1. Record Nr. UNINA9911007358303321

Titolo	Proceedings of the 6th International Conference on Advanced Materials for Photonics, Sensing, and Energy Applications : AMPSECA 2024; 31 October-01 November, Marrakech, Morocco / / edited by Yahia BOUGHALEB, Abdelowahed HAJJAJI, El-Kébir HLIL, Said LAASRI
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9663-78-4
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (XII, 667 p. 318 illus., 273 illus. in color.)
Collana	Springer Proceedings in Physics, , 1867-4941 ; ; 426
Disciplina	535
Soggetti	Optics Hydrogen as fuel Materials Detectors Environmental monitoring Security systems Optics and Photonics Hydrogen Energy Sensors and biosensors Environmental Monitoring Security Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1: Renewable Energy and Energy Storage -- Part 2: Photovoltaics and Solar Technologies -- Part 3: Materials and Nanotechnology -- Part 4: Artificial Intelligence and Modeling.
Sommario/riassunto	This book presents a selection of scientific peer reviewed articles presented at the 6th International Conference on Advanced Materials for Photonics, Sensing, and Energy Applications (AMPSECA 2024) held on 31Oct and 01Nov at Marrakech in Morocco. It explores advances in design, manufacturing, and applications of materials, as well as their use in biomaterials for medical, biological, and environmental applications. It discusses the challenges and opportunities associated

with transitioning to clean and sustainable energy sources, as well as the technological and policy innovations needed to address these challenges. A dedicated track on Hydrogen Technologies examines the role in transition to a hydrogen-based economy, addressing topics such as production, storage, use, and infrastructure of hydrogen. The book also includes selected articles highlighting progress in detection and bio-detection technologies, including a range of innovative sensors and detection approaches tailored for various applications such as healthcare, environmental monitoring, and security systems. It emphasizes recent trends and advancements illustrating the dynamic evolution of photonics-based detection techniques and their crucial importance in contemporary science and technology. These articles make a significant contribution to research and understanding in their respective fields and provide an overview of the latest developments in these crucial areas of science and technology.