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9.4 Annealing of Sputtered Precursors; 9.5 Device Performance; 9.6 Summary; References; Chapter 10 Coevaporation of CZTS Films and Solar Cells; 10.1 Introduction; 10.2 Basic Principles; 10.3 Process Variations; Acknowledgements; References; Chapter 11 Synthesis of CZTSSe Thin Films from Nanocrystal Inks; 11.1 Introduction; 11.2 Nanocrystal Synthesis; 11.3 Nanocrystal Characterization; 11.4 Sintering; 11.5 Conclusion; References; Chapter 12 CZTS Thin Films Prepared by a Non-Vacuum Process; 12.1 Introduction; 12.2 Sol-Gel Sulfurization Method  
12.3 Preparation of CZTS Thin Films by Sol-Gel Sulfurization Method

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Sommario/riassunto

Beginning with an overview and historical background of Copper Zinc Tin Sulphide (CZTS) technology, subsequent chapters cover properties of CZTS thin films, different preparation methods of CZTS thin films, a comparative study of CZTS and CIGS solar cell, computational approach, and future applications of CZTS thin film solar modules to both ground-mount and rooftop installation. The semiconducting compound (CZTS) is made up earth-abundant, low-cost and non-toxic elements, which make it an ideal candidate to replace Cu(In,Ga)Se<sub>2</sub> (CIGS) and CdTe solar cells which face material scarcity and toxic

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