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Dual-Luminescent Imaging for Capturing Temperature Field around a Bubble HIROTAKA SAKAUE, JAXA, HIDEKI GOYA, TAKESHI MIYAZAKI, The University of Electro-Communications — Dual-luminescent imaging uses two-luminescent outputs to extract the temperature information from an acquired image. This is applied to capture the temperature field around a bubble in boiling water. A laser sheet is used as an illumination source to obtain a temperature profile of the bubble. By using a fast frame-rate camera as an image acquisition unit, the time-resolved temperature information around the bubble can be captured. In the presentation, a current status of this measurement will be presented.

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