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Nota di contenuto	Front matter -- Preface -- Contents -- Symbols and units -- Part I: Crystalline Silicon Module Technology 1 Introduction -- 1. Introduction -- 2. Solar cell properties -- 3. Module design, materials, and production -- 4. Basic module characterization -- 5. Module power and efficiency -- 6. Module performance -- 7. References -- Part II: Crystalline Silicon Module Reliability -- 8. Characterization of modules and degradation effects -- 9. Loads for PV Modules -- 10. Accelerated aging tests -- 11. Reliability testing of materials -- 12. Reliability testing of modules -- 13. PV module and component certification -- 14. References -- Index
Sommario/riassunto	Photovoltaic Modules: Technology and Reliability provides unique insights into concepts, material design strategies, manufacturing techniques, quality and service life analysis of wafer-based photovoltaic modules. Taking an interdisciplinary approach, the authors focus on two main topics. Part I - Crystalline Silicone Module Technology offers photovoltaics fundamentals: solar cell properties, module design, materials and production, basic module characterization, module power as well as efficiency and module performance. Part II, on the other hand, illustrates the state-of-the-art of module reliability by characterization of modules and degradation

effects, examination of PV-Module loads, accelerated aging tests as well as reliability testing of materials and modules. A separate chapter is dedicated to PV module and component certification.