

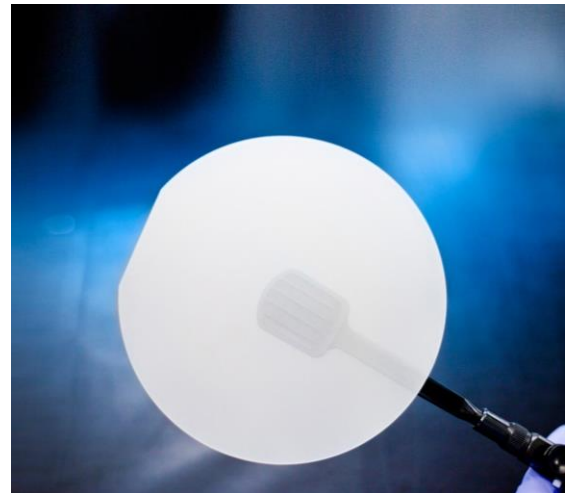
Monocrystal facilitates microLED development with its new Ultra-Clean sapphire wafers

Stavropol, Russia, April 26, 2017 – Monocrystal, a global leader in synthetic sapphire growing and processing, today announced the release of its new Ultra-Clean sapphire wafers.

Monocrystal applied its cutting-edge cleaning technology to achieve a breakthrough in wafer surface quality, required by high-precision optoelectronic applications, including microLEDs.

A microLED is the next generation light source, currently developed by all the leading LED-makers. It has significant advantages over a conventional LED in terms of brightness and power consumption. Monocrystal's new Ultra-Clean (UC) sapphire wafers have only 20-50 particles of no more than 1 micron in size on their surface; they are specially designated for microLED production.

“MicroLED is a very promising technology which requires a new approach in many aspects, including sapphire wafer surface preparation. Our UC-wafers with a very low particle count will allow our customers to achieve their target epitaxial yields, which is crucial for microLED successful development and further commercialization,” Monocrystal's CEO Oleg Kachalov commented.



“Our new UC-wafers are also compatible with the conventional PSS process. It is an advanced cost-saving solution, which eliminates the pre-cleaning step and allows PSS-makers to increase their yields up to 95-99% after the first pass. We have already received a very positive feedback on the UC-wafers from several long-term customers. We are encouraged to further develop our sapphire processing and cleaning technologies to assist our customers in achieving competitive advantages on the market,” added Monocrystal's VP Sales Mikhail Berest.

About Monocrystal

Monocrystal, a part of the diversified industrial holding Energomera, is a leading supplier of sapphire products for LED and metallization pastes for solar industries. According to the company's estimates, every 3rd LED, every 3rd smartphone with sapphire components and every 10th solar module in the world is made with Monocrystal products. The company's product portfolio includes large diameter sapphire substrates and ingots for LEDs, bricks and ingots for consumer electronics, optical windows, screen printing pastes for silicon wafer

solar cells, and conductive silver pastes for automotive glass. The company exports more than 99% of its products to more than 25 countries worldwide. For more information, please visit <http://www.monocrystal.com/>

Press contact: Monocrystal
Ludmila Zubova
Phone/Fax: +7 8652 56 28 71
Email: info@monocrystal.com
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