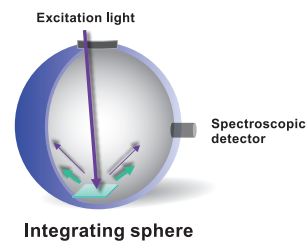


# Easily and instantly measures IQE (internal quantum efficiency), which is necessary to evaluate GaN single crystals and perovskite crystals

The ODPL measurement system use an integrating sphere to measure the spectrum of omnidirectional photoluminescence and determine the emission efficiency of samples.

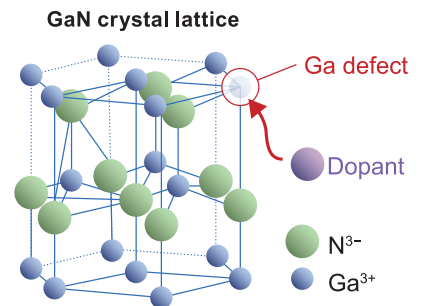


## "IQE" is a parameter for quality evaluation

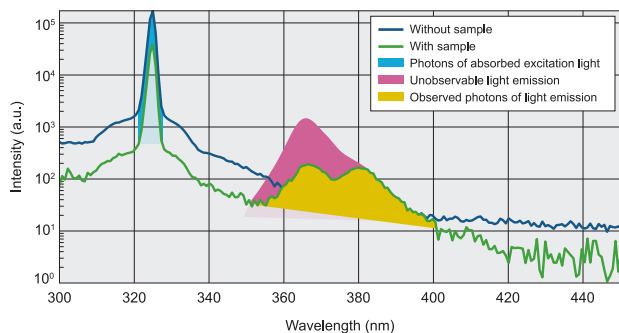
Semiconductor crystals have the property of emitting light when they are excited by light emitted from outside (photoluminescence). IQE is a parameter that expresses the efficiency of this light emission, and its value changes with great sensitivity due to dislocations, defects, and dopants. Therefore, it is expected that IQE will be used as an indicator of the quality of semiconductor materials.

$$IQE = \frac{\text{Amount of light emission}}{(\text{Light emission amount} + \text{Non light emission amount})}$$

Reflects dislocations, defects, and dopants



ODPL measurement



## Measurement / Analysis Items

- EQE measurement
- IQE calculation
- Absorption measurement
- PL spectrum measurement



ODPL measurement system C15993-01

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ODPL measurement system