1.

Record Nr.	UNINA9910367565503321
Autore	López de Lacalle Luis Norberto
Titolo	Machining-Recent Advances, Applications and Challenges / Luis Norberto López de Lacalle, Gorka Urbicain
Pubbl/distr/stampa	Basel, Switzerland : , : MDPI, , 2019
ISBN	9783039213788 3039213784
Descrizione fisica	1 electronic resource (554 p.)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The Special Issue Machining-Recent Advances, Applications and Challenges is intended as a humble collection of some of the hottest topics in machining. The manufacturing industry is a varying and challenging environment where new advances emerge from one day to another. In recent years, new manufacturing procedures have retained increasing attention from the industrial and scientific community. However, machining still remains the key operation to achieve high productivity and precision for high-added value parts. Continuous research is performed, and new ideas are constantly considered. This Special Issue summarizes selected high-quality papers which were submitted, peer-reviewed, and recommended by experts. It covers some (but not only) of the following topics: High performance operations for difficult-to-cut alloys, wrought and cast materials, light alloys, ceramics, etc.; Cutting tools, grades, substrates and coatings. Wear damage; Advanced cooling in machining: Minimum quantity of lubricant, dry or cryogenics; Modelling, focused on the reduction of risks, the process outcome, and to maintain surface integrity; Vibration problems in machines: Active and passive/predictive methods, sources, diagnosis and avoidance; Influence of machining in new concepts of machine-tool, and machine static and dynamic behaviors; Machinability of new composites, brittle and emerging materials; Assisted machining

processes by high-pressure, laser, US, and others; Introduction of new analytics and decision making into machining programming. We wish to thank the reviewers and staff from Materials for their comments, advice, suggestions and invaluable support during the development of this Special Issue.