

1. Record Nr.	UNINA9910493216703321
Titolo	Enhancing assessment in higher education : putting psychometrics to work / / edited by Tammie Cumming and M. David Miller, foreword by Michael J. Kolen
Pubbl/distr/stampa	Sterling, Virginia : , : Stylus Publishing, , 2017 ©2017
ISBN	1-62036-369-0
Descrizione fisica	1 online resource (234 pages)
Disciplina	378.1/662
Soggetti	College students - Rating of Educational tests and measurements - Psychological aspects Psychometrics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.

2. Record Nr.	UNINA9910424637203321
Titolo	Direct hydroxylation of methane : interplay between theory and experiment / Kazunari Yoshizawa, editor
Pubbl/distr/stampa	Gateway East, Singapore : , : Springer, , [2020] Â©2020
ISBN	981-15-6986-X
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (V, 165 p. 107 illus., 55 illus. in color.)
Disciplina	622.5
Soggetti	Methane
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Physical properties of methane -- 2. Methane hydroxylation by transition-metal oxide ions -- 3. Enzymatic methane hydroxylation by methane monooxygenase -- 4. Methane and benzene oxidation by metal-exchanged zeolites -- 5. Methane activation on metal-oxide surfaces -- 6. Methane activation on alloy surface: Informatics approach -- 7. Synergy of theory and experiment.
Sommario/riassunto	This book focuses on theoretical and computational studies by the editor's group on the direct hydroxylation of methane, which is one of the most challenging subjects in catalyst chemistry. These studies of more than 20 years include gas-phase reactions by transition-metal oxide ions, enzymatic reactions by two types of methane monooxygenase (soluble and particulate MMO), catalytic reactions by metal-exchanged zeolites, and methane C–H activation by metal oxide surfaces. Catalyst chemistry has been mostly empirical and based on enormous experimental efforts. The subject of the title has been tackled using the orbital interaction and computations based on extended Hückel, DFT, and band structure calculations. The strength of the theoretical studies is in the synergy between theory and experiment. Therefore, the group has close contacts with experimentalists in physical chemistry, catalyst chemistry, bioinorganic chemistry, inorganic chemistry, and surface chemistry. This resulting book will be useful for the theoretical analysis and design of catalysts. .

