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Autore	Kyratsis Panagiotis
Titolo	Advances in CAD/CAM/CAE Technologies
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2020
ISBN	3-03928-741-9
Descrizione fisica	1 online resource (116 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	CAD/CAM/CAE technologies find more and more applications in today's industries, e.g., in the automotive, aerospace, and naval sectors. These technologies increase the productivity of engineers and researchers to a great extent, while at the same time allowing their research activities to achieve higher levels of performance. A number of difficult-to-perform design and manufacturing processes can be simulated using more methodologies available, i.e., experimental work combined with statistical tools (regression analysis, analysis of variance, Taguchi methodology, deep learning), finite element analysis applied early enough at the design cycle, CAD-based tools for design optimizations, CAM-based tools for machining optimizations.

2. Record Nr.	UNINA9910557355703321
Autore	Timm Stefan
Titolo	Regulation of Central Carbon and Amino Acid Metabolism in Plants
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Descrizione fisica	1 online resource (182 p.)
Soggetti	Research & information: general Technology: general issues
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Due to their lightweight and high specific strength, Mg-based alloys 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 thermo-mechanical 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 Mg-based 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 experimental and computational investigation of the effect of different processing routes</p>