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Efficient prediction of cell size in solid polymeric foams by numerically solving the diffusion approximation of light scattering equation

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Graphical abstract



Highlights

- Cell size estimation in solid foams has been tested using light transmission
- Absorption is considered by numerically solving light scattering equation
- The effect of foam features in scattering characteristic lengths is investigated
- The developed methodology is applied obtaining successful results

Abstract

This paper investigates alternative approaches to accurately calculate the cell size of solid polymeric foams by means of light scattering (LS) experimental data. To this end, static optical transmission measurements have been carried out in foams with different

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