



# Analysis of Material Science Advancements for Renewable Energy Technologies (e.g., Solar Cells, Batteries) in Morocco: An African Perspective

Iain Ellis<sup>1,2</sup>, Martin Ball<sup>3,4</sup>, Jane Willis<sup>1,5</sup>, Carl James-Heath<sup>4</sup>

<sup>1</sup> Hassan II University of Casablanca

<sup>2</sup> Institut Agronomique et Vétérinaire Hassan II

<sup>3</sup> Department of Sustainable Systems, Hassan II University of Casablanca

<sup>4</sup> Sidi Mohamed Ben Abdellah University, Fez

<sup>5</sup> Department of Electrical Engineering, Institut Agronomique et Vétérinaire Hassan II

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**Correspondence:** [iellis@hotmail.com](mailto:iellis@hotmail.com)

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## Author notes

*Iain Ellis is affiliated with Hassan II University of Casablanca and focuses on Engineering research in Africa.*

*Martin Ball is affiliated with Department of Sustainable Systems, Hassan II University of Casablanca and focuses on Engineering research in Africa.*

*Jane Willis is affiliated with Hassan II University of Casablanca and focuses on Engineering research in Africa.*

*Carl James-Heath is affiliated with Sidi Mohamed Ben Abdellah University, Fez and focuses on Engineering research in Africa.*

## Abstract

This study addresses a current research gap in Engineering concerning Material Science Advancements for Renewable Energy Technologies (e.g., Solar Cells, Batteries) in Morocco. The objective is to clarify key debates, identify practical implications, and outline a focused agenda for scholarship and policy. A qualitative approach was used, drawing on recent literature and policy sources to frame the analysis. The analysis indicates persistent structural constraints alongside emerging local innovations; however, evidence remains uneven across contexts and sectors. The paper argues for context-specific approaches and stronger empirical foundations in future research. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Material Science Advancements for Renewable Energy Technologies (e.g., Solar Cells, Batteries), Morocco, Africa, Engineering, replication study This structured abstract provides a standardised summary to support rapid screening, indexing, and assessment of scholarly contribution.

**Keywords:** *Material Science Advancements for Renewable Energy Technologies (e.g., Solar Cells, Batteries), Morocco, Africa, Engineering*

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