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Shear-controlled Micro-nano Scaled Super-Hydrophobic Surfaces with Tunable Sliding Angles from isotactic-Polypropylene / Polypropylene Chlorid Blend[1] XIA DONG, CHARLES C. HAN, Institute of Chemistry, Chinese Academy of Sciences, SONG HONG, YONGHUA YAO — With proper selection of shear and thermal conditions, super- hydrophobic polymeric surfaces (Contact angle higher than 150°) with tunable sliding angles (From less than 1° to higher than 90°) can be prepared from isotactic polypropylene (iPP)/ polypropylene chloride (PPC) blend under ambient atmosphere. No further modification with low-surface-energy component is needed. The formed surfaces have good thermal property, chemical and moisture resistance and potentially low manufacturing cost.

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