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Title:High-speed coherent CW terahertz spectrometer
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Abstract:In-fibre wavelength selective modulation of the optical phase enables the electro-optic control of the terahertz phase in continuous-wave photomixing terahertz systems without any free-space optics. Using a fully fibre-coupled terahertz setup, a coherent scan of a frequency range of 1.5THz with 100MHz resolution in less than 24s is demonstrated. This sample rate of 1.6ms/sample is more than 20 times faster than any previous broadband scans reported.
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