

Title (en)

LARGE AREA GROUP III NITRIDE CRYSTALS AND SUBSTRATES, METHODS OF MAKING, AND METHODS OF USE

Title (de)

GROSSFLÄCHIGE III-NITRID-KRISTALLE UND SUBSTRATE, VERFAHREN ZU DEREN HERSTELLUNG UND VERWENDUNGSVERFAHREN

Title (fr)

CRISTAUX ET SUBSTRATS DE NITRURE DU GROUPE III DE GRANDE SURFACE, LEURS PROCÉDÉS DE FABRICATION ET LEURS PROCÉDÉS D'UTILISATION

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Application

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Abstract (en)

[origin: WO2021163230A1] Embodiments of the present disclosure include techniques related to techniques for processing materials for manufacture of group-III metal nitride and gallium based substrates. More specifically, embodiments of the disclosure include techniques for growing large area substrates using a combination of processing techniques. Merely by way of example, the disclosure can be applied to growing crystals of GaN, AlN, InN, InGaN, AlGaIn, and AlInGaIn, and others for manufacture of bulk or patterned substrates. Such bulk or patterned substrates can be used for a variety of applications including optoelectronic and electronic devices, lasers, light emitting diodes, solar cells, photo electrochemical water splitting and hydrogen generation, photodetectors, integrated circuits, and transistors, and others.

IPC 8 full level

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Citation (search report)

See references of WO 2021163230A1

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