

CURRENT RESEARCH ACTIVITIES OF BIOMEDICAL MAGNESIUM ALLOYS IN CHINA

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Abstract

The potential biomedical application of magnesium alloys as bioabsorbable / biodegradable implants in the human body has been extensively studied worldwide, and becomes an emerging and promising application direction.

The author served as the chairman in two recent conferences relating to biomedical magnesium alloys: (1) the *12th Annual Conference on Biomaterials* in December 2009, organized by the Chinese Society of Biomedical Engineering, and (2), a symposium on Biodegradable Metallic Materials in May 2010 at Peking University. Based on the papers presented in these conferences (about 50 in each), the frontier research activities of biomedical magnesium alloys in China for orthopedic and cardiovascular implants will be systematically summarized and comprehensively reviewed in this paper [1]. The research highlights the alloying system design, novel structure, degradation rate control, and surface modification methods; results will be demonstrated via plenty of in vitro and in vivo study data.

Reference

[1] Y.F. Zheng, "Current research activities of biomedical magnesium alloys in China", *JOM* 63/4 (2011), *to be published*.