

Randomized Lattice Graph [Open-Cell]

nTopology

Author: Christopher Cho
Date Created: 2021/04/05
Version Last Modified: 2.30.2
Current Block Version: 1.0.0
Toolkit: Osseointegrative Structures
Category: Lattice Graph Generation



Description

Generates a randomized lattice graph with open cells and open beams within the lattice design space. The randomized lattice graph is truncated by the input lattice design space, ensuring that no portion of the lattice graph exists outside of the lattice design space. The input beam thickness value for this block should match the input beam thickness value of the downstream thicken block. The input pore size value is a targeted value and the expected pore size result is a distribution within range of the targeted value.

Input Descriptions

Lattice Design Space	Volume to be filled with a randomized lattice.
Pore Size	Target pore size distribution of the lattice structure.
Beam Thickness	Desired beam diameter distribution of the lattice structure.
Randomization Seed	Original seed value to algorithmically generate randomness.