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Sommario/riassunto	This book documents a special collection of articles from a select group of invited prominent scientists from academia, national laboratories and industry who presented their work at the symposia on Energy Materials and Nanotechnology for Power Generation at the 2008 Materials Science and Technology (MS&T'08) conference held in Pittsburgh, PA. These articles represent a summary of the presentations focusing on both the scientific and technological aspects of energy storage, nuclear materials, nano-based sensors, catalysts and devices for applications in power generation, solar energy materials