2010 年度業績 ―望月 正人

学術論文・解説記事

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. 北野萌一, 岡野成威, 望月正人, 高強度鋼の適用拡大に向けた溶接部軟化許容設計の基礎的検討, 鋼構造年次論文報告集, 18, 165-172, 2010
4. Y. Mikami, R. Uraguchi, 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
5. 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
6. 川畑友弥, 堺堀英男, 大西一志, 望月正人, 岡野成威, 北野萌一, 高張力鋼継手の耐脆性破壊特性に及ぼす溶接継手軟質化の影響 - HT950 溶接継手における力学的検討, 溶接学会論文集, 28, 296-304, 2010
7. 北野萌一, 岡野成威, 望月正人, 大西一志, 川畑友弥, 堺堀英男, 強度ミスマッチが軟質溶接継手の強度に及ぼす影響の微視組織を考慮した評価 - HT950 溶接継手における力学的検討, 溶接学会論文集, 28, 288-295, 2010
8. 岡野成威, 松下和憲, 望月正人, 豊田政男, 移動熱源の影響に注目した入熱パラメータと角変形の関係に関する一考察, 溶接学会論文集, 28, 272-280, 2010
9. 白井秀彰, 望月正人, 豊田政男, 自動車部品における塑性流動を活用したアルミニウム合金とステンレス鋼の異材接合法の開発, 軽金属溶接構造協会誌, 48, 286-292, 2010
10. 越智申久, 岡野成威, 望月正人, 嶋村純二, 石川信行, 多電極サブマージアーク溶接における温度場特性に関する理論解析, 溶接学会論文集, 28, 158-166, 2010
11. 岡野成威, 望月正人, 円周多層溶接配管継手内表面における軸方向圧縮残留応力生成のための適正溶接施工法の検討, 圧力技術, 48, 86-96, 2010
12. 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
13. 柴原正和, 河村恵里, 生島一樹, 伊藤真介, 望月正人, 正岡孝治, ステレオ画像法による三次元溶接変形計測法の開発, 溶接学会論文集, 28, 108-115, 2010

14. 岡野成威, 松下和憲, 望月正人, 豊田政男, 上山智之, 入熱パラメータと溶接角変形の関係に関する実験的考察, 溶接学会論文集, 28, 97-107, 2010
15. 岡野成威, 望月正人, 豊田政男, 局所冷却を伴う温度場で生じる溶接残留変形とその低減効果, 溶接学会論文集, 28, 72-79, 2010

国際会議プロシーディングス

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

受賞

1. 鳥形啓輔, 平成 22 年度溶接学会奨学賞, 23.3.24
2. 伊與田宗慶, 溶接学会溶接冶金研究委員会創設 50 周年記念シンポジウムポスター賞, 22.10.19
3. 伊與田宗慶, 自動車技術会研究奨励賞, 23.3.15
4. 三上欣希, 溶接学会 溶接冶金研究委員会 第 11 回 優秀研究賞, 22.5.19
5. 望月正人, 米国機械学会 PVP Dr. Heki Shibata International Outstanding Award, 22.7.21
6. 望月正人, 科学技術振興機構 若手表彰, 23.2.4