Accepted Manuscript

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PII: S0925-8388(15)31113-0

DOI: 10.1016/j.jallcom.2015.09.137

Reference: JALCOM 35412

To appear in: Journal of Alloys and Compounds

Received Date: 8 August 2015

Revised Date: 8 September 2015

Accepted Date: 15 September 2015

Please cite this article as: F. Liu, Y. Deng, X. Han, W. Hu, C. Zhong, Electrodeposition of metals and alloys from ionic liquids, *Journal of Alloys and Compounds* (2015), doi: 10.1016/j.jallcom.2015.09.137.

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ACCEPTED MANUSCRIPT

Electrodeposition of metals and alloys from ionic liquids

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Abstract

Electrodeposition of metals and alloys in ionic liquids has been employed in a broader range of fields. Issues regarding the evolution of hydrogen, toxicity of reagents can be overcome by utilizing ionic liquids. This review outlines the current state of electrodeposition of various types of metals and their alloys in ionic liquids with particular focus on the work within the last decade. The metals are categorized into four groups and special attention is paid to the reactive metals that cannot possibly be deposited from traditional aqueous solutions.

Keywords: Electrodeposition; ionic liquids; metals; alloys; redox potential

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