

【ABSTRACT】

The present disclosure discloses a substrate heat-treating apparatus including a process chamber in which a flat substrate to be heat treated is placed, the process chamber comprising a beam transmitting plate placed below the flat substrate and an infrared transmitting plate placed above the flat substrate; a beam irradiating module for irradiating a VCSEL beam having a single wavelength to a lower surface of the flat substrate through the beam transmitting plate; and an temperature measuring module configured to measure the laser beam reflected from the lower surface or an upper surface the flat substrate, thereby measuring the temperature of the flat substrate.