

Synthesis and crystal structure of an Ag(I) complex of composition $(C_9H_7N(C_3H_5))_2[AgBr_2]Br(H_2O)_2$.

Autorzy

Oleksiy Pavlyuk

Vasyl V. Kinzhybalo

Rok wydania

2014

Czasopismo

Chemistry of Metals and
Alloys

Numer woluminu

7

Strony

63-67

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The crystalline complex $(C_9H_7N(C_3H_5))_2[AgBr_2]Br(H_2O)_2$ has been obtained and structurally investigated by X-ray diffraction: space group I-42d, $Z = 8$, $a = 26.903(6)$, $c = 7.090(2)$ Å, $V = 5132(2)$ Å³, $D_x = 1.784$ g·cm⁻³, number of independent reflection 6295, reliability factors $R = 0.022$, $wR = 0.039$. The coordination mode of the Ag(I) atom includes four bromine atoms. The crystal structure contains distinct polymeric anionic chains $\{AgBr_2\}_n$ and isolated Br⁻ anion, which are connected to the N-allylquinolinium cations and water molecules through electrostatic forces and hydrogen bonds.

Słowa kluczowe

Silver(I), σ -Complexes, N-Allyl derivatives, Quinoline, Crystal structure