

Advanced Technologies and Materials for Filtration: Applications, Markets and Companies

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Abstracts

Innovation in the global filtration market has increased considerably in recent years. Social needs for cleanliness, health and comfort are rising. There is an increasing demand for air filters with a high collection performance for indoor and outdoor air cleaning as well as waste gas treatment. Indoor air contaminants, such as volatile organic compounds (VOCs), microorganisms, allergens, and other pollutants (e.g., tobacco smoke) pose serious health- and productivity-related problems for occupants of indoor spaces.

The importance of improved water disinfection and microbial control cannot be overstated, and there is a huge market need for decentralized/point-of-use water treatment and reuse systems. With increasing instances of pollution both above and underground, the need for technological advances to treat water becomes even more pressing. water filtration Advanced materials are contributing greatly to applications such as desalination, nanofiltration, ultrafiltration, and microfiltration.

Various advanced filter technologies have been developed for enhanced healthcare and improving comfort, as well as industrial applications. Advanced materials have the clear potential to greatly benefit environmental quality and sustainability, through pollution prevention, water treatment and remediation. Benefits include the improved detection and sensing of contaminants and pollution and their safe removal and filtration from air, water and soil, at a greatly reduced cost in comparison to existing technologies.

Report contents include:

Overview of the global market for advanced filtration technologies.

Market revenues, current and forecast by types of filter and end user market, including data for 2017, 2017 and forecasts to 2030.

Market revenues by region to 2030.

Commercialization roadmaps.

Analysis of properties and applications of advanced filtration materials such as activated carbon, metal-organic frameworks (MOFs), nanofibers, carbon nanotubes, graphene, cellulose nanofibers, bacterial cellulose, oxide nanoparticles, dendrimers and new 2D materials.

Application opportunity analysis matrix for advanced filtration applications.

Analysis of advanced filtration technologies and materials in membranes, desalination, water treatment, air filters, oil and gas and virus filtration end user markets.

>100 company profiles including Ahlstrom-Munksjö, 3M, Unitika, Arveoli, Arvia Technology, Asahi Kasei, Donaldson Company, Inc., Dupont, Finetex, General Electric, G2O Water Technologies Limited (G2O), Directa Plus, Irema-Filter GmbH, Japan Vilene Company Ltd., Lockheed Martin, Mattershift, CSIRO, MOF Technologies, Nitto Denko, Revolution Fibres Ltd, Teijin etc.

Contents

1 INTRODUCTION

Aims and objectives of the study
Market definition
Market opportunity analysis

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

3.1 Historical filtration market
3.2 Recent growth
3.3 Market revenues, current and forecast
3.4 Regional analysis
3.5 Key market drivers and trends
3.6 Market opportunity assessment
3.7 Nanomaterials
3.8 Future perspectives and prospects
3.9 Market and technology challenges

4 ADVANCED MATERIALS FOR FILTRATION

4.1 TYPES OF FILTRATION
4.2 TYPES OF ADVANCED MATERIALS IN FILTRATION
4.3 ACTIVATED CARBON
 4.3.1 Properties
 4.3.2 Applications in filtration
4.4 METAL-ORGANIC FRAMEWORKS (MOFs)
 4.4.1 Properties
 4.4.2 Applications in filtration
 4.4.2.1 Water filtration
 4.4.2.2 Air filtration
 4.4.2.3 Groundwater remediation
4.5 DENDRIMERS
 4.5.1 Properties
 4.5.2 Applications in filtration
 4.5.2.1 Water filtration

4.6 NANOPARTICLES

4.6.1 Properties

- 4.6.1.1 Cobalt ferrite nanoparticles
- 4.6.1.2 Copper oxide nanoparticles
- 4.6.1.3 Iron oxide nanoparticles
- 4.6.1.4 Silver nanoparticles
- 4.6.1.5 Silica nanoparticles
- 4.6.1.6 Titanium dioxide nanoparticles

4.6.2 Applications in filtration

4.7 GRAPHENE

4.7.1 Properties

4.7.2 Applications in filtration

- 4.7.2.1 Water filtration
- 4.7.2.2 Gas separation
- 4.7.2.3 Photocatalytic absorbents
- 4.7.2.4 Air filtration

4.8 CARBON NANOTUBES

4.8.1 Properties

- 4.8.1.1 Double-wall nanotubes (DWNT)

