Proceedings of ASME 2022 17th International Manufacturing Science and Engineering Conference (MSEC2022)

Volume 2

June 27-July 1, 2022
West Lafayette, Indiana

Conference Sponsor
Manufacturing Engineering Division

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
Two Park Avenue * New York, N.Y. 10016

© 2022, The American Society of Mechanical Engineers, 2 Park Avenue, New York, NY 10016, USA
(www.asme.org)

All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

INFORMATION CONTAINED IN THIS WORK HAS BEEN OBTAINED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS FROM SOURCES BELIEVED TO BE RELIABLE. HOWEVER, NEITHER ASME NOR ITS AUTHORS OR EDITORS GUARANTEE THE ACCURACY OR COMPLETENESS OF ANY INFORMATION PUBLISHED IN THIS WORK. NEITHER ASME NOR ITS AUTHORS AND EDITORS SHALL BE RESPONSIBLE FOR ANY ERRORS, OMISSIONS, OR DAMAGES ARISING OUT OF THE USE OF THIS INFORMATION. THE WORK IS PUBLISHED WITH THE UNDERSTANDING THAT ASME AND ITS AUTHORS AND EDITORS ARE SUPPLYING INFORMATION BUT ARE NOT ATTEMPTING TO RENDER ENGINEERING OR OTHER PROFESSIONAL SERVICES. IF SUCH ENGINEERING OR PROFESSIONAL SERVICES ARE REQUIRED, THE ASSISTANCE OF AN APPROPRIATE PROFESSIONAL SHOULD BE SOUGHT.

ASME shall not be responsible for statements or opinions advanced in papers or . . . printed in its publications (B7.1.3). Statement from the Bylaws.

For authorization to photocopy material for internal or personal use under those circumstances not falling within the fair use provisions of the Copyright Act, contact the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, tel: 978-750-8400, www.copyright.com.

Requests for special permission or bulk reproduction should be addressed to the ASME Publishing Department, or submitted online at: https://www.asme.org/publications-submissions/journals/information-for-authors/journalguidelines/rights-and-permissions

ISBN: 978-0-7918-8581-9

CONTENTS

Proceedings of ASME 2022 17th International Manufacturing Science and Engineering Conference Volume 2

Manufacturing Processes

MSEC2022-78600 . . . . . **V002T05A001**
Incremental Sheet Forming of the WKU Big Red Mascot
Asghar Rezasoltani, Matthew Crocker, Jeremy Rice, and Avery Black

MSEC2022-80224 . . . . . **V002T05A002**
A Crystal Plasticity Finite Element Method Modeling of Zircaloy With Hydride Phases Based on Scanning Electron Micrographs
Shank S. Kulkarni, Timothy Truster, David J. Senor, and Ram Devanathan

MSEC2022-80231 . . . . . **V002T05A003**
Coupled Diffusion-Deformation-Damage Model for Polymers Used in Hydrogen Infrastructure
Shank S. Kulkarni, Kyoo Sil Choi, and Kevin Simmons

MSEC2022-80707 . . . . . **V002T05A004**
Effects of Process Parameters on Thin-Wall Substrate WAAM Deposition
Austen Thien, Jesse Goodwin, and Christopher Saldana

MSEC2022-81641 . . . . . **V002T05A005**
Analysis of Conduction Cooling Strategies for Wire Arc Additive Manufacturing
Lauren Heinrich, Thomas Feldhausen, Kyle S. Saleeby, Christopher Saldana, and Thomas R. Kurfess

MSEC2022-81781 . . . . . **V002T05A006**
The Development and Validation of a Novel Thread Forming Fastener for High Strength Steel Applications
Brandt J. Ruszkiewicz, Eric Breidenbaugh, and Gene Simpson

MSEC2022-82356 . . . . . **V002T05A007**
Laser Micro Machining Using an Oblique Photonic Nanojet With Focused Laser Beam Irradiation
Tsutomu Uenohara, Makoto Yasuda, Kosei Yamamoto, Yasuhiro Mizutani, and Yasuhiro Takaya

MSEC2022-82773 . . . . . **V002T05A008**
Image-Based Fractographic Pattern Recognition With Cluster Analysis
Shenghan Guo, Paul Paradise, Nicole Van Handel, and Dhruv Bhate

