

Gold(I)-Komplexe mit Aminliganden, II [1]. (Methylpyridin)-Komplexe von Gold(I)

Gold(I) Complexes with Amine Ligands, II. Methylpyridine Complexes of Gold(I)

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Z. Naturforsch. **53 b**, 653–662 (1998); eingegangen am 6. April 1998

Gold(I), Pyridine, Amine Complexes, X-Ray Data

Gold(I) complexes of overall formula LAuCl (L = various methylpyridines) are non-conducting in acetone. X-ray structure analyses show that the solid state structure of the corresponding complex **1** (L = 2-picoline) is molecular; the 3-picoline derivative **2** is however ionic $(\text{L}_2\text{Au})^+(\text{AuCl}_2)^-$. 3-Picoline forms a molecular complex LAuC_6F_5 (**3**) and also the ionic $(\text{L}_2\text{Au})^+(\text{SbF}_6)^-$ (**4**). Complexes **1**, **2** and **4** display short $\text{Au}\cdots\text{Au}$ contacts, leading to chains of gold atoms; additionally, complexes **3** and **4** show weak $\text{Au}\cdots\text{F}$ contacts. The (3-picoline)-gold(III) complex $\text{trans}-(\text{L}_2\text{AuCl}_2)^+(\text{SbF}_6)^-$ (**5**) was obtained as a by-product; it too contains short $\text{Au}\cdots\text{F}$ contacts.

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