

1. Record Nr.	UNINA9910164282703321
Titolo	Effects of Radiation on Materials: 20th International Symposium
Pubbl/distr/stampa	[Place of publication not identified], : American Society for Testing & Materials, 2001
ISBN	0-8031-5454-2
Descrizione fisica	1 online resource (xii, 879 pages) : illustrations
Disciplina	620.11228
Soggetti	Materials - Effect of radiation on Nuclear pressure vessels
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Review of Current Recommendations from the Recent IAEA Specialists Meeting on Irradiation Effects on Pressure Vessel Steels and its Mitigation / LM Davies, WL Server, V Lyssakov, ST Rosinski -- A Mechanistically-Based Model of Irradiation Damage in Low Alloy Steel Submerged Arc Welds / TJ Williams, D Ellis -- Vessel Investigation Program of "CHOOZ A" PWR Reactor after Shutdown / C Brillaud, Y Grandjean, S Saillet -- Development of Reconstitution Technology for Surveillance Specimens in Japan Power Engineering and Inspection Corporation / S Kataoka, N Kato, K Taguchi, M Yamamoto, Y Oka -- Master Curve Characterization of Irradiation Embrittlement Using Standard and 1/3-Sized Precracked Charpy Specimens / B-S Lee, W-J Yang, M-Y Huh, S-H Chi, J-H Hong -- Radiation Damage Assessment by the Use of Dynamic Toughness Measurements on Pre-Cracked Charpy-V Specimens / E Lucon, R Chaouadi -- Comparison of Transition Temperature Shifts Between Static Fracture Toughness and Charpy-v Impact Properties Due to Irradiation and Post-Irradiation Annealing for Japanese A533B-1 Steels / K Onizawa, M Suzuki -- Yield and Toughness Transition Predictions for Irradiated Steels Based on Dislocation Mechanics / M Wagenhofer, HP Gunawardane, ME Natishan -- Master Curve Evaluation of Irradiated Russian VVER Type Reactor Pressure Vessel Steels / H-W Viehrig, J Boehmert, J Dzugan, H Richter -- Fracture Toughness Characterization of 304L and 316L Austenitic Stainless Steels and Alloy 718 After Irradiation in High-Energy, Mixed

