

# Advanced Manufacturing Techniques Using Laser Material Processing

Part of the Advances in Civil and Industrial Engineering (ACIE) Book Series

Esther Titilayo Akinlabi (University of Johannesburg, South Africa), Rasheedat Modupe Mahamood (University of Johannesburg, South Africa & University of Ilorin, Nigeria) and Stephen Akinwale Akinlabi (University of the Witwatersrand, South Africa)

## Description:

The use of lasers in material processing has become a useful method for transforming industrial materials into finished products. The benefits of laser material processing are vast, including increased precision, high processing speed, and dustless cutting and drilling.

**Advanced Manufacturing Techniques Using Laser Material Processing** explores the latest methodologies for using lasers in materials manufacturing and production, the benefits of using lasers in industrial settings, as well as future outlooks for this technology.

## Readers:

This innovative publication is an essential reference source for professionals, researchers, and graduate-level students studying manufacturing technologies and industrial engineering.

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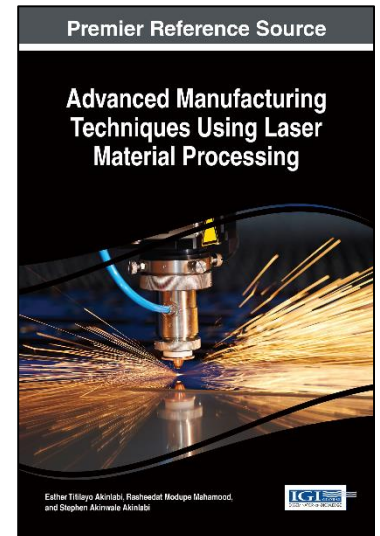
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Esther T. Akinlabi is the Head of Department of Mechanical Engineering Science, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa. Her research interest is in the field of modern manufacturing processes – Friction Stir Welding and Laser based additive manufacturing. Her research in the field of laser based additive manufacturing include laser material processing and surface engineering. She is a rated NRF researcher and has demonstrated excellence in all fields of endeavors. Her mentorship and research experience is enviable as she guides her postgraduate students through the research journey. She is a recipient of several research grants and has received many awards of recognition to her credit. She is a member of the South African Young Academy of Science. Prof Akinlabi has filed two patents and co-authored over 150 peer reviewed publications.

Rasheedat M. Mahmood is a research fellow at the department of Mechanical Engineering Science, Auckland Park Kingsway Campus, University of Johannesburg, Johannesburg, South Africa. She is also a lecturer at the Department of Mechanical Engineering, University of Ilorin, Nigeria. Her research interest is in the area of laser additive manufacturing and materials characterization.

Stephen A. Akinlabi is a doctorate candidate at the Department of Mechanical Engineering Science, University of Johannesburg and currently at the round off stage of his studies. He has over five years teaching experience as a lecturer and over ten years of industrial experience. His research interest is in the field of Laser forming and material characterization.