

## Editorial Note on Nano Filters

**Received:** April 19, 2020; **Accepted:** April 22, 2021; **Published:** April 30, 2021

### Editorial Note

New air filter technologies are being developed. Since particulate matter (PMs) and volatile organic compounds (VOCs) have caused serious health problems, new types of air filter technologies are being developed.

Traditional air filters have a restricted use and low degradability, and after use, they become non-disposable waste. We present a highly powerful, environmentally friendly, transparent, and multifunctional air purification filter that is highly effective at reducing air pollution, protecting the environment, and detecting hazardous chemical vapors encountered in daily life.

An electrospinning method was used to create uniform silk protein nanofibers on a window screen. The optical properties of silk nanofibrous air filters (SNAFs) (translucence and scattering) are beneficial for achieving viewability and regulating the room temperature.

The fabricated SNAFs could have air filtration efficiencies of up to 90% and 97 percent for PMs smaller than 2.5 and 10  $\mu\text{m}$ , respectively, outperforming commercial semi-high-efficiency particulate air (semi-HEPA) filters.

The SNAFs can naturally degrade after use. We also show that SNAFs impregnated with organic dyes are capable of sensing dangerous and toxic vapours

### Nikitha Y\*

St. Pious X Degree and PG College for Women, Nacharam, Hyderabad, Telangana, India

**\*Corresponding author:** Nikitha Y

✉ yerramnikitha21@gmail.com

St. Pious X Degree and PG

College for Women, Nacharam, Hyderabad, Telangana, India.

**Citation:** Nikitha Y (2021) Editorial Note on Nano Materials in Treatment of Cardio Vascular Diseases. Nano Res Appl Vol.7 No.4:13

experienced in daily life. Human activities have resulted in a great deal of pollution since the "Industrial Revolution." Because of their small size and heavy adhesion to toxic chemicals, particulate matter (PM), the term used to describe a mixture of few-micron-sized solid particles and liquid droplets in air, has posed significant public health concerns.

Inhalation of PM<sub>2.5</sub> (fine PM with an aerodynamic diameter of 2.5  $\mu\text{m}$  or less) was linked to 3.45 million premature deaths worldwide in 2007, and this figure is expected to rise today. PM<sub>10</sub> (fine PM with a diameter of 10  $\mu\text{m}$  or less) can accumulate in bronchioles via the airway during respiration..