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Titolo	Handbook of Indoor Air Quality // edited by Yinping Zhang, Philip K. Hopke, Corinne Mandin
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ISBN	981-16-7680-1
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (2180 pages)
Disciplina	354.81150006
Soggetti	Environment Buildings - Environmental engineering Thermodynamics Heat engineering Heat transfer Mass transfer Public health Environmental Sciences Building Physics, HVAC Engineering Thermodynamics, Heat and Mass Transfer Public Health
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. History and Perspective of Indoor Air Quality Research -- 2. High Volatility Organic Compounds (VVOCs) -- 3. Volatile Organic Compounds (VOCs) -- 4. Semi Volatile Organic Compounds (SVOCs) -- 5. Cooking, Heating Appliances -- 6. Vaping and Secondhand Exposure -- 7. Particles, Including Particles of Ambient Origin -- 8. Aerosol Dynamics for Particles -- 9. Deposition of Particles -- 10. Resuspension of Particles -- 11. Interaction of Gas Phase Pollutants and Particles -- 12. Cooking Aerosol -- 13. Personal Care Products as Sources -- 14. Sampling and Analysis of VVOCs, VOCs in Indoor Air -- 15. Sampling and Analysis of SVOCs in Indoor Environment.
Sommario/riassunto	People live in indoor environment about 90% of lifetime and an adult inhales about 15 kg air each day, over 75% of the human body's daily

mass intake (air, food, water). Therefore, indoor air quality (IAQ) is very important to human health. This book provides the basic knowledge of IAQ and highlights the research achievements in the past two decades. It covers the following 12 sections: introduction, indoor air chemicals, indoor air particles, measurement and evaluation, source/sink characteristics, indoor chemistry, human exposure to indoor pollutants, health effects and health risk assessment, IAQ and cognitive performance, standards and guidelines, IAQ control, and air quality in various indoor environments. It provides a combination of an introduction to various aspects on IAQ studies, the current state-of-knowledge, various advances and the perspective of IAQ studies. It will be very helpful for the researchers and technicians in the IAQ and the related fields. It is also useful for experts in other fields and general readers who want to obtain a basic understanding of and research advances in the field of IAQ. A group of experts in IAQ research have been recruited to write the chapters. Their research interests and experience cover the scope of the book. In addition, some experienced experts in IAQ field have been invited as advisors or reviewers to give their comments, suggestions and revisions on the handbook framework and the chapter details. Their contribution guarantees the quality of the book. We are very grateful to them. Last but not least, we express our heartfelt thanks to Prof. Spengler, Harvard University, for writing the foreword of the current Handbook of Indoor Air Quality both as a pioneer scientist who contributed greatly to indoor air science and as an Editor-in-chief of Handbook of Indoor Air Quality 2001, 1st ed. New York: McGraw-Hill. In addition to hard copies, the book is also published online and will be updated by the authors as needed to keep it aligned with current knowledge. These salient features can make the handbook fresh with the research development. .
