



LUCINTEL INSIGHT
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FIVE TRENDS SHAPING THE FUTURE OF THE NANOCOATING MARKET

Over the years, the overall demand for nanocoating has increased due to rising demand in the automotive and consumer electronic industries, along with growing awareness of anti-microbial nanocoating in the healthcare industry. Nanocoating is used for a variety of markets, such as construction, automotive, healthcare, marine, and electronics. The major growth driver for this market is the increasing demand for nanocoating in end use industries due to its superior

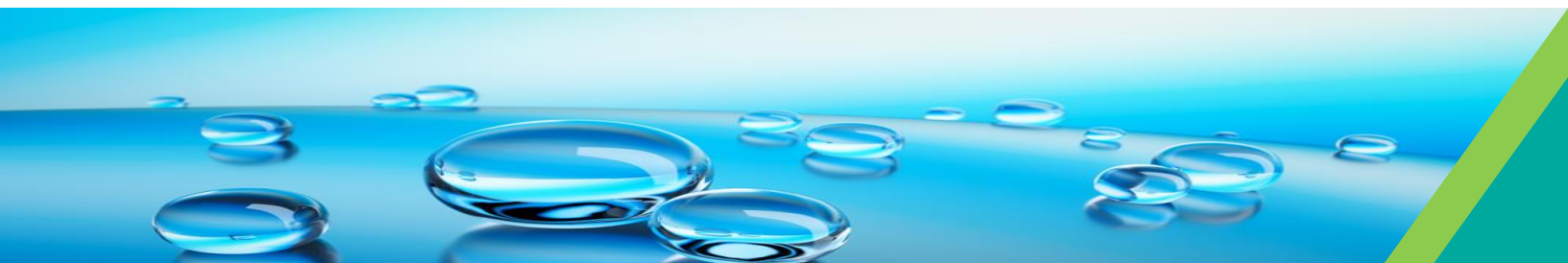
functional properties and performance benefits over conventional coatings.

The nanocoating market is divided into the segments of self-cleaning and easy-to-clean, anti-fingerprint, anti-microbial, anti-fouling, and others. Key players in the nanocoating market, in terms of product development, include ACTnano, Inc., PPG Industries, Nanogate AG, Nanosintez, and P2i Limited. These have been working on different strategies to drive sales using the most influential marketing techniques. However, as we examine the challenges and opportunities ahead in this market, companies can benefit from a strategy of developing waterproof nanocoating for electronic devices and anti-COVID-19 nanocoating along with their heterogeneous integration to drive toward the key target market trends we have identified. Lucintel predicts the global nanocoating market will be valued at \$22.9 billion by 2025, with an expected CAGR of 24.0% between 2020 and 2025.

Lucintel identifies five trends set to influence the global nanocoating market. Most of the industry players and experts agree that these five trends will accelerate developments in the nanocoating industry in the near future. In terms of the widespread knowledge about nanocoating already on the horizon, there is still a lack of unified perspective on the direction the industry is moving to proactively address developments. To help bring more clarity to this gap, our study aims to provide insights concerning the direction that changes are taking, and how these changes will impact the nanocoating market.

1. Nanostructured Coating for Prevention of Biofilm-Associated Infections on Medical Devices

Biofilm formation by human bacterial pathogens on implanted medical devices poses a major mortality risk for patients. Biofilm is a complex bacterial community that is highly resistant to antibiotics and human immunity. Biofilm formation on indwelling medical devices and implants such as catheters, mechanical heart valves, pacemakers, and prosthetic joints, presents a



critical medical problem. Altering the surface properties of indwelling medical devices is one of the main focuses now being implemented to prevent or decrease biofilm infections. One of the approaches to make biomaterial surfaces resistant to biofilm formation is to coat the surface with bactericidal/bacteriostatic substances. One of these involves development of trimethylsilane (TMS) plasma nanocoating



using low temperature plasma coating technology to coat surfaces of stainless steel and titanium for reduced bacterial adhesion and biofilm formation. Significant inhibition of *S. epidermidis* biofilm was observed on TMS plasma-coated stainless steel and titanium.

2. Nanocoating for Waterproofing Mobile Devices

There is new chemistry for the nanocoating that makes phones more waterproof than they have been in the past. The players Liquipel, HzO, Neverwet, and P2i Ltd. are looking to attain more market share by demonstrating to gadget companies that their nanocoating is better and that their waterproofing process costs less. All four of these companies have worked to meet International Electrotechnical Commission (IEC) 60529 IPX7 standards, which call for an electronic device to operate for at least 30 minutes after being immersed in at least 1 meter of water. Currently, the IPX7 standard serves as an industry benchmark for testing nanocoating on electronics.



