At this time, nonconventional machining presents great interest for application in the modern manufacturing industry. This volume aims to provide information on progress of nonconventional machining in six chapters. Chapter 1 is dedicated to environmental aspects related to nonconventional machining processes. Chapter 2 describes vibration assisted machining: turning, drilling, cutting, and laser polishing. Chapter 3 contains information on abrasive waterjet machining of dissimilar materials stacked in a hybrid structure. Chapter 4 is dedicated to magnetic abrasive finishing process. Chapter 5 describes electrical discharge machining of silicon (current progress and future trends). Finally, Chapter 6 contains information on parametric optimization of machining characteristics of titanium alloy in wire electro discharge machining (WEDM).

This volume can be used as a research book for an undergraduate engineering course or as a topic on nonconventional machining at the postgraduate level. Also, this volume can serve as a useful reference for academics; researchers; mechanical, production, and industrial engineers; and professionals in nonconventional machining and related industries. The interest of scientific in this volume is evident for many important laboratories, institutes, colleges, and universities as well as for manufacturing industry.

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