Proton/Neutron Spectrum / MA Sokolov, JP Robertson, LL Snead, DJ Alexander, P Ferguson, MR James, SA Maloy, WF Sommer, G Willcutt, MR Louthan -- Review of Phosphorus Segregation and Intergranular Embrittlement in Reactor Pressure Vessel Steels / CA English, SR Ortner, G Gage, WL Server, ST Rosinski -- Modeling of Phosphorus Accumulation on Grain Boundaries in Iron Alloys under Irradiation / VA Pechenkin, IA Stepanov, YV Konobeev -- Grain Boundary Phosphorus Segregation Under Irradiation and Thermal Aging and Its Effect on the Ductile-to-Brittle Transition / S Song, RG Faulkner, PEJ Flewitt -- An Evaluation of Through-Thickness Changes in Primary Damage Production in Commercial Reactor Pressure Vessels / RE Stoller, LR Greenwood -- Hardness and Microstructure Changes with Thermal Annealing of Neutron-Irradiated Fe-Cu Alloys / H Kawanishi, S Suzuki -- Effects of Copper Concentration and Neutron Flux on Irradiation Hardening and Microstructure Evolution in Fe-Cu Model Alloys / R Kasada, T Kitao, K Morishita, H Matsui, A Kimura -- Effects of Neutron Irradiation and Thermal Annealing on Model Alloys Using Positron Annihilation Techniques / ES Cumblidge, GL Catchen, AT Motta, G Brauer, J Bohmert -- Microstructural Evolution in High Nickel Submerged Arc Welds / JM Hyde, D Ellis, CA English, TJ Williams -- An Evaluation of the Effect of Radiation Environment on Linde 80 Reactor Vessel Welds / MJ DeVan, WA Pavinich -- Reirradiation Response Rate of a High-Copper Reactor Pressure Vessel Weld / SK Iskander, RK Nanstad, CA Baldwin, DW Heatherly, MK Miller, I Remec -- Relation Between Resistivity and Mechanical Properties in Heat Affected Zone of Welded Pressure Vessel Steel / R Kasada, T Suzuki, K Itoh, Y Naruse, A Kimura -- Fracture Toughness and Tensile Properties of Irradiated Reactor Pressure Vessel Cladding Material / MG Horsten, WPA Belcher -- True Characteristics of Strength and Ductility for Neutron-Irradiated Metals and Alloys / OP Maksimkin, OV Tivanova -- Investigation of Temper Embrittlement in Reactor Pressure Vessel Steels Following Thermal Aging, Irradiation, and Thermal Annealing / RK Nanstad, DE McCabe, MA Sokolov, CA English, SR Ortner -- Composition Effects on the Radiation Embrittlement of Iron Alloys / J Bohmert, A Ulbricht, A Kryukov, Y Nikolaev, D Erak -- The Determination of Bias Factor Stress Dependence from Experimental Data on Irradiation Creep and Stress-Affected Swelling in Austenitic Stainless Steels / YV Konobeev, VA Pechenkin, FA Garner -- Swelling and Microstructural Evolution in 316 Stainless Steel Hexagonal Ducts Following Long-Term Irradiation in EBR-II / JI Cole, TR Allen, H Tsai, S Ukai, S Mizuta, N Akasaka, T Donomae, T Yoshitake -- Radiation-Induced Segregation and Void Swelling in 304 Stainless Steel / TR Allen, JI Cole, EA Kenik -- Effect of Irradiation Environment of Fast Reactor's Fuel Elements on Void Swelling in P, Ti-Modified 316 Stainless Steel / N Akasaka, I Yamagata, S Ukai -- The Swelling Dependence of Cold Worked 16Cr-15Ni-2Mo-IMn Steel on Neutron Irradiation Temperature, Fluence and Damage Rate During Its Use as a Cladding Material in the BN-600 Reactor / AV Kozlov, EA Kinev, SV Bryushkova, IA Portnykh -- Tensile Properties of 12% Cold-Worked Type 316 Stainless Steel Irradiated in EBR-II Under Lower-Dose-Rate Conditions to High Fluence / T Yoshitake, T Donomae, S Mizuta, H Tsai, RV Strain, TR Allen, JI Cole -- Irradiation Creep Deformation of Modified 316 and 15Cr-20Ni Base Austenitic Fuel Elements Irradiated in FFTF / A Uehira, S Ukai, S Mizuta, RJ Puigh -- Behavior of Different Austenitic Stainless Steels, Conventional, Reduced Activation (RA) and ODS Chromium-Rich Ferritic-Martensitic Steels Under Neutron Irradiation at 325°C in PWR Environment / J-C Brachet, X Averty, P Lamagnere, A Alamo, F Rozenblum, O Raquet, J-L Bertin -- Post-Irradiation Deformation Microstructures in Fe-9Cr / DS Gelles, ML

