

1. Record Nr.	UNINA99111114516803321
Autore	Jones Craig A. M
Titolo	Advancing IT Interoperability and Trade Facilitation in Southeast Asia / / by Craig A. M. Jones
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Palgrave Macmillan, , 2026
ISBN	981-9536-60-X 9789819536603
Edizione	[1st ed. 2026.]
Descrizione fisica	1 online resource (447 pages)
Collana	Economics and Finance Series
Disciplina	382.0959
Soggetti	Technology - Sociological aspects Information technology International trade Technological innovations Financial engineering Information and Communication Technologies (ICT) International Trade Innovation and Technology Management Financial Technology and Innovation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction -- 2. Theoretical and Technical Foundations -- 3. IT Progress and Innovations Since 2016 -- 4. IT Case Studies -- 5. Digital Trade Facilitation Technologies -- 6. Policy and Regulatory Framework for IT -- 7. Future IT Trends and Predictions -- 8. IT Management and Strategy for Businesses -- 9. Cybersecurity Measures and Challenges in ASEAN Related to Digital Trade Facilitation -- 10. The Role of Digital Identity in Trade -- 11. Impact of Trade Digitalization on SMEs in Southeast Asia -- 12. E-commerce Strategies and Frameworks -- 13. Sustainable Practices in Digital Trade -- 14. Conclusion, Recommendations, and Final Thoughts.
Sommario/riassunto	This book explores how digital technologies are transforming cross- border trade in Southeast Asia. It examines IT interoperability within the ASEAN Single Window, a landmark initiative that connects national

customs systems to accelerate clearance, strengthen cybersecurity, and enable seamless data exchange. Organized across nine chapters, the book highlights how artificial intelligence, blockchain, cloud computing, and smart connected platforms are reshaping trade flows and regulatory cooperation. Drawing on detailed case studies from Singapore, Malaysia, and Indonesia, it shows how digital innovation reduces transaction costs, shortens clearance times, and empowers small and medium-sized enterprises to participate in regional commerce. Combining theory, policy analysis, and empirical evidence, this book provides both researchers and practitioners with a clear roadmap for advancing digital trade. It is an essential resource for scholars of international trade, policymakers, and business leaders seeking to understand and shape the future of digital transformation in Asia and beyond. Dr. Craig A. M. Jones, DBA, CIO, PMP, CISM, is Vice President of Asia Pacific Operations at Innovative Management Concepts (IMC). A graduate of Harvard Business School's Advanced Management Program, he has lived in the Pacific for over 25 years and published peer-reviewed articles on digital trade facilitation, IT interoperability, and digital transformation. .

2. Record Nr.	UNINA9911146775803321
Titolo	Materials for energy // editor, Sam Zhang
Pubbl/distr/stampa	Boca Raton, FL, : CRC Press, 2021
ISBN	1-000-17671-1 0-429-35140-2 1-000-17667-3 9780429351402
Edizione	[First edition.]
Descrizione fisica	1 online resource (529 pages) : illustrations
Collana	Advances in Materials Science and Engineering
Disciplina	621.3028/4 620.11
Soggetti	Electric batteries - Materials Energy storage - Materials Renewable energy sources - Materials Sustainable engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Half Title -- Series Page -- Title Page -- Copyright Page -- Table of Contents -- Preface -- Editor -- Contributors -- Chapter 1 Halide Perovskite Photovoltaics -- 1.1 Solar Energy and Photovoltaics -- 1.2 Halide Perovskite Materials -- 1.2.1 Structure of Halide Perovskite Materials -- 1.2.2 Optical Property and Bandgap Tunability of Halide Perovskite Materials -- 1.2.3 Optoelectronic Property of Halide Perovskite Materials -- 1.3 Stability of Halide Perovskites -- 1.3.1 Intrinsic Thermal Stability of Halide Perovskite Materials -- 1.3.2 Phase Stability of FAPbI ₃ Perovskite -- 1.3.3 Phase Stability of All-Inorganic CsPbI ₃ Perovskite -- 1.4 Summary -- References -- Chapter 2 Carbon Nanomaterials for Flexible Energy Storage Devices -- 2.1 Overview of Flexible Energy Storage Devices -- 2.2 Flexible Supercapacitors -- 2.2.1 Mechanism and Advancement of Supercapacitors -- 2.2.2 Electrodes -- 2.2.2.1 Carbon Materials -- 2.2.2.2 Conducting Polymers -- 2.2.2.3 Transition Metal Oxides -- 2.2.3 Flexible Wire-Shaped Supercapacitors -- 2.2.3.1 Wire-Shaped Supercapacitors in a Parallel Structure -- 2.2.3.2 Wire-

