

The Global Market for Nanocoatings in the Medical Industry

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Abstracts

In medical and healthcare facilities it is necessary to equip materials and surfaces with a high level of hygiene using antimicrobial agents to protect them against bacteria and other micro organisms to prevent infections caused by bacteria and contribute significantly to reduce health costs. Challenges in medical device coatings include:

biocompatibility;

coating adhesion;

uniform coverage over challenging shapes;

strength;

durability.

Benefits of nanoscale coatings in this sector include long lasting antimicrobial effect, constant release of the active substance, effectiveness against bacteria and other micro-organisms, no chemical impurities, easy processing, no changes to the characteristics of the equipped material, and no later discolouration of the equipped material.

Nanocoatings are already finding application in life sciences & healthcare in enabling anti-bacterial surfaces for medical catheters, added to paints and lacquers used to coat operating tables, door knobs and door handles in hospitals and as ultra-hard porous coatings for surgical and orthopedic implants like screws, plates or joint implants.

The medical market will be a high growth area for nanoscale coatings over the next

5-10 years, and this is reflected in the high number of companies exploiting technology in this area, especially in the anti-microbial domain. The main market driver in this area is the prevention of the spread of deadly infections in medical facilities. Drug-resistant bacteria, the so-called 'superbugs,' are a growing problem in hospitals worldwide and poor hygiene among staff is often blamed for the spread of such infections.

Report contents include:

Advantages of nanocoatings in the medical and healthcare industry.

Types of nanocoatings.

Anti-viral and anti-microbial nanocoatings industry analysis.

Types of nanomaterials utilized in medical nanocoatings.

Profiles of 107 companies.

Contents

1 EXECUTIVE SUMMARY

- 1.1 Why nanocoatings?
- 1.2 Advantages over traditional coatings
- 1.3 Improvements and disruption in coatings markets
- 1.4 Anti-viral nanoparticles and nanocoatings
 - 1.4.1.1 Reusable Personal Protective Equipment (PPE)
 - 1.4.1.2 Wipe on coatings
 - 1.4.1.3 Facemask coatings
 - 1.4.1.4 Long-term mitigation of surface contamination with nanocoatings
- 1.5 End user market for nanocoatings
- 1.6 The nanocoatings market in 2020
- 1.7 Global market size, historical and estimated to 2020
 - 1.7.1 Global revenues for nanocoatings 2010-2030
 - 1.7.2 Regional demand for nanocoatings
- 1.8 Market challenges
- 1.9 Toxicity and environmental considerations
- 1.10 Impact of COVID-19 on the market
- 1.11 Market outlook in 2021

2 NANOCOATINGS TECHNICAL ANALYSIS

- 2.1 Properties of nanocoatings
- 2.2 Benefits of using nanocoatings
 - 2.2.1 Types of nanocoatings
- 2.3 Production and synthesis methods

3 NANOMATERIALS IN MEDICAL NANOCOATINGS

- 3.1 Metallic-based coatings
- 3.2 Polymer-based coatings
- 3.3 Graphene
 - 3.3.1 Properties
 - 3.3.2 Graphene oxide
 - 3.3.2.1 Anti-bacterial activity
 - 3.3.2.2 Anti-viral activity
 - 3.3.3 Reduced graphene oxide (rGO)

- 3.3.4 Application in medical and healthcare
 - 3.3.4.1 Anti-microbial wound dressings
 - 3.3.4.2 Medical textiles
 - 3.3.4.3 Anti-microbial medical devices and implants
- 3.4 Silicon dioxide/silica nanoparticles (Nano-SiO₂)
 - 3.4.1 Properties
 - 3.4.2 Application in medical and healthcare
 - 3.4.2.1 Antimicrobial and antiviral activity
 - 3.4.2.2 Easy-clean and dirt repellent coatings
- 3.5 Silver nanoparticles (Ag-NPs)
 - 3.5.1 Properties
 - 3.5.2 Application in medical nanocoatings
 - 3.5.2.1 Textiles
 - 3.5.2.2 Wound dressings
 - 3.5.2.3 Air filtration
 - 3.5.3 Companies
- 3.6 Titanium Dioxide nanoparticles (TiO₂-NPs)
 - 3.6.1 Properties
 - 3.6.1.1 Exterior and construction glass coatings
 - 3.6.1.2 Outdoor air pollution
 - 3.6.1.3 Interior coatings
 - 3.6.1.4 Improving indoor air quality
 - 3.6.1.5 Medical facilities
 - 3.6.2 Application in medical nanocoatings
 - 3.6.2.1 Antimicrobial coating indoor light activation
- 3.7 Nano-Zinc oxide (nano-ZnO/ ZnO-NPs)
 - 3.7.1 Properties
 - 3.7.2 Application in medical nanocoatings
 - 3.7.2.1 Sterilization dressings
 - 3.7.2.2 Anti-bacterial surfaces in construction and building ceramics and glass
 - 3.7.2.3 Antimicrobial packaging
 - 3.7.2.4 Anti-bacterial textiles
- 3.8 Nanocellulose
 - 3.8.1 Properties
 - 3.8.2 Application in medical nanocoatings
 - 3.8.2.1 Cellulose nanofibers
 - 3.8.2.2 Cellulose nanocrystals (CNC)
- 3.9 Carbon nanotubes
 - 3.9.1 Properties