Hamilton, R Schaublin -- Effect of Specimen Size on Fatigue Properties of Reduced Activation Ferritic/Martensitic Steel / T Hirose, H Sakasegawa, A Kohyama, Y Katoh, H Tanigawa -- Correlation Between Creep Properties and Microstructure of Reduced Activation Ferritic/Martensitic Steels / H Sakasegawa, T Hirose, A Kohyama, Y Katoh, T Harada, T Hasegawa -- Comparison of Thermal Creep and Irradiation Creep of HT9 Pressurized Tubes at Test Temperatures from ~490°C to 605°C / MB Toloczko, BR Grambau, FA Garner, K Abe -- Examination of 304L Stainless Steel to 6061-T6 Aluminum Inertia Welded Transition Joints after Irradiation in a Spallation Neutron Spectrum / KA Dunn, MR Louthan, JI Mickalonis, S Maloy, MR James -- Microstructural Alteration of Structural Alloys by Low Temperature Irradiation with High Energy Protons and Spallation Neutrons / BH Sencer, GM Bond, FA Garner, SA Maloy, WF Sommer, MR James -- Retention of Very High Levels of Helium and Hydrogen Generated in Various Structural Alloys by 800 MeV Protons and Spallation Neutrons / BM Oliver, FA Garner, SA Maloy, WF Sommer, PD Ferguson, MR James -- The Influence of High Energy Proton Irradiation on the Corrosion of Materials -- S Lillard, F Gac, M Paciotti, P Ferguson, G Willcutt, G Chandler, L Daemen -- The Effect of High Energy Protons and Neutrons on the Tensile Properties of Materials Selected for the Target and Blanket Components in the Accelerator Production of Tritium Project / SA Maloy, MR James, GJ Willcutt, WF Sommer, WR Johnson, MR Louthan, ML Hamilton, FA Garner -- High-Energy Spallation Neutron Effects on the Tensile Properties of Materials for the Target and Blanket Components for the Accelerator Production of Tritium Project / MR James, SA Maloy, WF Sommer, WR Johnson, DA Lohmeier, ML Hamilton -- Microstructural Evolution of Reduced Activation and Conventional Martensitic Steels after Thermal Aging and Neutron Irradiation / M-H Mathon, Y de Carlan, G Geoffroy, X Averty, C-H de Novion, A Alamo -- Dimensional Characteristics of Displacement Cascades in Austenitic Steels under Neutron Irradiation at Cryogenic Temperature / AV Kozlov, IA Portnykh, LA Skryabin, SS Lapin -- On the a+?-Phase Boundary in Nickel and in Manganese Containing Stainless Steel Alloys / W Schule -- Effect of Nickel on Irradiation Hardening and Microstructure Evolution of Proton Irradiated Fe-Cu Alloys / H Shibamoto, T Kitao, H Matsui, M Hasegawa, S Yamaguchi, A Kimura -- Effect of Final Irradiation Temperature and Frequency of Irradiation Temperature Cycles on Microstructural Evolution of Vanadium Alloys / N Nita, K Fukumoto, H Matsui -- Hardening of Vanadium Doped with Nitrogen by Heavy Ion Irradiation and Post-Irradiation Annealing / T Nagasaka, H Takahashi, T Muroga, N Yoshida, T Tanabe -- Hydrogen and Helium Gas Formation and their Release Kinetics in Tungsten Rods after Irradiation with 800 MeV Protons / BM Oliver, FA Garner, ML Hamilton, WF Sommer, SA Maloy, PD Ferguson, MR James -- The Influence of Temperature, Fluence, Dose Rate, and Helium. Production on Defect Accumulation and Swelling in Silicon Carbide / H Kishimoto, Y Katoh, A Kohyama, M Ando -- Microstructural Stability of SiC/SiC Composites under Dual-Beam Ion Irradiation / Y Katoh, H Kishimoto, M Ando, A Kohyama, T Shibayama, H Takahashi -- Molecular Dynamics Simulation of Radiation Damage Production in Cubic Silicon Carbide / L Malerba, JM Perlado, I Pastor, T Diaz de la Rubia -- Influence of the Reactor and Cyclotron Irradiation on Energy Transformation during Plastic Deformation of Metal Materials / OP Maksimkin, MN Gusev -- Irradiation-Induced Amorphization and Its Recovery Behavior in Cold-Rolled and Aged Ti-Ni Shape Memory Alloys / A Kimura, T Hirose, H Matsui -- Effect of Mass and Energy on Preferential Amorphization in Polycrystalline Silicon Film during Ion

Irradiation / M Takeda, S Ohnuki, T Suda, S Watanebe, H Abe, I  
Nashiyama -- Crack Growth Resistance of Irradiated Zr-2.5Nb Pressure  
Tube Material at Low Hydrogen Levels / PH Davies, DD Himbeault, RSW  
Shewfelt, RR Hosbonds -- Author Index -- Subject Index.

---