Application of foam ceramic panels as photocatalytic filters

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This contribution deals with the application of foam ceramics as photocatalytic filters. This material is prepared by the deposition of ceramic slurry on polyurethane foam and after heat treatment material with open cell structure and high surface area is prepared. The subsequent deposition of nanocrystalline anatase results in the fabrication of a highly active photocatalytic filter applicable in air treatment systems.

The objective of this work is the comparison of photocatalytic activity of fabricated photocatalytic filters based on foam ceramics and ordinary planar ceramic material coated with same TiO2 material as foam ceramics.