- 3.9.2 Application in medical nanocoatings
- 3.10 Fullerenes
 - 3.10.1 Properties
 - 3.10.2 Application in medical nanocoatings
- 3.11 Copper nanoparticles (Cu-NPs)
 - 3.11.1 Properties
 - 3.11.2 Application in medical nanocoatings
 - 3.11.3 Companies
- 3.12 Gold nanoparticles (Au-NPs)
 - 3.12.1 Properties
 - 3.12.2 Application in medical nanocoatings
- 3.13 Chitosan nanoparticles
 - 3.13.1 Properties
 - 3.13.2 Application in medical nanocoatings
 - 3.13.2.1 Wound dressings
- 3.14 Hydrophobic and Hydrophilic coatings and surfaces
 - 3.14.1 Hydrophilic coatings
 - 3.14.2 Hydrophobic coatings
 - 3.14.2.1 Properties
 - 3.14.2.2 Application in facemasks
- 3.15 Superhydrophobic coatings and surfaces
 - 3.15.1 Properties
 - 3.15.1.1 Anti-microbial use
 - 3.15.1.2 Durability issues
 - 3.15.1.3 Nanocellulose
- 3.16 Oleophobic and omniphobic coatings and surfaces
 - 3.16.1 SLIPS
 - 3.16.2 Covalent bonding
 - 3.16.3 Step-growth graft polymerization
 - 3.16.4 Applications

4 MARKET SEGMENT ANALYSIS, MEDICAL COATINGS MARKET

- 4.1 ANTI-MICROBIAL, ANTI-VIRAL AND ANTI-FUNGAL NANOCOATINGS
 - 4.1.1 Market drivers and trends
 - 4.1.2 Applications
 - 4.1.3 Global revenues 2010-2030
 - 4.1.4 Companies
- 4.2 ANTI-FOULING AND EASY-TO-CLEAN NANOCOATINGS

- 4.2.1 Market drivers and trends
- 4.2.2 Benefits of anti-fouling and easy-to-clean nanocoatings
- 4.2.3 Applications
- 4.2.4 Global revenues 2010-2030
- 4.2.5 Companies
- 4.3 SELF-CLEANING (BIONIC) NANOCOATINGS**
 - 4.3.1 Market drivers and trends
 - 4.3.2 Benefits of self-cleaning nanocoatings
 - 4.3.3 Global revenues 2010-2030
 - 4.3.4 Companies
- 4.4 SELF-CLEANING (PHOTOCATALYTIC) NANOCOATINGS**
 - 4.4.1 Market drivers and trends
 - 4.4.2 Benefits of photocatalytic self-cleaning nanocoatings
 - 4.4.3 Applications
 - 4.4.3.1 Self-Cleaning Coatings
 - 4.4.3.2 Indoor Air Pollution and Sick Building Syndrome
 - 4.4.3.3 Outdoor Air Pollution
 - 4.4.3.4 Water Treatment
 - 4.4.4 Global revenues 2010-2030
 - 4.4.5 Companies
- 4.5 ANTI-FOGGING COATINGS**
 - 4.5.1 Applications

5 COMPANY PROFILES 135 (107 COMPANY PROFILES)

6 RESEARCH METHODOLOGY

- 6.1 Aims and objectives of the study
- 6.2 Market definition
 - 6.2.1 Properties of nanomaterials
 - 6.2.2 Categorization

7 REFERENCES

Tables

TABLES

Table 1. Properties of nanocoatings.

Table 2. Market drivers and trends in nanocoatings.

Table 3: End user markets for nanocoatings.

Table 4: Global revenues for nanocoatings, 2010-2030, millions USD.

Table 5: Market and technical challenges for nanocoatings.

Table 6. Toxicity and environmental considerations for anti-viral coatings.

