

2010 —MOCHIZUKI Masahito

Scientific Papers/Commentary Articles

1. M. Mochizuki and M. Toyoda, Prediction of Ductile-to-Brittle Transition Under Different Strain Rates in Undermatched Welded Joints, Transactions of the ASME, Journal of Pressure Vessel Technology, Vol. 133, 133, 031401-1-8, 2011
2. K. Miyazaki and M. Mochizuki, The Effects of Residual Stress Distribution and Component Geometry on the Stress Intensity Factor of Surface Cracks, Transactions of the ASME, Journal of Pressure Vessel Technology, Vol. 133, 133, 011701-1-7, 2011
3. Y. Mikami, R. Uruguchi, K. Sogabe and M. Mochizuki, SCC Prediction in Weld Components by Multi-Scale Analysis Incorporating Crystal Plasticity, Mathematical Modelling of Weld Phenomena 9, 9, 699-713, 2010
4. M. Mochizuki, M. Tanaka and S. Okano, Distortion Analysis by Combining Arc Plasma Process with Weld Mechanics, Mathematical Modelling of Weld Phenomena 9, 9, 551-578, 2010
5. J. Yamamoto, K. Hiraoka and M. Mochizuki, Analysis of Martensite Transformation Behavior in Welded Joint of Low Transformation-Temperature Welding Wire, Science and Technology of Welding and Joining, 18, 104-110, 2010

International Conference Proceedings

1. M. Mochizuki, S. Kanno, S. Shimizu and Y. Daitou, Diagnostics of Nuclear Power Plant Components due to Thickness Measurement by Using Digital Radiography, Proceedings of the 2010 ASME Pressure Vessels and Piping Conference, PVP2010-25999, 1-8, 2010
2. M. Mochizuki, Weld HAZ Mis-Matching Design for Joint Performances in High Chromium Steel Welded Pipe-Joint for Sodium Cooled Fast Breeder Reactor, Proceedings of the 2010 ASME Pressure Vessels and Piping Conference, PVP2010-25903, 1-10, 2010
3. M. Mochizuki and S. Itoh, Million-Finite-Element-Order Large-Scale Computation of Residual Stress in Complicated Weld Structures, Proceedings of the 2010 ASME Pressure Vessels and Piping Conference, PVP2010-25902, 1-10, 2010
4. M. Mochizuki and S. Okano, Coupling Computation between Weld Mechanics and Arc Plasma Processes, Proceedings of the 2010 ASME Pressure Vessels and Piping Conference, PVP2010-25901, 1-14, 2010
5. M. Mochizuki, H. Mori and J. Katsuyama, Mechanism Study on IGSCC by Analyzing Residual Stress and Work Hardening in Welds of Low-Carbon Austenitic Stainless Steel with Surface Machining, Proceedings of the 2010 ASME Pressure Vessels and Piping Conference,

PVP2010-25900, 1-10, 2010

6. M. Mochizuki and Y. Mikami, Prediction of SCC Initiation in Weld Components by Multi-Scale Analysis Incorporating Crystal Plasticity, Proceedings of the 2010 ASME Pressure Vessels and Piping Conference, PVP2010-25899, 1-12, 2010
7. A. Kawaguchi, S. Itoh, M. Mochizuki and M. Kameyama, Large-Scale Computation of Welding Residual Stress, Proceedings of the Joint International Conference on Supercomputing in Nuclear Applications and Monte Carlo, OC2-2-II-4, 1-8, 2010
8. Y. Mikami, K. Sogabe, S. Nishikawa and M. Mochizuki, Multi-scale Analysis of Microscopic Stress Concentration at Grain Boundary in Weld Metal of Ni-based Alloy Joint for SCC Evaluation, Proceedings of the 18th European Conference on Fracture, Fracture of Materials and Structures from Micro to Macro Scale, B.04.6-4, 1-10, 2010
9. T. Hashimoto, Y. Osawa, S. Itoh, M. Kameyama, N. Hirano, N. Chigusa, K. Saida, M. Mochizuki and K. Nishimoto, Evaluation for Stability of Water Jet Peening during Long Term Operation, Proceedings of The 3rd Inter-University Research Seminar – IURS2010, 51-54, 2010
10. L. Yu, Y. Nakabayashi, M. N. B. Jaafar, M. Kameyama, S. Hirano, N. Chigusa, K. Saida, M. Mochizuki and K. Nishimoto, Prediction using Neural Network for Hardness in CGHAZ of Low-Alloy Steel Produced by Temper Bead Technique, Proceedings of The 3rd Inter-University Research Seminar – IURS2010, 47-50, 2010

Awards

1. M. Mochizuki, PVP Dr. Heki Shibata International Outstanding Award, 22.7.21