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# Contribution of Textile in Indoor Air Microplastics

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## Abstract

Microplastics have received increasing attention over the past decade due to their ubiquitous detection in all environmental compartments. They are released to the air by various sources, including synthetic textiles. In Puerto Rico, which has a tropical climate, it is a very common practice to dry the washed clothes by hanging indoor environments rather than using a dryer. Active and passive air samplers were used to collect microplastics samples in living rooms and laundry areas at homes located in various municipalities. Indoor air microplastics samples were also collected in an enclosed room with and without hanging wet clothes. Microplastics levels were significantly higher at all of the laundry areas samples than the living room samples. Room with damp clothes had tenfold higher microplastics level than the room without damp clothes. Results indicate that the sources from synthetic textile contribute significantly to the total numbers of microplastics in indoor environments.

**Keywords:** Textile microplastics, active sampler, passive sampler, indoor air

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