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Porous Polyolefin Films via Polymer Blends

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Porous polymer films have broad application including battery separators, membrane supports and filters. Polyolefins are attractive for these applications because of their solvent resistance, low electrical and thermal conductivity, easy fabrication and cost. We will describe fabrication of porous films using cocontinuous blends of a polyolefin with another polymer which can be readily removed with a solvent. Methods to image and control the cocontinuous morphology will be presented.

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Trifkovic, M., A. T. Hedegaard, K. Huston, M. Sheikhzadeh, and C. W. Macosko, "Porous films via PE/PEO cocontinuous blends," *Macromolecules* **45**, 6036-6044 (2012).

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