Oral presentation | 3 Optics and Photonics | 3.9 Terahertz technologies

## [10p-Z24-1~16]3.9 Terahertz technologies

Isao Morohashi(NICT), Takashi Arikawa(Kyoto Univ.)

Thu. Sep 10, 2020 1:25 PM - 5:30 PM Z24

 $\Delta:$  Presentation by Applicant for JSAP Young Scientists Presentation Award

▲ : English Presentation

▼ : Both of Above

No Mark: None of Above

1:30 PM - 1:45 PM

## [10p-Z24-2][The 4th Photonics Division Award Speech] Demonstration of tunable backward terahertz-wave parametric oscillation

OKouji Nawata<sup>1</sup>, Hiroaki Minamie<sup>1</sup> (1.RIKEN)

Keywords: Nonlinear wavelength conversion, Terahertz-wave parametric oscillation, Quasi-phase-matching device

We demonstrated tunable backward terahertz (THz)-wave parametric oscillation. The oscillation was emerged by the simple scheme without cavity mirrors. Noteworthy, the tunability was provided by just rotating the angle of a nonlinear crystal. The capability would realize mobile and ubiquitous THz-wave sources combining with robots.