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Disciplina	620
Soggetti	Building repair Buildings—Repair and reconstruction Energy efficiency Buildings—Design and construction Building Construction Engineering, Architectural Building construction Building Repair and Maintenance Energy Efficiency Building Construction and Design Building Physics, HVAC
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Smart Trends and Paradigm Shift -- 2 Building Systems Engineering -- 3 Basic Smart Building Systems -- 4 Air, Water, Power and Internet Quality -- 5 Acoustics, Vibrations and Integrated Buildings Systems -- 6 Lightning, Electrostatic Discharge, and Buildings -- 7 Electromagnetic Waves, Noise, and Systems Susceptibility -- 8 From Microelectronic Technology to Information Technology -- 9 Energy Storage -- 10 Integrated Building Systems Engineering & Automation -- 11 Atmospheric Radiation Soup and Buildings and Internet of Things -- 12 Reliability Requirements, Risk Management, and Associated Building -- 13 Integration of Mother Nature into Smart Buildings -- 14 Taking Advantage of Natural Elements Surrounding the Building -- 15 Reduce,

Reuse, Recycle -- 16 The Human Body and Building Synchronization -- 17 Understanding the Occupant's Behavior -- 18 Vision of Cities: From the Green City to the Smart City -- 19 The Smart Building in the Smart City -- 20 The journey of water – from the smart building to the smart city -- 21 Integrated Affordable Mobility Solutions in a Smart Neighborhood -- 22 International Rating Systems for Smart Buildings and Smart Cities.

Sommario/riassunto

This book is a resumption of the work “Integrated M/E Design: Building Systems Engineering” published by Anil Ahuja in 1997. Together with an international group of authors from the engineering, urban planning, and architecture fields, Mr. Ahuja discussed new trends and paradigms in the smart buildings and smart city sectors and extended the topic of the previous publication from the building to the entire city. A smart, sustainable building is not just about the building itself. There are things happening in the inside of the building and on the outside. A smart building connects the inside with the outside, provides efficiencies on both sides, synchronizes the outside infrastructure with its inside systems, and integrates nature and its occupants in its design. A smart building doesn't just provide technology solutions. It is about constant exchange between the inside and the outside of the building, the contribution of the building to the quality of the entire neighborhood and the rest of the city, how the smart building can connect people in a sharing community, and how technology can be the key to make it happen.
