Realization of common platform technologies, facilities and equipment that create innovative knowledge and products

R&D Project Title (Registered) Development of innovative high-spatial and time resolution IR analysis methods with nanocarbon-based IR emitters

Project Leader : Hideyuki Maki Professor, Faculty of Science and Technology, Keio University.

R&D Team :



Summary :

Spectroscopy and imaging in the mid-infrared region are widely used from basic research to industry as Fourier transform infrared spectroscopy in the fields of chemistry and materials, etc. However, it has rarely been used in biotechnology and medicine due to problems such as extremely low spatial resolution caused by the use of macro and slow infrared light sources. In this study, we will develop an innovative infrared analysis technology based on new principles using nanocarbon-based IR sources. This will enable the use of nanocarbon infrared analysis in a wide range of fields, including biotechnology and medical fields.

