Record Nr. UNINA9910299711403321 Autore Xu Zhonglin Titolo Fundamentals of Air Cleaning Technology and Its Application in Cleanrooms / / by Zhonglin Xu Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 2014 **ISBN** 3-642-39374-8 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (881 p.) Disciplina 363.7392 620 628.53 690 Soggetti **Building construction** Air pollution Engineering Building Physics, HVAC Atmospheric Protection/Air Quality Control/Air Pollution Engineering, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di contenuto Particle and Size Distribution -- Airborne Particles in Outdoor Air-Atmospheric Dust -- Filtration Mechanism of Fine Particle --Characteristics of Air Filters -- Structural Design of HEPA Filter --Movement of Indoor Fine Particle -- Classification of Air Cleanliness --Principle of Cleanroom -- Theory of Biological Cleanroom --Calculation Theory of Uniform Distribution in Cleanroom -- Calculation Theory of Non-uniform Distribution in Cleanroom -- Characteristics of Cleanroom -- Design Calculation of Cleanroom -- Local Clean Area --Theory of Leakage Preventing Layer -- Sampling Theory --Measurement and Evaluation. Sommario/riassunto Fundamentals of Air Cleaning Technology and Its Application in

Cleanrooms sets up the theoretical framework for cleanrooms. New ideas and methods are presented, which include the characteristic

index of cleanrooms, uniform and non-uniform distribution

characteristics, the minimum sampling volume, a new concept of outdoor air conditioning and the fundamentals of leakage-preventing layers. Written by an author who can look back on major scientific achievements and 50 years of experience in this field, this book offers a concise and accessible introduction to the fundamentals of air cleaning technology and its application. The work is intended for researchers, college teachers, graduates, designers, technicians and corporate R&D personnel in the field of HVAC and air cleaning technology. Zhonglin Xu is a senior research fellow at China Academy of Building Research.