MSEC2022-83697 . . . . . **V002T05A009**
Performance Prediction of Resistance Spot Welding Joints Using a Modified GTN Model
Weiling Wen and Mihaela Banu

MSEC2022-83881 . . . . . **V002T05A010**
Establishment of Mode Shape Database for Machine Tool and its Application in Estimating System Dynamics
Jiahui Liu, Toru Kizaki, Shogo Yamaura, and Naohiko Sugita

MSEC2022-84945 . . . . . **V002T05A011**
Directed Energy Deposition Using Non-Spherical Metal Powders?
Richie Garg, Harish Singh Dhami, Priti Ranjan Panda, and Koushik Viswanathan

MSEC2022-84977 . . . . . **V002T05A012**
Simulating Residual Stress at Critical Features of Straightened Hollow Transmission Shafts
Michael Chodubski

MSEC2022-84991 . . . . . **V002T05A013**
Joining of Metal-Thermoplastic-Tube-Joints by Hydraulic Expansion
Florian Weber, Peter Lehmenkühler, Marlon Hahn, and A. Erman Tekkaya

MSEC2022-84993 . . . . . **V002T05A014**
Selective Laser Melting of Crack-Free Ti-48Al-2Cr-2Nb Alloy: Improved Manufacturability by Powder Surface Modification Using Graphene Oxide
Xing Zhang, Dian Li, Yufeng Zheng, and Yiliang Liao

MSEC2022-85024 . . . . . **V002T05A015**
Vibration Reduction in Robotic Milling Through Spindle Speed Modulation
Dominic Huschke and Shreyes N. Melkote

MSEC2022-85026 . . . . . **V002T05A016**
Ultra-Fine Bubbles (UFB) Inserted Novel Coconut Oil Based Metal Working Fluid (MWF) As a Sustainable Lubricant for Turning of Ti-6Al-4V
K. C. Wickramasinghe and Hiroyuki Sasahara

MSEC2022-85065 . . . . . **V002T05A017**
Tooling Engineering and its Role in Manipulating Fiber Spinning and Enabled Nanostructures
Weiheng Xu and Kenan Song

MSEC2022-85120 . . . . . **V002T05A018**
Metal Powders via Surface Grinding: Applicability and Performance Evaluation for Laser Sintering
Harish Singh Dhami, Priti Ranjan Panda, Puli Saikiran, and Koushik Viswanathan

MSEC2022-85130 . . . . . **V002T05A019**
Time Domain Simulation of Turning Operations With Flank Textured Tool
Norikazu Suzuki, Tsubasa Fujinaka, and Yuya Yokokawa

MSEC2022-85192 . . . . . **V002T05A020**
Exploring the Role of Mechanochemical Effects in Cutting of Aluminum Alloys With Alcohols
Tatsuya Sugihara, Takuma Nomura, Toshiyuki Enomoto, Anirudh Udupa, Koushik Viswanathan, and James Mann

MSEC2022-85196 . . . . . **V002T05A021**
Effect of Alloying Elements of Al Alloy on the Interfacial Microstructure and Fracture Behaviour of Al Alloy/Steel Inertia Friction Welded Joint: A Comparative Study
Hong Ma, Peihao Geng, and Guoliang Qin

MSEC2022-85205 . . . . . **V002T05A022**
Experimental and Numerical Investigation of Heat Assisted Incremental Sheet Forming Process of Magnesium Alloy
Narinder Kumar, Mohit Mahala, and Anupam Agrawal

MSEC2022-85222 . . . . . **V002T05A023**
Bidirectional Bending of Thin Metals With Femtosecond Lasers
Bryce Tessmann, Kewei Li, and Xin Zhao

MSEC2022-85224 . . . . . **V002T05A024**
Effect of Metal Mixing on Mechanical Performance of Laser Keyhole Welding of Nickel and Copper
Wenkang Huang, Wenda Tan, Wayne Cai, and Jennifer Bracey

MSEC2022-85262 . . . . . **V002T05A025**
Thermal Analyses of Electrically Assisted Forming
Tyler J. Grimm and Laine Mears

MSEC2022-85288 . . . . . **V002T05A026**
Mechanical Property and Microstructure of IN718/FGH96 Dissimilar Superalloy Linear Friction Weldment
Mingxiang Wang, Peihao Geng, Hong Ma, and Guoliang Qin

