

1. Record Nr.	UNINA9910807364203321
Titolo	Indoor air quality assessment for smart environments // Jagriti Saini, Maitreyee Dutta, Goncalo Marques, Malka Halgamuge
Pubbl/distr/stampa	Washington : , : IOS Press, Incorporated, , 2022 ©2022
ISBN	1-64368-277-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (142 pages)
Collana	Ambient intelligence and smart environments / aise, , 18754163 ; ; 30
Disciplina	613/.5
Soggetti	Indoor air quality
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Title Page -- Preface -- About the Editors -- List of Reviewers -- Contents -- Indoor Air Quality: Definition, State of the Art and IoT/AI Applications -- Indoor Environmental Sensing Techniques for Occupant Health and Comfort -- Technological Interventions and Indoor Air Quality Assessment in Smart Environments: A Review -- Zigbee-Based Wireless Smart Device for Enclosed Space Real-Time Air Quality Monitoring: Experiment, Data Analysis and Risk Assessment -- Green and Smart Hospitals: A Review in the Context of Indoor Air Quality (IAQ) -- An Evaluation of Health Risks of Nano Building Products Used for IAQ Management in Smart Environment -- Optimization of Household Ventilation with Improved Cookstove: An Amicable Approach to Strengthen Indoor Air Quality and Public Health -- IAQ Assessment for Smart Environments: Conclusion and Future Scope -- Subject Index -- Author Index.
Sommario/riassunto	"Indoor air quality (IAQ) and indoor air pollution (IAP) are a cause of concern in many countries because they can significantly influence the general health and well-being of those who spend most of their time inside, whether at home or work. Poor indoor air quality and repeated exposure to dangerous concentrations of pollutants can contribute significantly to the healthcare burden, as well as leading to increased absenteeism and lost productivity worldwide. This book, Indoor Air Quality Assessment for Smart Environments, explores the problem of IAQ and highlights potential challenges, gaps, and opportunities in the

field. As the title suggests, it focuses on assessing indoor air quality in smart environments, which use emerging technologies like the Internet of Things (IoT) and intelligent building management systems which deploy Wireless Sensor Networks (WSN). The book contains 8 chapters, written by various experts in the field and addressing significant elements of IAQ management, including: definition, state-of-the-art and applications; sensing techniques; technological interventions and smart environments; smart monitoring devices; green and smart hospitals; health risks of nano building products; the optimization of household ventilation; and an assessment of smart environments. As well as providing a useful source of knowledge for researchers, policymakers, public health professionals and government agencies wishing to enhance the air quality in buildings, the book will also serve as a guide to building occupants who wish to take the necessary measures to enhance the built environment and improve ventilation"--
