金属多硫1,2-二硫烯配合物C[Ni(dmid)~2]的研究

郝志峰,杨蓉,余向阳,唐宗薰,史启祯

汕头大学化学系.汕头(515063);西北大学化学系.西安(710069)

收稿日期 修回日期 网络版发布日期 接受日期

摘要 首次制得通式为C[Ni(dmid)~2]系列新配位化合物(C为外部阳离子,H~2dmid=4,5-二硫醇-1,3-二硫-2-酮)。当这些配合物用化学法氧化时,得到同一种配合物[Ni(dmid)~2],并确定了这些新配合物的组成,研究了它们的IR,UV,ESR,XPS谱和循环伏安图,测定了室温导电率。XPS谱的研究结果说明,用化学法氧化时电子转移过程主要发生在配体上,配位体的电荷分布发生了变化。

关键词 <u>硫烯</u> 镍络合物 <u>电荷分布</u> 氧化 <u>红外分光光度法</u> <u>紫外分光光度法</u> <u>电子自旋共振</u> X射线光电子谱法

分类号 <u>0611.</u>662

Study on metal multi-sulfur 1,2-dithiolene coordination compounds of C[Ni(dmid)~2]

Hao Zhifeng, Yang Rong, Yu Xiangyang, Tang Zongxun, Shi Qizhen Shantou Univ, Dept Chem. Shantou (515063); Northwest Univ, Dept Chem. Xian (710069)

Abstract A new series of coordination compounds C[Ni(dmid)~2] (where C is outer cations, H~2dmid=1,3-dithiole-2-one-4,5-dithiolate) have been prepared for the first time. The same compound [Ni(dmid)~2] is obtained when these compounds of C[Ni(dmid)~2] are oxidized. The components of these new compounds have been determined. IR, UV, ESR, XPS, cyclic voltammograms and conductivities at room temperature were studied. The XPS spectra show that the electron transfer occurs mainly on the ligand during the oxidation. Thus, charge distribution of the ligand changed accordingly.

Key wordsNICKEL COMPLEXCHARGE DISTRIBUTIONOXIDATIONINFRAREDSPECTROPHOTOMETRYULTRAVIOLET SPECTROPHOTOMETRYELECTRON SPIN RESONANCEX-RAY PHOTOELECTRON SPECTROMETRY

DOI:

通讯作者

扩展功能

本文信息

- ► Supporting info
- ▶ <u>PDF</u>(0KB)
- ▶[HTML全文](0KB)
- ▶参考文献

服务与反馈

- ▶把本文推荐给朋友
- ▶加入我的书架
- ▶加入引用管理器
- ▶ 复制索引
- ► Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

相关信息

- ▶ 本刊中 包含"硫烯"的 相关文章
- ▶本文作者相关文章
- 郝志峰
- 杨蓉
- 余向阳
- 唐宗薰
 - 史启祯