

Material Innovation Area

<http://crystal.pwr.eng.osaka-u.ac.jp>



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In cutting-edge technology, the evolution of hardware as well as software brings the innovation. The ultimate hardware technology is the “crystal”, the only one that can control electrons and light. Yusuke Mori Lab. is leading the world in researching “crystals”. With the arrival of smart society by the Internet of Things (IoT), AI and 5G will be the foundations. Yusuke Mori Lab. manufactures crystals that are indispensable for the realization of AI and crystals that accelerate 5G. We are also conducting research on linking meteorites with urethral stones and drug discovery by investigating crystals.

Growth of large-diameter and high-quality GaN wafers
by the Na-flux method

Click!



φ 2-inch GaN wafer



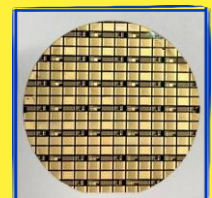
GaN crystal growth equipment for
high-temperature
and high-pressure condition



OVPE growth reactor



GaN crystal grown by OVPE



Devices fabricated on the
2-inch OVPE-GaN wafer

Click!

Nonlinear optical crystal crystals for UV laser

Click!



Furnace for CLBO crystal growth



CLBO crystal