

Physicists get a perfect material for air filters

March 2 2016

A research team from the Institute of Theoretical and Experimental Biophysics of the Russian Academy of Sciences has synthesized a material that is perfect for protection of respiratory organs, analytical research and other practical purposes. An almost weightless fabric made of nylon nanofibers with a diameter less than 15 nm beats any other similar material in terms of filtering and optical properties.

The scientists, whose work is published in the *European Polymer Journal*, characterize their material as lightweight (10-20 mg/m²), almost invisible (95 percent light transmission, more than that of window glass), showing low resistance to airflow and efficient interception of

Citation: Physicists get a perfect material for air filters (2016, March 2) retrieved 9 April 2024 from <https://phys.org/news/2016-03-physicists-material-air-filters.html>

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