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Title:Organic conjugated material-based broadband terahertz wave modulators

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Abstract:A simple and efficient broadband terahertz (THz) wave modulator based on an organic conjugated material thin film, 200-nm thick organic copper phthalocyanine (CuPc) film, deposited on a Si wafer was proposed. External laser beams significantly decrease the transmittance of THz pulses through the CuPc film over all frequency of the pulse. Modulation efficiency reaches as high as 55 under a cw-laser beam of 80 mW.

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