Table 7: Technology for synthesizing nanocoatings agents.

Table 8: Film coatings techniques.

Table 9: Nanomaterials used in nanocoatings and applications.

Table 10: Graphene properties relevant to application in coatings.

Table 11. Bactericidal characters of graphene-based materials.

Table 12. Markets and applications for nanocoatings in medical and healthcare.

Table 13. Commercial activity in antimicrobial and antiviral nanocoatings graphene nanocoatings.

Table 14. Markets and applications for antimicrobial nanosilver nanocoatings.

Table 15. Companies developing antimicrobial silver nanocoatings.

Table 16. Antibacterial effects of ZnO NPs in different bacterial species.

Table 17. Types of carbon-based nanoparticles as antimicrobial agent, their mechanisms of action and characteristics.

Table 18. Companies developing antimicrobial copper nanocoatings.

Table 19. Mechanism of chitosan antimicrobial action.

Table 20: Contact angles of hydrophilic, super hydrophilic, hydrophobic and superhydrophobic surfaces.

Table 21: Disadvantages of commonly utilized superhydrophobic coating methods.

Table 22: Applications of oleophobic & omniphobic coatings.

Table 23: Anti-microbial, anti-viral and anti-fungal nanocoatings-Nanomaterials used, principles, properties and applications

Table 24. Nanomaterials utilized in antimicrobial and antiviral nanocoatings coatings-benefits and applications.

Table 25: Antimicrobial and antiviral nanocoatings markets and applications.

Table 26: Market assessment of antimicrobial and antiviral nanocoatings.

Table 27: Opportunity for antimicrobial and antiviral nanocoatings.

Table 28: Revenues for antimicrobial and antiviral nanocoatings, 2010-2030, US\$.

Table 29: Antimicrobial and antiviral nanocoatings product and application developers.

Table 30: Anti-fouling and easy-to-clean nanocoatings-Nanomaterials used, principles,

properties and applications.

Table 31: Market drivers and trends in Anti-fouling and easy-to-clean nanocoatings.

Table 32: Anti-fouling and easy-to-clean nanocoatings markets, applications and potential addressable market.

Table 33: Market assessment for anti-fouling and easy-to-clean nanocoatings.

Table 34: Revenues for anti-fouling and easy-to-clean nanocoatings, 2010-2030, US\$.

Table 35: Anti-fouling and easy-to-clean nanocoatings product and application developers.

Table 36: Self-cleaning (bionic) nanocoatings-Nanomaterials used, principles, properties and applications.

Table 37: Market drivers and trends in Self-cleaning (bionic) nanocoatings.

Table 38: Self-cleaning (bionic) nanocoatings-Markets and applications.

Table 39: Market assessment for self-cleaning (bionic) nanocoatings.

Table 40: Revenues for self-cleaning nanocoatings, 2010-2030, US\$.

Table 41: Self-cleaning (bionic) nanocoatings product and application developers.

Table 42: Self-cleaning (photocatalytic) nanocoatings-Nanomaterials used, principles, properties and applications.

Table 43: Market drivers and trends in photocatalytic nanocoatings.

Table 44: Photocatalytic nanocoatings-Markets, applications and potential addressable market size by 2027.

Table 45: Market assessment for self-cleaning (photocatalytic) nanocoatings.

Table 46: Revenues for self-cleaning (photocatalytic) nanocoatings, 2010-2030, US\$.

Table 47: Self-cleaning (photocatalytic) nanocoatings product and application developers.

Table 48. Market overview of anti-fog coatings in healthcare and medical.

Table 49. Photocatalytic coating schematic.

Table 50: Categorization of nanomaterials.

Figures

FIGURES

Figure 1. Schematic of anti-viral coating using nano-actives for inactivation of any adhered virus on the surfaces.

Figure 2. Face masks coated with antibacterial & antiviral nanocoating.

Figure 3: Global revenues for nanocoatings, 2010-2030, millions USD.

Figure 4: Regional demand for nanocoatings, 2019, millions USD.

Figure 5: Hydrophobic fluoropolymer nanocoatings on electronic circuit boards.

Figure 6: Nanocoatings synthesis techniques.

Figure 7: Techniques for constructing superhydrophobic coatings on substrates.

Figure 8: Electrospray deposition.

Figure 9: CVD technique.

Figure 10: Schematic of ALD.

Figure 11. A substrate undergoing layer-by-layer (LbL) nanocoating.

Figure 12: SEM images of different layers of TiO₂ nanoparticles in steel surface.