MSEC2022-85293 . . . . . **V002T05A027**
Primary Chatter and Limiting Chip Load in Turning Under Negative Process Damping
Ming-Jen Hsu and Jiunn-Jyh Wang

MSEC2022-85298 . . . . . **V002T05A028**
Influence of Silane Treatment on the Joint Properties During Laser Joining of Aluminum Alloy to CFRTP
Ziwei Feng, Xueyan Zhang, Jianhui Su, Yifan Liu, Hongyun Zhao, Bo Chen, Xiaoguo Song, and Caiwang Tan

MSEC2022-85310 . . . . . **V002T05A029**
Net-Shape Tensile Specimens as Representatives of Material Properties of Metal Additive Manufacturing: Evaluation and Correction Factor
Nicholas Bass, Sagar Jalui, and Guha Manogharan

MSEC2022-85315 . . . . . **V002T05A030**
Evaluation of Process Parameters Modifications on Directed Energy Deposition Manufactured Parts Obtained in a Hybrid Additive Manufacturing Machine
Ana Beatriz B. Henriques, Paola L. de Aguiar, Raphael G. dos Santos, and Joice Miagava

MSEC2022-85339 . . . . . **V002T05A031**
Pass-Wise Tool Wear Prediction in Turning Based on Long-Short Term Memory Algorithm Using Current Signals
Benvolence Chinomona, Chunhui Chung, and Po-Chieh Wang

MSEC2022-85387 . . . . . **V002T05A032**
Layer-Wise Melt Pool Temperature Evolution in Laser Powder Bed Fusion: An Experimental Study Using a Single Camera Based Two-Wavelength Imaging Pyrometry
Chaitanya Krishna Prasad Vallabh, Shawn Hinnebusch, Albert C. To, and Xiayun Zhao

MSEC2022-85413 . . . . . **V002T05A033**
Experimental Analysis of Metal Inert Gas Based Wire Arc Additive Manufacturing of Aluminum Nanocomposite AA7075
Mason Darnell, Dennis Harwig, and Xun Liu

MSEC2022-85416 . . . . . **V002T05A034**
Cutting Process in Slot Milling of AISI420 Stainless Steel Manufactured in Additive Process
Shoichi Tamura, Takeru Ishikuri, Katsufumi Inazawa, and Takashi Matsumura

MSEC2022-85422 . . . . . **V002T05A035**
Learning the Temporal Effect in Infrared Thermal Videos With Long Short-Term Memory for Quality Prediction in Resistance Spot Welding
Shenghan Guo, Dali Wang, Jian Chen, Zhili Feng, and Weihong "Grace" Guo

MSEC2022-85439 . . . . . **V002T05A036**
Towards a Digital Twin: Simulation and Residual Stress Analysis in Aerospace Composite Structures Assembly
Tim Lutz, Xiaowei Yue, and Jaime Camelio

MSEC2022-85443 . . . . . **V002T05A037**
Process Mechanics – a Guide for Industry 4.0: Modelling Cutting of Nimonic 90 and Ti-6Al-4V
W. Lortz and Radu Pavel

MSEC2022-85446 . . . . . **V002T05A038**
Random Grid-Based DIC Analysis of Plastic Flow Near Interfaces in Deformation Processing
Deepika Gupta and Koushik Viswanathan

MSEC2022-85449 . . . . . **V002T05A039**
Digital Twin-Based Tool State Prognosis Model for Drilling Machines
Sunidhi Dayam and K. A. Desai

MSEC2022-85464 . . . . . **V002T05A040**
Process Temperatures and Material Flow in Friction Stir Welding of High Density Polyethylene (HDPE)
Jamal Sheikh-Ahmad, Razi Ur Rehman, Suleyman Deveci, and Fahad Almaskari

MSEC2022-85472 . . . . . **V002T05A041**
Shape Error Analysis in Ultra-Precision Grinding of Optical Glass by Using Motor-Current-Based Grinding Force Monitoring
Naoki Iinuma, Boshi Chen, Tappei Kawasato, and Yasuhiro Kakinuma

MSEC2022-85480 . . . . . **V002T05A042**
Autoclave Molding of Carbon Fiber Laminates With Interlaminar Carbon Nanotubes
Fabrizio Quadrini, Denise Bellisario, Leandro Iorio, Alice Proietti, Nicola Gallo, and Loredana Santo

