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Nota di contenuto	Introduction to Alternative Fuels and Advanced Combustion Techniques as Sustainable Solutions for Internal Combustion Engines -- Prospects of Fuel Injection System for Di-Methyl Ether Applications in Compression Ignition Engines -- Material Compatibility, Technical Challenges, and Modifications Required for DME Adaptation in Compression Ignition Engines -- Techno-Economic and Environmental Evaluation of Producer Gas-Based IC Engine in a Hybrid Energy System -- A Comparative Assessment of Biogas Upgradation Techniques and its Utilization as an Alternative Fuel in Internal Combustion Engines -- A Comprehensive Study on Utilization of Producer Gas as IC Engine Fuel.
Sommario/riassunto	This monograph covers different aspects related to utilization of alternative fuels in internal combustion (IC) engines with a focus on biodiesel, dimethyl ether, alcohols, biogas, etc. The focal point of this book is to present engine combustion, performance and emission

characteristics of IC engines fueled by these alternative fuels. A section of this book also covers the potential strategies of utilization of these alternative fuels in an energy efficient manner to reduce the harmful pollutants emitted from IC engines. It presents the comparative analysis of different alternative fuels in a variety of engines to show the appropriate alternative fuel for specific types of engines. This book will prove useful for both researchers as well as energy experts and policy makers.