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(57) Abstract :
ABSTRACT: Title: A System and Method for Selecting Optimal Designs for Lightweight Additive Manufactured Sandwich Lattice Structures The present disclosure proposes a system (100) and method that design optimal lattice structures for additively manufactured sandwich lattice structures. The system (100) for selecting one or more lattice structures comprises a computing device (102) having a processor (104) and a memory (106) for storing one or more instructions executed by the processor (104). The system (100) suggests a range of lattice settings for effective selection. The system (100) reduces manufacturing costs by minimizing the weight of materials and components, resulting in less fuel consumption during transportation, especially in industries such as aerospace and automotive. The system (100) reduces material waste and weight while maintaining structural performance. The system (100) assists in making decisions by using multiple criteria for selecting an optimized lattice structure.

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