Record Nr. UNINA9910830063403321 Biofuels from lignocellulosic biomass: innovations beyond bioethanol / **Titolo** / edited by Michael Boot Pubbl/distr/stampa Weinheim, Germany:,: Wiley-VCH Verlag GmbH & Co.,, 2016 ©2016 **ISBN** 3-527-68529-4 3-527-68530-8 3-527-68531-6 Descrizione fisica 1 online resource (275 p.) Disciplina 661.802 Lignocellulose - Biodegradation Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Title Page: Copyright: Table of Contents: List of Contributors: Preface: Nota di contenuto Acknowledgments: Chapter 1: Fuels and Combustion: 1.1 Introduction: 1.2 The Options; 1.3 Spark Ignition; 1.4 Compression Ignition; 1.5 Highly Diluted Autoignition, HCCI; 1.6 Other Combustion Concepts; 1.7 Summary of Combustion Processes: References; Chapter 2: Fuel Class Higher Alcohols; 2.1 Introduction and Fuel Properties; 2.2 Performance in Spark-Ignition Engines; 2.3 Performance in Compression-Ignition Engines: 2.4 Production Pathways: 2.5 Outlook: 2.6 Conclusions: References: Chapter 3: Fuel Class Valerates 3.1 Introduction and Fuel Properties 3.2 Performance in Spark-Ignition Engines: 3.3 Performance in Compression-Ignition Engines: 3.4 Production Pathways; 3.5 Outlook; 3.6 Conclusions; Acknowledgments; References; Chapter 4: Butyl Ethers and Levulinates; 4.1 Introduction and Fuel Properties; 4.2 Performance in Compression-Ignition Engines; 4.3 Production Pathways; 4.4 Outlook; 4.5 Conclusions; References; Chapter 5: A Comprehensive Review of 2,5-Dimethylfuran as a Biofuel Candidate; 5.1 Introduction to DMF; 5.2 Production Pathways; 5.3 Performance in Spark-Ignition Engines 5.4 Performance in Compression-Ignition Engines 5.5 Outlook; 5.6 Conclusions; References; Chapter 6: Furanoids; 6.1 Introduction and

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