubble Formation in Nuclear and Structural Materials / CM Schaldach, WG Wolfe -- Bubble Microstructures in Helium Injected Palladium Foils / DS Gelles, RA Causey, K Hertz, DF Cowgill, R Schaublin -- Fatigue Response and Life

Prediction of Selected Reactor Materials / M Li, JF Stubbins -- Detection of Radiation-Enhanced Diffusion by Means of Neutron-Irradiated Diffusion Couples of Fe-Cr-Ni System / N Akasaka, K Tanaka, S Ohnuki, H Takahashi, S Watanabe, M Itoh -- Surprisingly Large Generation and Retention of Helium and Hydrogen in Pure Nickel Irradiated at High Temperatures and High Neutron Exposures / LR Greenwood, FA Garner, BM Oliver, ML Grossbeck, WG Wolfe -- The Influence of Pre-Irradiation Heat Treatments on Thermal Non-Equilibrium and Radiation-Induced Segregation Behavior in Model Austenitic Stainless Steel Alloys / JI Cole, TR Allen, GS Was, RB Dropek, EA Kenik -- Inter-Granular Phosphorus Segregation in Ferritic Steels / RG Faulkner, PEJ Flewitt, Z Lu -- Grain Boundary Phosphorous Segregation and Its Influence on the Ductile Brittle Transition Temperature in Reactor Pressure Vessel Steels / A Kimura, M Shibata, R Kasada, H Nakata, K Fujii, K Fukuya -- The Modeling of Radiation-Induced Phosphorus Segregation at Point Defect Sinks in Dilute Fe-P Alloys / IA Stepanov, VA Pechenkin, YV Konobeev -- Irradiation Induced Vacancy-Cu Aggregations in Fe-Cu Model Alloys of Reactor Pressure Vessel Steels Studied by Positron Annihilation / Y Nagai, K Takadate, Z Tang, H Ohkubo, M Hasegawa -- Heavy Ion Fluence Measurements Based on Radiation Effects Generated in CTA Foils / Z Peimel-Stuglik. VA Skuratov -- Tensile Property Estimates Obtained Using a Low Compliance Shear Punch Test Fixture / MB Toloczko, RJ Kurtz, K Abe, A Hasegawa -- Revisiting the Use of SiC as a Post Irradiation Temperature Monitor / LL Snead, AM Williams, AL Qualls -- New Methodologies for Developing Radiation Embrittlement Models and Trend Curves of the Charpy Impact Test Data / JA Wang, NSV Rao -- Mechanical and Structural Property Changes of Monolithic SiC and Advanced SiC/SiC Composites due to Low Temperature He -Ion Irradiation and Post-Irradiation High Temperature Annealing / S Nogami, S Miwa, A Hasegawa, K Abe -- Precipitation and Amorphization in Boron Carbide Irradiated by High Energy Helium Ions / T Maruyama, M Iwanami, S Ohnuki, T Suda, S Watanabe, K Ikezawa -- Effects of Pu Decay on a Sodalite Based Ceramic Waste Form / J-F Jue, SM Frank, TP O'Holleran, W Sinkler, TL Barber, SG Johnson, KM Goff -- Changes in Mechanical Properties of High-Purity V-4Cr-4Ti-Si, Al, Y Alloys after Neutron Irradiation at Relatively Low Temperatures / T Chuto, M Satou, A Hasegawa, K Abe, T Muroga, N Yamamoto -- Creep Deformation in V-4Cr-4Ti in a Low-Oxygen Lithium Environment / ML Grossbeck --Varying Temperature Irradiation Effects of V-4Cr-4Ti Alloy with Small Addition of Si, Al and Y / M Satou, H Nakayashiki, T Chuto, A Hasegawa, K Abe -- Peculiarities of Structural and Behavioral Changes of Some Zirconium Alloys at Damage Doses of Up to 50 dpa / GP Kobylyansky, AE Novosyolov, ZE Ostrovsky, VK Shamardin, AV Obuhov, VN Shishov, MM Peregud, AV Nikulina -- Effect. of Ion Irradiation on Microstructure and Hardness in Zircaloy-4 / XT Zu. M Atzmon, LM Wang, LP You, FR Wan, GS Was, RB Adamson --Microstructure Response in Copper and Copper Alloys Irradiated with Fission Neutrons with Controlled Temperature Variations / T Muroga, H Watanabe -- Author Index -- Subject Index.