

新型C~n[M(dmit)~2]类导电配位化合物的研究

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摘要 首次将不饱和杂原子环状阳离子(N-甲基吡啶阳离子、N-甲基喹啉阳离子和N-甲基苯并噻唑阳离子)及三甲基苯基铵阳离子引入[M(dmit)~2]ⁿ⁺体系制备得到了6个新型的导电配位化合物C~n[M(dmit)~2] (M=Ni,Pd,Pt,n=2,1)。对这些新化合物进行了组成和结构的测定,研究了它们的IR,UV,ESR和XPS,测定了变温磁化率和室温导电率。结果表明,外部阳离子的大小和形状会影响阴离子部分[M(dmit)~2]ⁿ⁻的荷电量以及电荷分布,从而导致配合物性能的改变,说明外部阳离子可以通过另外一种方式来影响配合物的电性能。

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Study on new type of conductive coordination compound of C~n[M(dmit)~2]

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Abstract A new type of conductive coordination compound of C~n[M(dmit)~2] (M=Ni, Pd, Pt, n=2, 1) has been obtained by introducing unsaturated heterocyclic cations (N-methylpyridine cation, N-methylquinoline cation and N-methylbenzothiazole cation) and trimethylphenyl ammonium into the system of [Ni(dmit)~2]ⁿ⁺. The components and structures of these new compounds have been determined. IR spectra, ESR spectra, XPS spectra, UV spectra, magnetic susceptibilities and conductivities were studied. It is concluded that the charge number and distribution of the anion can be influenced by the outer cations, therefore, the electrical property of the complexes was influenced by the cations through another way.

Key words [COMPLEX COMPOUNDS](#) [METAL COMPLEX](#) [THIOKETONE](#) [SULFUR HETEROCYCLICS COMPOUNDS](#) [CYCLOPENTENE P](#) [ELECTRICAL CONDUCTIVITY](#) [SUSCEPTIBILITY](#) [ELECTRICAL CONDUCTIVITY](#)

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