4.8.2 Applications in filtration

- 4.8.2.1 Water filtration
- 4.8.2.2 Gas separation

4.9 POLYMER & ALUMINA NANOFIBERS

4.9.1 Properties

- 4.9.1.1 Polymer nanofibers
- 4.9.1.2 Alumina nanofibers

4.9.2 Applications in filtration

- 4.9.2.1 Water filtration
- 4.9.2.2 Air filtration

4.10 GRAPHITIC CARBON NITRIDE (g-C₃N₄)

4.10.1 Properties

- 4.10.1.1 Synthesis
- 4.10.1.2 C₂N

4.10.2 Applications in filtration

- 4.10.2.1 Filtration membranes
- 4.10.2.2 Photocatalysts

4.11 GRAPHDIYNE

4.11.1 Properties

4.11.2 Applications in filtration

- 4.11.2.1 Separation membranes
- 4.11.2.2 Water filtration
- 4.11.2.3 Photocatalysts
- 4.12 MOLYBDENUM DISULFIDE (MoS₂)
 - 4.12.1 Properties
 - 4.12.2 Applications in filtration
 - 4.12.2.1 Desalination and water filtration
- 4.13 CELLULOSE NANOFIBERS
 - 4.13.1 Properties
 - 4.13.2 Applications in filtration
 - 4.13.2.1 Water filtration
 - 4.13.2.2 Air filtration
 - 4.13.2.3 Virus filtration
- 4.14 BACTERIAL NANOCELLULOSE
 - 4.14.1 Properties
 - 4.14.2 Applications in filtration

5 MARKETS

- 5.1 DESALINATION
- 5.2 WATER TREATMENT
- 5.3 AIR FILTERS
 - 5.3.1 Industrial air filtration
 - 5.3.2 Personal protection – Face Masks, Individual Ventilation Systems
 - 5.3.3 Cabin filtration
 - 5.3.4 Air pollution control
 - 5.3.5 Heating, Ventilation and Air Conditioning (HVAC)
 - 5.3.6 Engine air filtration stationary, mobile, military
 - 5.3.7 Gas turbine filtration
 - 5.3.8 Clean room technology
- 5.4 VIRUS FILTRATION
- 5.5 OIL AND GAS FILTERS

6 GLOBAL REVENUES FOR ADVANCED FILTRATION TECHNOLOGIES TO 2030

7 COMPANY PROFILES (103 COMPANY PROFILES)..... 106-180

8 REFERENCES

Tables

TABLES

Table 1. Global revenues for advanced filtration technologies by materials, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates

Table 2. Global revenues for advanced filtration technologies by market, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates

Table 3. Global revenues for advanced filtration technologies by region, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates

Table 4. Market drivers for advanced filtration technologies

Table 5. Market opportunity assessment matrix for advanced filtration technologies

Table 6. Market and technology challenges in advanced filtration technologies

Table 7. Types of filtration

Table 8. Applications in desalination and water filtration, by advanced materials type and benefits thereof

Table 9. Applications of nanoparticles in filtration

Table 10: Comparison of CNT membranes with other membrane technologies

Table 11. CNF membranes

Table 12. Applications in desalination, by advanced materials type and benefits thereof

Table 13: Applications in water treatment, by advanced materials type and benefits thereof

Table 14. Applications in air filters, by advanced materials type and benefits thereof

Table 15. Applications in virus filters, by advanced materials type and benefits thereof

Table 16. Applications in oil and gas filters, by advanced materials type and benefits thereof

Table 17. Global revenues for advanced filtration technologies by materials, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates

Table 18. Global revenues for advanced filtration technologies by market, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates

Figures

FIGURES

- Figure 1. Global revenues for advanced filtration technologies by materials, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates
- Figure 2. Global revenues for advanced filtration technologies by market, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates
- Figure 3. Global revenues for advanced filtration technologies by region, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates
- Figure 4. Advanced filtration technologies commercialization roadmap
- Figure 5. Metal-organic frameworks schematic
- Figure 6. MOF water membrane
- Figure 7. Schematic of dendrimer water treatment system
- Figure 8. Nanometer-scale pores in single-layer freestanding graphene membrane can effectively filter NaCl salt from water
- Figure 9. Graphene filtration membrane
- Figure 10. Degradation of organic dye molecules by graphene hybrid composite photocatalysts.
- Figure 11. Graphene anti-smog mask
- Figure 12. Carbon nanotube water filtration
- Figure 13. Nanofiber air filter
- Figure 14: Graphitic carbon nitride
- Figure 15. Structural difference between graphene and C₂N-h₂D crystal: (a) graphene; (b) C₂N-h₂D crystal. Credit: Ulsan National Institute of Science and Technology
- Figure 16. Graphdiyne structure
- Figure 17: Structure of 2D molybdenum disulfide
- Figure 18. SEM image of MoS₂
- Figure 19. Nanocellulose virus filter paper
- Figure 20. Global revenues for advanced filtration technologies by materials, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates
- Figure 21. Global revenues for advanced filtration technologies by market, 2017-2030 (Millions USD). Conservative, medium and optimistic estimates
- Figure 22. CNF transparent film
- Figure 23. CNF wet powder
- Figure 24. Silk nanofiber (right) and cocoon of raw material

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