

***Journal of Smart Processing***

**Vol. 7 No. 1 2018 (January 2018)**

**CONTENTS**

**見える化技術を用いた溶接・接合プロセスの先進的研究**

Preface.....	Manabu TANAKA1.....	1
Preface of Reviews .....	Masaya SHIGETA.....	2
<b>Reviews</b>		
To Diagnose Complex Electromagnetic-Thermal-Fluid Phenomena of Arc Welding by In-situ Observation Technique	Masaya SHIGETA and Manabu TANAKA.....	3
High Accurate Evaluation of Weld Solidification Cracking Susceptibility by In-situ Observation Technique	Kota KADOI.....	8
Development of Computing Methods for Analysis of Joining-Induced Thermal Conduction, Residual Stress and Deformation in Thin Plates	Ninshu MA and Hisashi SERIZAWA.....	14
Numerical Analyses of Charpy Impact Test for Welded Joints	Yasuhiro TAKASHIMA and Fumiyoji MINAMI.....	21
Lead-Free High Temperature Bonding Processes for Next Generation Power Module Packaging	Min-Su KIM and Hiroshi NISHIKAWA.....	28
<b>S.P.S.News .....</b>	<b>N1</b>	