

Gyroid additive manufactured structures with modulated mechanical response

Gyroid lattice structure samples with different overall porosities are additively manufactured using laser powder bed fusion. Their mechanical performance is tested by both static compression and compression-compression fatigue.

RESEARCH ACTIVITIES (in collaboration with NTNU University in Norway):

Numerical analysis on both as-designed and as-fabricated geometries to identify the role of various internal and surface defects on mechanical performance of lattice structures. Next step will be to optimize heterogeneous structures on the numerical and experimental data

