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Nota di contenuto	Chapter 1. Disruption as a strategy: technology leadership brief -- Chapter 2. Retail infrastructure costs comparison for hydrogen and electricity for light-duty vehicles -- Chapter 3. Nanometers layered conductive carbon coating on 316L stainless steel as bipolar plates for more economical automotive PEMFC -- Chapter 4. Chemical hydrides for hydrogen storage in fuel cell applications -- Chapter 5. Hydrogen sensors for automotive fuel cell applications -- Chapter 6. Development of a vehicle-level simulation model for evaluating the trade-off between various advanced on-board hydrogen storage technologies for fuel cell vehicles -- Chapter 7. Air supply system for automotive fuel cell application -- Chapter 8. Hybrid electric system for a hydrogen fuel cell vehicle and its energy management -- Chapter 9. Control system for sensing the differential pressure between air and hydrogen in a polymer electrolyte fuel cell (PEFC) -- Chapter 10. Multi-objective optimization of fuel cell hybrid vehicle powertrain design-- Cost and energy.

Sommario/riassunto

The chapters in this book are based on papers covering various qualities of fuel cells. They address topics including barriers to the market introduction of alternative vehicles and ways to address these challenges, retail infrastructure cost comparison of hydrogen and electricity, a conductive carbon coating on 316L stainless steel for bipolar plates for the polymer electrolyte membrane fuel cell (PEMFC), chemical hydrides for hydrogen storage, hydrogen sensors, a simulation model for comparing on-board hydrogen storage technologies, an air supply system, a hybrid electric system for a hydrogen fuel cell vehicle and its energy management, a control system for sensing differential pressure between air and hydrogen in a polymer electrolyte fuel cell (PEFC), and optimization of a fuel cell hybrid vehicle powertrain design.
