

1. Record Nr.	UNINA9910768464703321
Titolo	Conversion of Carbon Dioxide into Hydrocarbons Vol. 1 Catalysis // edited by Inamuddin, Abdullah M. Asiri, Eric Lichtfouse
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-28622-3
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (X, 211 p. 53 illus., 43 illus. in color.)
Collana	Environmental Chemistry for a Sustainable World, , 2213-7122 ; ; 40
Disciplina	546.6812
Soggetti	Environmental chemistry Catalysis Pollution Analytical chemistry Electrochemistry Environmental Chemistry Analytical Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Chapter 1. Conversion of carbon dioxide into liquid hydrocarbons in the presence of a cobalt-containing catalysts -- Chapter 2. Conversion of carbon dioxide using lead/composite/oxides electrodes into formate/formic acid -- Chapter 3. Thermo-chemical conversion of carbon dioxide to carbon monoxide by reverse water-gas shift reaction over ceria-based catalysts -- Chapter 4. Photocatalytic systems for carbon dioxide conversion to hydrocarbons -- Chapter 5. Electrochemical reduction of carbon dioxide to methanol using metal-organic frameworks and non-metal-organic frameworks catalysts -- Chapter 6. Photocatalytic conversion of carbon dioxide into hydrocarbons -- Chapter 7. Electrocatalytic production of methanol from carbon dioxide.
Sommario/riassunto	This book presents the catalytic conversion of carbon dioxide into various hydrocarbons and other products using photochemical, electrochemical and thermo-chemical processes. Products include formate, formic acid, alcohols, lower and higher hydrocarbons, gases

such as hydrogen, carbon monoxide and syngas.
