CONTENTS

JOURNAL OF THE JAPAN WELDING SOCIETY
Vol.90 No.4 June 2021

The Address by the President in General Meeting ................................................................. HIROSE Akio 3
Essay  
What I Think Back in My 40th Year of Research Work .................................................. KASUYA Tadashi 4

The Latest Technology Note
Aircraft Engine Titanium Alloys, Welding / Joining Process and ........................................... TSUZUKI Ryoichi 8
Automation Technology for Future

Technical Information ~ Special Issue ~
Passion of Young Professionals for Welding and Joining Research

A Preface ................................................................................................................................. (KASANO Kazuki 30
YOAMAMOTO Hajime

Approaches and Future Developments about Evaluation of .................................................. KAWABE Nao 31
Hydrogen Diffusion Behavior in Resistance Spot Welds
Research for Carbide Composite Laser Cladding on Steam Turbine Blades .......................... NAKASHIMA Yuya 33
for Geothermal Power Generation
Influence of Gas Cutting on Deformation during Removal of Constraint Jig ......................... ASHIDA Ryo 36
Using Fast Large-Scale Analysis
Development of Numerical Model for Visualization of ...................................................... KOMEN Hisaya 40
Submerged Arc Welding Phenomena
A Technique for Preventing Solidification Cracking at the end part ........................................ YOKOTA Hiroyoshi 43
in One-Side Submerged Arc Welding
My Passion for Dissimilar Joining Research in Student Days Connecting ............................ SAKINO Shota 46
with My Current Work
The First Step as a Researcher in the Welding Process ......................................................... TANAKA Keigo 50

A Class in Joining & Welding ~ Application Examples Learned from the Basics to the Advanced Level ~
Solid-State Dissimilar Film Formation for Metals, Ceramics, and Polymers ........................ OGAWA Kazuhiro 53
by Cold Spray Technique

Point Lesson of Experiments
Visualization of Material Flow During Friction Stir Welding .............................................. SHIBAYANAGI Toshiya
ORI Kyohei
KAWANISHI Syoichi
TOMONAGA Naoya
YAMANE Takeshi 62
Utilizing Transparent Fluid

Up-to-the-minute
Report on 27th Symposium on “Microjoining and Assembly Technology in Electronics” ........ MATSUSHIMA Michiya 66

Spot Light
~ My History for Welding ~ ................................................................................................... MAEDA Kyohei 69

WELNET for Young Members
Report of WELNET Evening Forum at JWS National Meeting in Spring 2021 ....................... 72

Calendar of Event .................................................................................................................. 73

Society Announcements .......................................................................................................... 74

Quarterly Journal of the Japan Welding Society Vol. 39 No.1 2021 Contents ........................................ 75

Notice for photocopying
If you wish to photocopy any work of this publication, you have to get permission from the following organization to which licensing of copyright clearance is delegated by the copyright owner.

<All users except those in USA> Japan Academic Association for Copyright Clearance, Inc. (JAACC) 6-41 Akasaka 9-chome, Minato-ku, Tokyo 107-0052 Japan TEL: 81-3-3475-5618 FAX: 81-3-3475-5619 E-mail: info@jaacc.jp

<Users in USA> Copyright Clearance Center, Inc. 222 Rosewood Drive, Danvers, MA 01923 USA Phone: 1-978-750-8400 FAX: 1-978-646-8600