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Additive manufacturing of packings for rotating packed beds

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Graphical abstract



Highlights

- Proof of concept for additive manufacturing of packing material for RPBs
- Experimental investigation of hydrodynamics and effective interfacial area
- Comparison of metal foam and polymer replica produced by 3D printing

Abstract

HIGEE technology and rotating packed beds (RPB) in specific, gained a lot of interest for industrial processes intensification in recent years. Yet, most of the investigations were restricted to wire meshes and foam packings, as manufacturing methods for commercial structured packings in column applications do not immediately meet the specific requirements in an RPB. The comparable low volume and unconventional form of the packing call for tailored packing designs for RPB application. To this end, additive Download English Version:

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