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TITLE

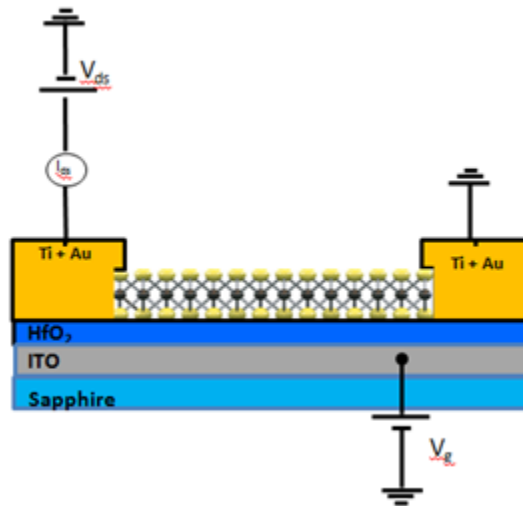
Electro-optical Modulator based on a layered semiconductor crystal structure

INVENTORS

Christoph Gadermaier, Daniele Vella, Guglielmo Lanzani, Nicola Martino, Maria Rosa Antognazza, Andras Kis, Dmitry Ovchinnikov

DESCRIPTION

The invention discloses an electro-absorption modulator based on an ultrathin (sub-nm to few nm) film of a layered two-dimensional semiconductor material. Layered crystals are those that form strong chemical bonds in-plane but display weak out-of-plane bonding. A transverse electric field is applied by at least one electrode on each side of the film, with the electrodes being either transparent or containing suitable openings for the transmission of light.



APPLICATIONS

Two-dimensional semiconductors, semiconductors

KEYWORDS

Electro-absorption modulator, electro-optical modulator, layered crystal semiconductors, mono- or few- atomic thickness semiconductor films, graphene

BIBLIOGRAPHIC DATA

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Applicants Institut "Jožef Stefan", Fondazione Istituto Italiano di Tecnologia

CONTACTS

Technology Transfer Office

Lorenzo Rossi

Lorenzo.rossi@iit.it

+39 010 71781 489