

14th International Conference on Materials and Manufacturing Technologies

Selected peer-reviewed extended articles
based on abstracts presented at the
14th International Conference on Materials and
Manufacturing Technologies (ICMMT 2023)

Aggregated Book

Edited by

Vladimir Khovaylo and Nguyen Quang Liem



Copyright © 2023 Trans Tech Publications Ltd, Switzerland

All rights reserved. No part of the contents of this publication may be reproduced or transmitted in any form or by any means without the written permission of the publisher.

Trans Tech Publications Ltd
Seestrasse 24c
CH-8806 Baech
Switzerland
<https://www.scientific.net>

Volume 100 of
Scientific Books Collection
ISBN 978-3-0364-0229-1

Full text available online at <https://www.scientific.net>

Distributed worldwide by
Trans Tech Publications Ltd
Seestrasse 24c
CH-8806 Baech
Switzerland
Phone: +41 (44) 922 10 22
e-mail: sales@scientific.net

Printed with permission by
Curran Associates Inc. (2023)

CURRAN ASSOCIATES INC.
proceedings
.com

Additional copies of this
publication are available from:

Web: www.proceedings.com/71588.html

Table of Contents

Preface	v
Conference Committees	vi
Chapter 1: Steel and Alloys	
Microstructure and Fatigue Life of Surface Modified PBF-LB Manufactured Maraging Steel	
T. Rautio, M. Jaskari, M. Hietala and A. Järvenpää	3
Multi Objective Parametric Optimization of Ultrasonic Vibration Assisted Turning on Ti6Al4V Alloy	
V.K. Pasam, G. Kartheek, S. Rankireddy and L. Dumpala	11
The Effect of Laser Heat Treatment and Severe Shot Peening on Laser Powder Bed Fusion Manufactured AISI 316L Stainless Steel	
M. Hietala, T. Rautio, M. Jaskari, T. Gundgire and A. Järvenpää.....	17
Chapter 2: Advanced Technologies	
Parametric Study of the Galvanic Reaction Parameters on the Synthesis of 1-Dimensional Cu-Ag Nanostructures	
M.K.J. Exconde and M.D.L. Balela.....	27
Investigation of Basic Characteristics of Waterproof-Breathable Nonwoven Nano-Fabric Manufactured by Improved Melt-Blowing Method	
S.P. Tsai, W. Wu, H. Sota, T. Hirogaki and E. Aoyama	35
Exploring Microgravity Liquid Printing Based on Resin Solidification for Outer Space Applications	
F. Diaz Palacios, G. Sahonero Alvarez, G. Rojas, M. Clavijo, J. Ordoñez and K. Nallar.....	41
Chapter 3: Green Building Materials	
Mechanical Properties of Concrete with Clam Shell Powder (CSP) as Partial Cement Replacement	
Y. Mahshuri, H. Sinin and A.E. Sinin.....	51
Determination of the Optimal Jar Mill Setting for Crushed Eggshells Used in LDPE Tile Creation	
R.A.S. delos Reyes, D.P. Higa, J.A. Montuya and N. Umantod	59
Keyword Index	65
Author Index	67