Figure 13: The coating system is applied to the surface. The solvent evaporates.

Figure 14: A first organization takes place where the silicon-containing bonding component (blue dots in figure 2) bonds covalently with the surface and cross-links with neighbouring molecules to form a strong three-dimensional.

Figure 15: During the curing, the compounds organise themselves in a nanoscale monolayer. The fluorine-containing repellent component (red dots in figure) on top makes the glass hydro- phobic and oleophobic.

Figure 16: Graphair membrane coating.

Figure 17: Antimicrobial activity of Graphene oxide (GO).

Figure 18: Hydrophobic easy-to-clean coating.

Figure 19 Anti-bacterial mechanism of silver nanoparticle coating.

Figure 20: Mechanism of photocatalysis on a surface treated with TiO₂ nanoparticles.

Figure 21: Schematic showing the self-cleaning phenomena on superhydrophilic surface.

Figure 22: Titanium dioxide-coated glass (left) and ordinary glass (right).

Figure 23: Self-Cleaning mechanism utilizing photooxidation.

Figure 24: Schematic of photocatalytic air purifying pavement.

Figure 25: Schematic of photocatalytic indoor air purification filter.

Figure 26. Schematic of antibacterial activity of ZnO NPs.

Figure 27: Types of nanocellulose.

Figure 28. Mechanism of antimicrobial activity of carbon nanotubes.

Figure 29: Fullerene schematic.

Figure 30. TEM images of Burkholderia seminalis treated with (a, c) buffer (control) and (b, d) 2.0 mg/mL chitosan; (A: additional layer; B: membrane damage).

Figure 31: (a) Water drops on a lotus leaf.

Figure 32: A schematic of (a) water droplet on normal hydrophobic surface with contact angle greater than 90° and (b) water droplet on a superhydrophobic surface with a contact angle $> 150^\circ$.

Figure 33: Contact angle on superhydrophobic coated surface.

Figure 34: Self-cleaning nanocellulose dishware.

Figure 35: SLIPS repellent coatings.

Figure 36: Omniphobic coatings.

Figure 37: Market drivers and trends in antimicrobial and antiviral nanocoatings.

Figure 38. Nano-coated self-cleaning touchscreen.

Figure 39: Revenues for antimicrobial and antiviral nanocoatings, 2010-2030, US\$.

Figure 40. Revenues for antimicrobial and antiviral nanocoatings, 2019-2030, US\$, adjusted for COVID-19 related demand, conservative and high estimates.

Figure 41: Anti-fouling treatment for heat-exchangers.

Figure 42: Markets for anti-fouling and easy clean nanocoatings, by %.

Figure 43: Potential addressable market for anti-fouling and easy-to-clean nanocoatings by 2030.

Figure 44: Revenues for anti-fouling and easy-to-clean nanocoatings 2010-2030, millions USD.

Figure 45. Revenues for anti-fouling and easy-to-clean nanocoatings, 2019-2030, US\$, adjusted for COVID-19 related demand, conservative and high estimates

Figure 46: Self-cleaning superhydrophobic coating schematic.

Figure 48: Potential addressable market for self-cleaning (bionic) nanocoatings by 2030.

Figure 49: Revenues for self-cleaning nanocoatings, 2010-2030, US\$.

Figure 50. Revenues for self-cleaning (bionic) nanocoatings, 2019-2030, US\$, adjusted for COVID-19 related demand, conservative and high estimates

Figure 51: Principle of superhydrophilicity.

Figure 52: Schematic of photocatalytic air purifying pavement.

Figure 53: Tokyo Station GranRoof. The titanium dioxide coating ensures long-lasting whiteness.

Figure 54: Markets for self-cleaning (photocatalytic) nanocoatings 2019, %.

Figure 55: Potential addressable market for self-cleaning (photocatalytic) nanocoatings by 2030.

Figure 56: Revenues for self-cleaning (photocatalytic) nanocoatings, 2010-2030, US\$.

Figure 57. Revenues for self-cleaning (photocatalytic) nanocoatings, 2019-2030, US\$, adjusted for COVID-19 related demand, conservative and high estimates

Figure 58. Face shield with anti-fog coating.

Figure 59. GrapheneCA anti-bacterial and anti-viral coating.

Figure 60. Microlyte® Matrix bandage for surgical wounds.

Figure 61. Self-cleaning nanocoating applied to face masks.

Figure 62. NanoSeptic surfaces.

Figure 63. NascNanoTechnology personnel shown applying MEDICOAT to airport luggage carts.

Figure 64. Applications of Titanystar.

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