MSEC2022-85508 . . . . . **V002T05A043**
Effects of Flight Distance on Metal Microdroplet Depositing Behaviors in Laser-Induced Forward Transfer
Di Wu, Zijie Lu, Guohu Luo, and Yongxiang Hu

MSEC2022-85532 . . . . . **V002T05A044**
3D Printing and Mechanical Behavior of Anisogrid Composite Lattice Cylindrical Structures
Felicia Stan, Ionut-Laurentiu Sandu, and Catalin Fetecau

MSEC2022-85554 . . . . . **V002T05A045**
Acoustic Emission Sensors to Monitor Early Onset of Necking During Uniaxial Tension
Madhav Baral, Ali Al-Jewad, Alexander Breunig, Jinjin Ha, Peter Groche, Yannis P. Korkolis, and Brad L. Kinsey

MSEC2022-85562 . . . . . **V002T05A046**
Towards Directed Energy Deposition of Metals Using Polymer-Based Supports: Hardness of 316L Stainless Steel Deposited on Carbon-Fiber-Reinforced ABS
Rebecca Kurfess, Rangasayee Kannan, Thomas Feldhausen, Kyle Saleeby, A. John Hart, and David Hardt

MSEC2022-85574 . . . . . **V002T05A047**
Prediction of Weld Defects in Underwater Friction Stir Welding of Dissimilar Materials
Raju Prasad Mahto, Ananta Dutta, and Debasish Mishra

MSEC2022-85587 . . . . . **V002T05A048**
Machine Learning-Based Cutting Constant Estimation for Mechanistic Force Models of End Milling Operation
Shubham Vaishnav and K. A. Desai

MSEC2022-85595 . . . . . **V002T05A049**
Double Interpolation to Achieve Linear Strain Path for AISI 1008 Steel Cruciform Specimen
Jordan Hoffman, Jinjin Ha, Brad Kinsey, Dilip Banerjee, and Mark A. Iadicola

MSEC2022-85618 . . . . . **V002T05A050**
Experimental Study of Microscopic Morphology and Material Property for Recycled Polyamide 12 Powder in Selective Laser Sintering
Mohammad Aman Ullah Al Amin, Yiran Yang, Md Humaun Kobir, and Lei Di

MSEC2022-85620 . . . . . **V002T05A051**
Selective Laser Melting and Mechanical Properties of Oxide Dispersion Strengthened Haynes 214 Alloy
Bibek Poudel, Hoa X. Nguyen, Aaron O'Neil, Mohsan Uddin Ahmad, Zhiyuan Qu, Patrick Kwon, and Haseung Chung

MSEC2022-85621 . . . . . **V002T05A052**
Extracting the In-Process Structural Dynamics Parameters in Micro-Milling Operations
Maryam Hashemitaheri, Rinku Mittal, Harish Cherukuri, and Ramesh Singh

MSEC2022-85632 . . . . . **V002T05A053**
A Machinability Study of Coated Inserts for Turning Ti-6Al-4V
Ryan M. Khawarizmi, Yang Guo, Thomas R. Bieler, and Patrick Kwon

MSEC2022-85645 . . . . . **V002T05A054**
Analysis of the Unique Mechanics of Shear Localization in Metal Cutting Processes
Mohammadreza Fazlali, Mauricio Ponga, and Xiaoliang Jin

MSEC2022-85722 . . . . . **V002T05A055**
Investigating the Heterogeneity in Microstructure Evolution During Selective Laser Melting of Titanium Aluminides: An Integrated Experimental and Modeling Study
Xing Zhang, Leslie Mushongera, and Yiliang Liao

MSEC2022-85746 . . . . . **V002T05A056**
An Investigation Into Multi-Track Deposition in Laser Powder-Bed Fusion: Transient Regions Analysis and Scan Length Effects
Santosh Rauniyar, Subin Shrestha, and Kevin Chou

MSEC2022-85822 . . . . . **V002T05A057**
An Investigation of Chipping Propagation on Carbide Tool in End Milling for Prototyping
Shuhuan Zhang and Rui Liu

MSEC2022-85829 . . . . . **V002T05A058**
Design of Micro-Scale Periodic Surface Textures by Pulsed Laser Melting and its Influence on Wettability
Rohit Gupta, Justin Hijam, Rama Balhara, and Madhu Vadali

