



Electrochemical Study of the Hydrogenation of $\text{LaZr}_2\text{Cr}_4\text{Ni}_5$ -Based Alloys

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ABSTRACT

Among a series of AB_x ($0.5 \leq x \leq 5$) intermetallic compounds investigated for the reversible hydrogen storage, the AB_3 -type alloys have shown promising performances as negative electrode materials for Ni-MH batteries [1-3]. They gained a great attention owing to their elevated hydrogen storage capacity of 400 mAh.g^{-1} [3-7]. Comparatively to the commonly used AB_5 -type alloys, the AB_3 -type alloys are distinguished by their longer electrochemical stability in highly alkaline media and faster charge/discharge kinetics [2,8-10]. In our previous work [11], a novel AB_3 -type $\text{LaZr}_2\text{Cr}_4\text{Ni}_5$ -based alloy was successfully elaborated by mechanical alloying from LaNi_5 and ZrCr_2 precursors according to eqn.

Importance of Chromatography: The importance of Chromatography is increasing rapidly in pharmaceutical analysis. The precise differentiation, selective identification and quantitative determination of structurally closely related compounds.

High performance Liquid Chromatography: The cutting edge kind of chromatography has been called superior, high, high goal and fast fluid chromatography.

Multiple reports have been provided of conjugated polymers with spirocyclic ring systems. The use of a tetrahedral core in combination with a planar conjugated backbone was used to monitor thin film microstructure and increase system efficiencies in many cases. In particular, spirocyclic fluorine and sila-fluorine based conjugated polymers have demonstrated increased stability and decreased emission

relative to their comparable non-spirocyclic. Spirocyclics are widely used as electron-acceptors in organic solar cells. Similarly, spirocyclic small molecules are the most common type of hole transport materials in hybrid solar cells. Interestingly, small molecule spirocyclic hole conveying materials were also used to produce high-efficiency solar cells even at low concentrations. Nevertheless, so far, the use of spirocycles in conjugated polymers has been primarily to regulate their solid state structure, and their ability in terms of the polymer backbone's electronic manipulation has largely been overlooked. In contrast, spiro conjugation has been used several times in small molecules to monitor the molecular frontier orbitals and their respective interactions. Here we present a series of spirocyclic conjugated polymers, where you can use the orthogonal ring method to control the polymer's electronic structure. Therefore we envisage a method by which both electronic and morphological properties can be simultaneously enhanced.

Whereas the polymeric materials described in this study are more suitable for emissive applications, we assume that this novel energetic tuning approach extends to all fields of conjugated polymer electronics. To establish this new approach, we have chosen to research fluorine containing conjugated polymers in all fields of organic electronics because of its widespread use. In addition, due to its improved chemical stability, the use of spirocycles containing fluorene polymers has been extensively studied. We were therefore interested in further investigating related spiro- systems in which the anthracene unit's C-10 atom was changed to integrate both electron donation and electron withdrawal functions to investigate its effect on the band.

Keywords: HPLC; Amlodipine Besylate;
TelmisartanHCl; Chromatogram; Validation