

Synthesis and characterization of chloro-bis(quinoline-2-carboxylato- κ^2 N,O)gallium(III).Autorzy

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Rok wydania

2011

Czasopismo

Journal of Coordination
Chemistry

Numer woluminu

64

Strony

1082-1090

DOI

10.1080/00958972.2011.563383

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The preparation and characterization of a new gallium(III) complex with quinoline-2-carboxylate, of formula $[\text{Ga}(\text{quin-2-c})_2\text{Cl}]$, are described. The crystal structure of the complex has been determined by X-ray diffraction, crystallizing in monoclinic space group $P2_1/n$ with Ga(III) adopting a distorted tetragonal pyramid. Gallium(III) coordinates two quinoline-2-carboxylates and one chloride with a $\text{Cl}, \text{N}_2, \text{O}_2$ donor set. In the crystal the 2-D supramolecular structure is generated by weak intermolecular interactions, $\text{C-H} \cdots \text{O}$, $\text{C-H} \cdots \text{Cl}$, and $\text{C-H} \cdots \pi$. The cytotoxicity assays against several human cancer cell lines (Du145, A549, MCF-7, A498, HT-29) and against mouse fibroblasts (BALB/3T3) revealed moderate antiproliferative activity of the complex.

Słowa kluczowe

Quinoline-2-carboxylate, Gallium(III) complex, crystal structure, Cytotoxic activity

Adres publiczny

<https://doi.org/10.1080/00958972.2011.563383>