1st Biennial ESIS-CSIC Conference on Structural Integrity
(BECCSI 2025)

November 25-28, 2025, Metropol Palace, Belgrade, Serbia

Additive manufacturing, current trends and future opportunities

Filippo Berto[1,*]

[1]Department of Chemical Engineering Materials Environment, Sapienza - Università di Roma, Via Eudossiana 18, Roma, Italy
*corresponding author: filippo.berto@uniroma1.it

Abstract

The talk will be dedicated to recent trends in additive manufacturing focusing on recent developments, especially for metallic materials. Fracture and fatigue assessment plays a fundamental role for the future of these new materials and the lecture will focus on these aspects showing new design opportunities and advanced methods for optimizing additively manufactured components. Data driven methods are a powerful tool in this regard and some considerations will be carried out showing the most updated solutions up to now available.

Keywords
Additive manufacturing; fatigue; Data-driven methods