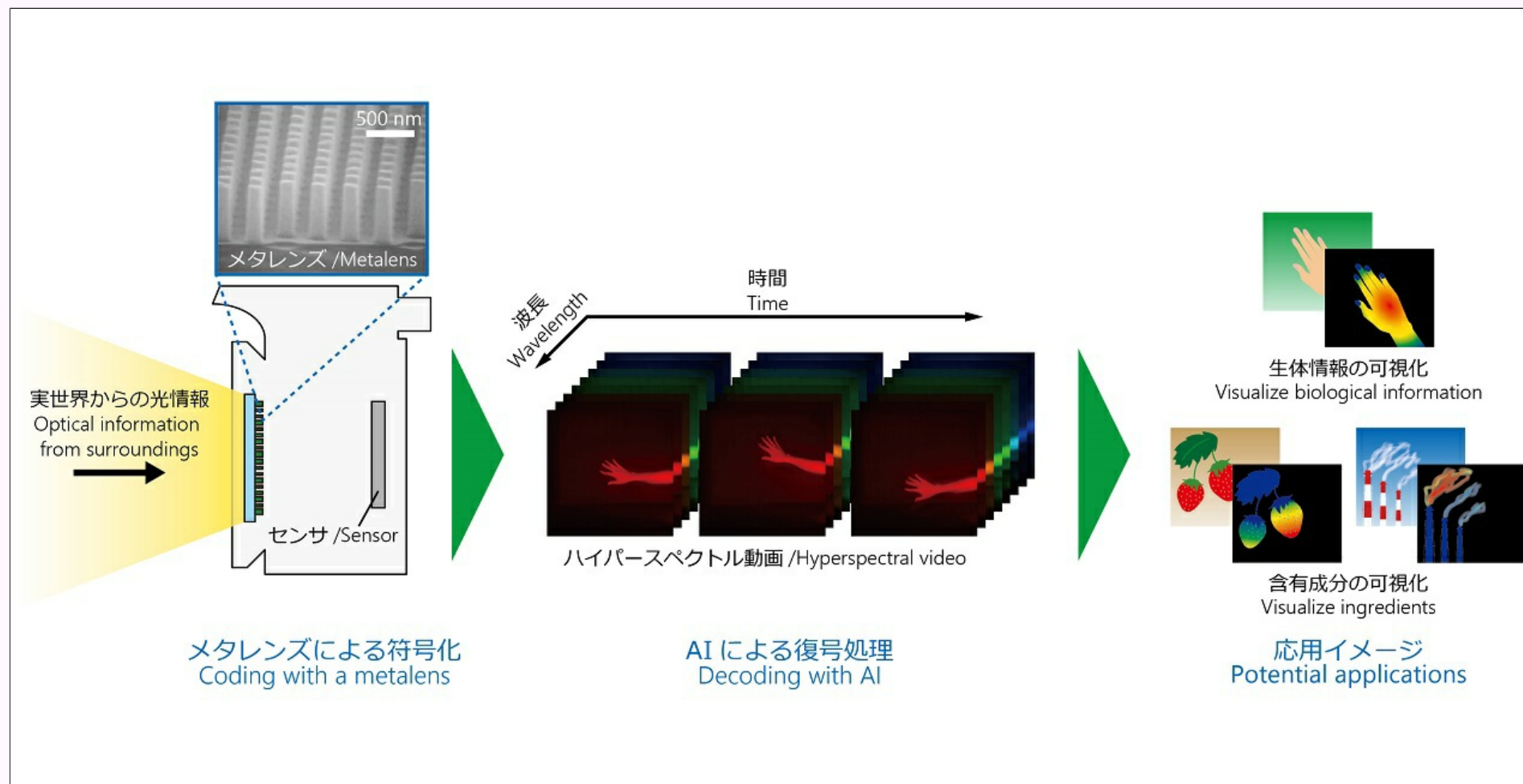




Capture spectral information in real time with a simple camera

Abstract

Light has a wealth of spectral information on objects, which can be used for estimating food freshness and biological information. However, capturing just one spectral image requires a long exposure with a complex camera. Our technology makes it possible to capture spectral images at a video frame rate using a simple camera with a state-of-the-art lens (metalens) and AI-based image processing.



Features

- A simple and compact camera consisting of one lens and one image sensor
- Spectral imaging at a video frame rate

Application Scenarios

- Real-time quality assessment for foods
- Easy acquisition of biological information and health status by non-contact sensing

Roadmaps

- We will further improve the accuracy and speed of the camera by optimizing the design from the metalens to AI. We will also convert the acquired spectral data into information valuable to society.

Exhibitors

NIPPON TELEGRAPH AND TELEPHONE CORPORATION