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Altri autori (Persone)	GaoFei <1983-> BlunierBenjamin MiraouiAbdellatif
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Soggetti	Proton exchange membrane fuel cells - Mathematical models
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [227]-233) and index.
Nota di contenuto	General introduction -- PEMFC structure -- Why model a fuel cell? -- How can a fuel cell be modeled? -- Literature models synthesis -- Structural and functional approaches -- Stack-level model -- Cell-level model (membrane-electrode assembly, MEA) -- Individual layer level modeling -- Finite element and finite volume approach -- Detailed nexa proton exchange membrane fuel cell stack modeling -- Model experimental validation.
Sommario/riassunto	The fuel cell is a potential candidate for energy storage and conversion in our future energy mix. It is able to directly convert the chemical energy stored in fuel (e.g. hydrogen) into electricity, without undergoing different intermediary conversion steps. In the field of mobile and stationary applications, it is considered to be one of the future energy solutions. Among the different fuel cell types, the proton exchange membrane (PEM) fuel cell has shown great potential in mobile

applications, due to its low operating temperature, solid-state electrolyte and compactness. This book pre
