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Accession number:20113414255333

Title:Organic conjugated material-based broadband terahertz wave modulators

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Source title:Applied Physics Letters

Abbreviated source title:Appl Phys Lett

Volume:99

Issue:6

Issue date:August 8, 2011

Publication year:2011

Article number:061108

Language:English

ISSN:00036951

CODEN:APPLAB

Document type:Journal article (JA)

Publisher:American Institute of Physics, 2 Huntington Quadrangle, Suite N101, Melville, NY 11747-4502, United States

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.

Number of references:17