Shaped Supercapacitors in a Twisted Structure
 2.2.3.3 Wire-Shaped Supercapacitors in a Coaxial Structure -- 2.2.4 Applications -- 2.2.4.1 Supercapacitor Textiles -- 2.2.4.2 Flexible Microsupercapacitors -- 2.3 Flexible Batteries -- 2.3.1 Mechanism and Development of Batteries -- 2.3.2 Electrodes -- 2.3.2.1 Carbon Nanotube -- 2.3.2.2 Graphene -- 2.3.2.3 Carbon Paper/Carbon Cloth -- 2.3.3 Configuration -- 2.3.3.1 Flexible Planar Batteries -- 2.3.3.2 Flexible Wire-Shaped Batteries -- 2.3.4 Application -- 2.3.4.1 Textile Batteries -- 2.3.4.2 Multifunctional Batteries -- 2.4 Integrated Energy Device -- 2.5 Summary and Outlook -- References
 Chapter 3 Triboelectric Materials for Nanoenergy -- 3.1 Introduction -- 3.1.1 Nanoenergy -- 3.1.2 Triboelectric Nanogenerator -- 3.1.2.1 Basic Working Models -- 3.1.2.2 Theory Basis -- 3.1.2.3 Material Sources -- 3.2 The Development of Materials for TENGs -- 3.2.1 Dielectric-to-Dielectric Device Structure -- 3.2.1.1 The Working Principle of Dielectric-to-Dielectric Device -- 3.2.1.2 The Advantages of Dielectric-to-Dielectric Device -- 3.2.1.3 Development of Dielectric-to-Dielectric Paired Materials for TENGs -- 3.2.2 Dielectric-to-Conductor Device Structure -- 3.2.2.1 The Working Principle of Dielectric-to-Conductor Device -- 3.2.2.2 The Advantages of Dielectric-to-Conductor Device -- 3.2.2.3 Development of Dielectric-to-Conductor Paired Materials for TENGs -- 3.2.3 Semiconductor Device Structure -- 3.2.3.1 The Role of Semiconductor for TENGs -- 3.2.3.2 Semiconductor-to-Dielectric Device -- 3.2.3.3 Semiconductor-to-Conductor Device -- 3.3 The Output Enhancement Mechanism in TENGs -- 3.3.1 Selection of Paired Materials -- 3.3.2 Enhancement in Effective Contact -- 3.3.3 Modification of Material Composition -- 3.3.4 Control of Environmental Conditions

Sommario/riassunto

Materials for Energy offers a comprehensive overview of the latest developments in materials for efficient and sustainable energy applications, including energy conversion, storage, and smart applications. Discusses a wide range of material types, such as nanomaterials, carbonaceous electrocatalysts and electrolytes, thin films, phase change materials, 2D energy materials, triboelectric materials, and membrane materials Describes applications that include flexible energy storage devices, sensors, energy storage batteries, fuel and solar cells, photocatalytic wastewater treatment, and more Highlights current developments in energy conversion, storage, and applications from a materials angle Aimed at researchers, engineers, and technologists working to solve alternative energy issues, this work illustrates the state of the art and latest technologies in this important field.
