Sankhya Mohanty - DTU Orbit (12/10/2017)

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Publications:

Laser additive manufacturing of multimaterial tool inserts: a simulation-based optimization study
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Multi-objective optimization of cellular scanning strategy in selective laser melting
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Analysis of moisture transport between connected enclosures under a forced thermal gradient
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Improving accuracy of overhanging structures for selective laser melting through reliability characterization of single track formation on thick powder beds
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Optimization of electronic enclosure design for thermal and moisture management using calibrated models of progressive complexity
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Reducing residual stresses and deformations in selective laser melting through multi-level multi-scale optimization of cellular scanning strategy
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Semi-empirical prediction of moisture build-up in an electronic enclosure using analysis of variance (ANOVA)
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Cellular scanning strategy for selective laser melting: Generating reliable, optimized scanning paths and processing parameters
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015
Cellular Scanning Strategy for Selective Laser Melting: Capturing Thermal Trends with a Low-Fidelity, Pseudo-Analytical Model
Publication: Research - peer-review › Journal article – Annual report year: 2014

Effect of Uncertainty in Processing Parameters on the Microstructure of Single Melt Tracks Formed by Selective Laser Melting
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Numerical Model based Reliability Estimation of Selective Laser Melting Process
Publication: Research - peer-review › Conference article – Annual report year: 2014

A finite volume alternate direction implicit approach to modeling selective laser melting
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Cellular scanning strategy for selective laser melting: Evolution of optimal grid-based scanning path & parametric approach to thermal homogeneity
Publication: Research - peer-review › Conference article – Annual report year: 2013

Projects:

Modelling the thermo-metallurgical-mechanical conditions in precision additive metal manufacturing
Bayat, M., Hattel, J. H., Mohanty, S., Thorborg, J. & Tiedje, N. S.
01/10/2017 → 30/09/2020
Project: PhD

Modelling the thermo-metallurgical-mechanical conditions in precision additive metal manufacturing
Bayat, M., Hattel, J. H., Mohanty, S., Thorborg, J. & Tiedje, N. S.
01/10/2017 → 30/09/2020
Project: PhD

Numerical modelling of heat treatment and post processing of additive manufactured metal parts
De Baere, D., Hattel, J. H., Mohanty, S., Thorborg, J. & Tiedje, N. S.
01/09/2017 → 31/08/2020
Project: PhD

Modelling Climatic Reliability of Electronic Devices
Shojaee Nasirabadi, P., Hattel, J. H., Mohanty, S. & Spangenberg, J.
01/11/2014 → 31/10/2017
Project: PhD

Developing semi-empirical models for predicting climate inside electronic device enclosures
Staliulionis, Z., Hattel, J. H., Ambat, R., Jellesen, M. S. & Mohanty, S.
15/10/2013 → 22/07/2017
Project: PhD
Modelling selective Laser Melting
01/05/2012 → 11/12/2015
Project: PhD