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[Fe(pmd)(H₂O){Au(CN)₂]₂·H₂O

(HS) (LS).
 ()
 [1].
 [2-4].
 [5]

[Fe(pmd)(H₂O){Au(CN)₂]₂·H₂O (pmd =).
 Fe(II): Fe(1) Fe(2),
 {Fe(1)N₆} {Fe(2)N₄O₂}
 (350 – 400)
 [Fe(pmd)(H₂O){Au(CN)

$\text{[Fe(pmd)(H}_2\text{O)}\{\text{Au(CN)}_2\}_2\text{]}\cdot\text{H}_2\text{O}$ **1Au**, **2Au** -
 , [5]. **1Au** ,
 $\text{cm}^3\text{Kmol}^{-1}$, $\text{cm}^3\text{Kmol}^{-1}$ (M -
 $M T$ $M T$ $M T$ $M T$ -
 , T -), -
 Fe (II) [5]. $M T$ -
 $= 165 \text{ K.}$ $M T$ -
 $= 159$ $M T$ 1.7
 , 50 % Fe(II) HS -
 Fe(II) ,
 Fe(1) HS LS ,
 Fe(2) HS -
 $M T$ 8 K. -
 (HS)
 (LS). -
 $\text{[Fe(pmd)(H}_2\text{O)}\{\text{Au(CN)}_2\}_2\text{]}\cdot\text{H}_2\text{O}$, -
 , -
 , -
 Fe(1). , -
 " " -
 $88 \text{ K} < T < 160 \text{ K.}$ -
 , -
 , -
 , -
 , -

: **1.** *Lehn J.M.* Toward Self-Organization and Complex Matter // Science – 2002.- V.295. – P. 2400 – 2403. **2.** *Gaspar A.B., Munoz M.C. and Real J.A.* Dinuclear iron(II) spin crossover compounds: singular molecular materials for electronics // J. Mater. Chem. – 2006. – V.16.- P. 2522-2533. **3.** *Bousseksou A. Molnar G. and Matouzenko G.* Switching of Molecular Spin States in inorganic complexes by Temperature, Pressure, Magnetic Field and Light: Towards Molecular Devices // Eur. J. Inorg. Chem. – 2004. – P. 4353 – 4369. **4.** *Kahn O., Martinez C. J.* Spin-Transition Polymers: From Molecular Materials Toward Memory Devices // Science – 1998.- V.279. – P. 44 – 48. **5.** *Niel V., Thompson A., Muñoz M.C, Galet A., Goeta A., and Real J.A.* Crystalline-State Reaction with Allosteric Effect in Spin-

: 621.47:578.12

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CdTe, CdTe. n-CdS/p-
CdS CdS ,

CdS/CdTe
CdS, " "

2,38 , 71,51%
66,82% ,

(, FTO
(78,32% 75,29%). (2,35 2,27)

: ,