Record Nr. UNINA9910557355703321 Autore Timm Stefan Regulation of Central Carbon and Amino Acid Metabolism in Plants Titolo Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021 1 electronic resource (182 p.) Descrizione fisica Soggetti Research & information: general Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Due to their lightweight and high specific strength, Mg-based alloys Sommario/riassunto are considered as substitutes to their heavier counterparts in applications in which corrosion is non-relevant and weight saving is of importance. Furthermore, due to the biocompatibility of Mg, some alloys with controlled corrosion rates are used as degradable implant materials in the medical sector. The typical processing route of Mg parts incorporates a casting step and, subsequently, a thermomechanical treatment. In order to achieve the desired macroscopic properties and thus fulfill the service requirements, thorough knowledge of the relationship between the microstructure, the processing steps, and the resulting property profile is necessary. This Special Issue covers in situ and ex situ experimental and computational investigations of the behavior under thermo-mechanical load of Mgbased alloys utilizing modern characterization and simulation techniques. The papers cover investigations on the effect of rare earth additions on the mechanical properties of different Mg alloys, including the effect of long-period stacking-ordered (LPSO) structures, and the

processing routes

experimental and computational investigation of the effect of different