MSEC2022-86075 . . . . . **V002T05A059**
Experimental Investigation of Nanosecond Laser Modification of Bulk Metallic Glass
J. Ma, M. P. Jahan, Shuting Lei, and Mark Gueli

MSEC2022-86171 . . . . . **V002T05A060**
Analysis of the Heat-Affected Zone and Ablation Efficiency in Terms of Burst Mode Parameters During High Power Picosecond Laser Micromachining of Metals
Sijie Zhang and Yung C. Shin

MSEC2022-86659 . . . . . **V002T05A061**
Exploring Surface Texture Quantification in Piezo Vibration Striking Treatment (PVST) Using Topological Measures
Melih C. Yesilli, Max M. Chumley, Jisheng Chen, Firas A. Khasawneh, and Yang Guo

Manufacturing Systems

MSEC2022-81991 . . . . . **V002T06A001**
Solving the Open Route Capacitated Periodic Vehicle Routing Problem With Time Windows to Service Microgrids Powered by Uncertain Renewable Generation
Waleed Shawky, Ahmed Azab, and Sally Kassem

MSEC2022-83098 . . . . . **V002T06A002**
Decision Support for Locating Manufacturing Plants in Emerging Economies Using a Reliability Approach
Mohamed Gadalla and Ahmed Azab

MSEC2022-83907 . . . . . **V002T06A003**
Evaluation of Data-Driven Models in Human-Robot Load-Sharing
Vinh Nguyen and Jeremy Marvel

MSEC2022-83923 . . . . . **V002T06A004**
Proof of Authenticity Statistics From Multiple Perceptual Hash Comparisons: A Case Study
Michele Maasberg, Leslie G. Butler, Brendan Birch, and Maia Trailer

MSEC2022-84064 . . . . . **V002T06A005**
What Role Does Maintenance Play in Achieving Sustainability in Manufacturing? - A Scoping Literature Review
Christina Bredebach

MSEC2022-84712 . . . . . **V002T06A006**
Development of Autonomous Robotic Bin Picking System Using Convolutional Neural Network (CNN) Initially Trained by Human Skills
Huitaek Yun, Jinho Park, and Martin Byung-Guk Jun

MSEC2022-84878 . . . . . **V002T06A007**
Embrace the Imperfection: How Intrinsic Variability of Roll-to-Roll Manufactured Environmental Sensors Enable Self-Calibrating, High-Precision Quorum Sensing
Ajanta Saha, Sarath Gopalakrishnan, Jose Waimin, Sotoudeh Sedaghat, Ye Mi, Nicholas Glassmaker, Mukkerem Cakmak, Ali Shakouri, Rahim Rahimi, and Muhammad A. Alam

MSEC2022-85085 . . . . . **V002T06A008**
Digital Twin Platforms: Architectures and Functions
Huiyue Huang, Tang Ji, and Xun Xu

MSEC2022-85135 . . . . . **V002T06A009**
Modeling and Model-Driven of Holonomic System Based on MBSE: a Case of Internet of Things Platform
Hao Yang, Chun Zhao, Nana Shen, Wenzheng Liu, and Lin Zhang

MSEC2022-85269 . . . . . **V002T06A010**
Comparison of Human Skeleton Trackers Paired With a Novel Skeleton Fusion Algorithm
Jared T. Flowers and Gloria J. Wiens

MSEC2022-85306 . . . . . **V002T06A011**
Global Disruption of Semiconductor Supply Chains During COVID-19: An Evaluation of Leading Causal Factors
Aamirah Mohammed and Sardar Asif Khan

MSEC2022-85358 . . . . . **V002T06A012**
Finding Robust Pareto-Optimal Solutions Over Time for Dynamic Disassembly Sequence Planning
Xin Zhang, Yilin Fang, and Quan Liu

MSEC2022-85362 . . . . . **V002T06A013**
Individual-Based Transfer Learning for Dynamic Human-Robot Collaborative Disassembly Line Balancing
Yilin Fang and Xiao Zhang

MSEC2022-85367 . . . . . **V002T06A014**
An Intelligent Switching Method of Multi-Resolution Models Oriented for Complex System Co-Simulation
Wenzheng Liu, Chun Zhao, and Heming Zhang