3. Development of a New Anti-COVID-19 Nanocoating

The need for harmful chemicals is decreasing, as researchers are developing a new nanoparticle coating which could limit the transmission of COVID-19 via various surfaces. Anti-viral nanoparticle coatings have demonstrated the potential to prevent active surface infection from SARS-CoV-2. The coating contains nanoparticles of safe metal ions and polymers with both anti-viral and anti-microbial properties. This coating could find applications in hospitals and other healthcare facilities, as well as in schools, airports, and on public transportation. This coating, which can be sprayed directly onto surfaces, is also effective in reducing bacterial infection.



4. Omniphobic Nanocoating for Air Conditioners

Omniphobic nanocoating is a coating type that is 100 times thinner than human hair. Omniphobic nanocoating can be applied on air conditioner cooling fins to improve efficiency. The cost of omniphobic nanocoating is less than two percent of the manufacturing cost of an AC unit. Nelumbo has developed an omniphobic nanocoating that accelerates water shedding and reduces contaminant build-up on surfaces.



5. Growing Application of Nanocoating in Building and

Construction

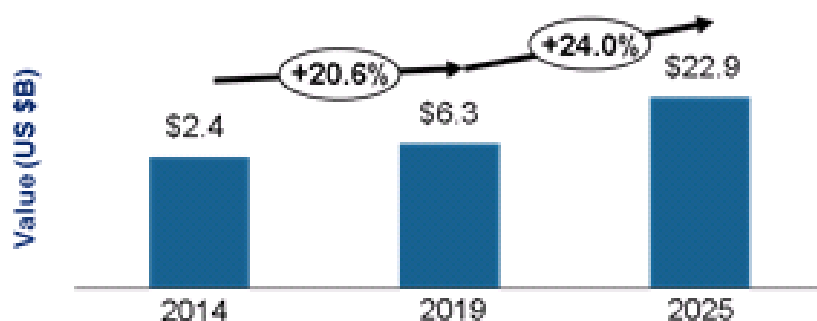
In the building and construction industry, nanocoating helps in the reduction of algae, mildew, and microbial growth. Nanocoating is preferred for coating building facades, roofs, and floor tiles. The nanocoating market in Brazil, Russia, India, China, and South Africa (BRICS) is growing due to industrialization and urbanization, along with the growing demand from consumers of the building and construction industry in these countries. Lucintel predicts the construction industry will grow 7% to 9% in next five years, and this will drive the demand for nanocoating.



Strategic Considerations for Key Players in the Nanocoating Market

The nanocoating industry is dynamic and ever-changing. Successful industry players are masters of innovation, change and adaptation. To retain this status, they need to be attentive to current trends. We believe there will be promising opportunities for nanocoating in the construction, automotive, healthcare, marine, electronic, and energy industries. As per Lucintel's latest market research report (Source: <https://www.lucintel.com/nanocoating-market-2020-2025.aspx>), the [nanocoating market](#) is expected to grow with a CAGR of 24.0% between 2020 and 2025, and reach \$22.9 billion by 2025. This market is primarily driven by increasing demand for nanocoating in end use industries due to its superior functional properties and performance benefits over conventional coatings.

Trends and Forecast for the Global Nanocoating Market (US \$B) (2014-2025)



Source: Lucintel

Whether you are new to the nanocoating market or an experienced player, it is important to understand the trends that impact the development process, as these trends as listed above will lead players to create long-term strategy formulation that will allow them to remain competitive and successful in the long run. For example, to capture growth momentum, nanocoating market players can increase their capabilities to develop waterproof nanocoating for electronic devices. Players can also focus on the development of anti-COVID-19 nanocoating, an area of growth which is expected to lead future trends.

Note: In order to gain better understanding, learn more about the scope, benefits, and companies researched, and other details of the nanocoating market report from Lucintel, click on <https://www.lucintel.com/nanocoating-market-2020-2025.aspx>. This comprehensive report provides you in-depth analysis on market trends and forecast, segment analysis, regional analysis, competitive benchmarking and company profiling of key players. In addition, we also offer **strategic growth consulting** to meet your customized needs. We have worked with many PE firms and corporate customers in the process of their market entry and M & A initiatives.



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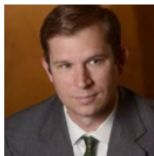


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