Record Nr. UNINA9910254512703321 Biological Effects of Fibrous and Particulate Substances / / edited by **Titolo** Takemi Otsuki, Yasuo Yoshioka, Andrij Holian Pubbl/distr/stampa Tokyo:,: Springer Japan:,: Imprint: Springer,, 2016 **ISBN** 4-431-55732-6 Edizione [1st ed. 2016.] 1 online resource (229 p.) Descrizione fisica Collana Current Topics in Environmental Health and Preventive Medicine, , 2364-8333 616.079 Disciplina Soggetti Public health **Immunology** Pharmacology Public Health Pharmacology/Toxicology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters. 1. Macrophage and Multinucleated Giant Cell Classification -- 2. Nota di contenuto NLRP3 Inflammasome-Mediated Toxicity of Fibrous Particles -- 3. Approaching a Unified Theory for Particle-Induced Inflammation -- 4. Reproductive and Developmental Effects of Nanomaterials -- 5. Fibrogenic and Immunotoxic Responses to Carbon Nanotubes -- 6. Potential Hazards of Skin Exposure to Nanoparticles -- 7. Health Effects of Silver Nanoparticles and Silver Ions -- 8. Multiwalled Carbon Nanotube-Induced Pulmonary Fibrogenesis -- 9. Silicates and Autoimmunity -- 10. Asbestos Exposure and Autoimmunity -- 11. T Cell Alteration Caused by Exposure to Asbestos -- 12. Effects of Asbestos Fibers on Human Cytotoxic T Cells. Sommario/riassunto This volume examines our current understanding of the biological effects of fibrous and particulate substances, including discussions on nanoparticles. It offers comprehensive information on the latest insights into the immunological effects of various irritants on the human body. Readers will benefit from the contributing authors'

diverse perspectives and extensive discussions of key issues, which include molecular alterations of the immune system and autoimmune

diseases in connection with asbestos and silica, among others. The chapters also discuss recommendations, practical methods, and nanosafety science in situations involving exposure to nanotoxic substances. Edited in collaboration with the Japanese Society for Hygiene, this book provides up-to-date information on the immunological effects of nanotoxic substances to researchers interested in environmental and occupational health. Presenting a number of recent concepts and findings in the field, it enables readers to gain a comprehensive knowledge of health problems caused by environmental fibrous and particulate substances.