MSEC2022-85392 . . . . . **V002T06A015**
Physics-Informed Machine Learning for Accelerated Testing of Roll-to-Roll Printed Sensors
S. Chandra Mouli, Sotoudeh Sedaghat, Muhammed Ramazan Oduncu, Ajanta Saha, Rahim Rahimi, Muhammad A. Alam, Alexander Wei, Ali Shakouri, and Bruno Ribeiro

MSEC2022-85440 . . . . . **V002T06A016**
Visualization Error Analysis for Augmented Reality Stereo Video See-Through Head-Mounted Displays in Industry 4.0 Applications
Wenhao Yang and Yunbo Zhang

MSEC2022-85459 . . . . . **V002T06A017**
Anomaly Scoring Model for Diagnosis on Machine Condition and Health Management
Byung Gun Joung, Zhongtian Li, and John W. Sutherland

MSEC2022-85513 . . . . . **V002T06A018**
Development of an Interactive Digital Twin for Directed Energy Deposition (DED) Process
Inwoong Noh, Hyewon Shin, Youngwoon Choi, Yongho Lee, Yongjae Jeon, and Sang Won Lee

MSEC2022-85553 . . . . . **V002T06A019**
Roll to Roll Manufacturing and In-Line Imaging and Characterization of Functional Films
Nicholas Glassmaker, Ye Mi, Mukerrem Cakmak, and Ali Shakouri

MSEC2022-85576 . . . . . **V002T06A020**
Operating System for Cyber-Physical Manufacturing (OSCM): A Flexible Event-Driven Shopfloor Information Platform for Advanced Manufacturing
Ricardo Toro Santamaria and Placid M. Ferreira

MSEC2022-85638 . . . . . **V002T06A021**
Thin-Film Nitrate Sensor Performance Prediction Based on Image Analysis and Credibility Data to Enable a Certify As Built Framework
Xihui Wang, Ajanta Saha, Ye Mi, Ali Shakouri, Muhammad Ashraful Alam, George T. C. Chiu, and Jan P. Allebach

MSEC2022-85670 . . . . . **V002T06A022**
A Novel Quality Clustering Methodology on Fab-Wide Wafer Map Images in Semiconductor Manufacturing
Yuan-Ming Hsu, Xiaodong Jia, Wenzhe Li, and Jay Lee

MSEC2022-85678 . . . . . **V002T06A023**
Development and Evaluation of a Computer Vision System for Assembly Bolt Pattern Traceability and Poka-Yoke
Eric Kozikowski, Nathan W. Hartman, and Jorge D. Camba

MSEC2022-85690 . . . . . **V002T06A024**
Sequential Robust Parameter Design With Sample Size Selection
Jaesung Lee, Shiyu Zhou, and Junhong Chen

MSEC2022-85718 . . . . . **V002T06A025**
Curating Datasets of Flexible Assemblies to Predict Spring-Back Behavior for Machine Learning Purposes
Alex Adrian, Satchit Ramnath, Sai Chandu Sunkara, Yannis Korkolis, Joseph K. Davidson, and Jami J. Shah

MSEC2022-85769 . . . . . **V002T06A026**
A Dynamic Cloud Bayes Network-Based Cleaning Method of Multi-Source Unstructured Data
Yin Chao, Liao Xinian, and Li Xiaobin

MSEC2022-85770 . . . . . **V002T06A027**
Immersive Virtual Reality Training With Error Management for CNC Milling Set-Up
Matt Ryan, Yiwen Wang, Qinqin Xiao, Rui Liu, and Yunbo Zhang

MSEC2022-85804 . . . . . **V002T06A028**
Investigating the Role of Auditory Perception of Cutting Process Conditions in CNC Machining
Krzysztof Jarosz, Yunbo Zhang, and Rui Liu

MSEC2022-85833 . . . . . **V002T06A029**
Assessing the Impacts of Real-Time Price Prediction Quality on Demand Response Management for Sustainable Smart Manufacturing
Lingxiang Yun and Lin Li

MSEC2022-86090 . . . . . **V002T06A030**
Collaborative Filtering Recommendation Based Trust Evaluation Method for Cloud Manufacturing Service
Jiang Pei, Wang Mingxing, Li Xiaobin, and Yin Chao

MSEC2022-87425 . . . . . **V002T06A031**
Research on Condition Monitoring Technology of Automobile Parts Intelligent Production Line Based on Cyber Physical System
Yifei Wang, Zhiwen Xia, Kexin Yang, and Lijun Jin