

Machine Learning Assessment of Fiber Morphology Descriptors in Solution Blow Spinning

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Editor's note: This study by Rivera Vera and coworkers uses machine learning to reanalyze Box-Behnken datasets for solution-blow-spun polystyrene (PS) and polysulfone (PSf) mats, focusing on fiber diameter (DoF) and relative fiber amount (RoF). PS showed strong predictive performance for DoF ($R^2 = 0.8142$), while PSf showed much lower performance ($R^2 = 0.0043$). Results indicate that descriptor suitability depends on morphology, highlighting the need for machine learning to identify effective characterization parameters in fibrous materials.

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