

## 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 22 May 2024 from <a href="https://phys.org/news/2016-03-physicists-material-air-filters.html">https://phys.org/news/2016-03-physicists-material-air-filters.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.