1. Record Nr. UNINA9910744509703321 Autore Daud Suzairi Titolo Carbon nanotubes: fabrication using the arc discharge process // Suzairi Daud Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 981-9949-62-9 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (xv, 73 pages): illustrations (chiefly color) Collana SpringerBriefs in Applied Sciences and Technology, , 2191-5318 Disciplina 541.0421 620.193 Soggetti Carbon nanotubes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Theory and operational principles of carbon nanotubes -- Research design -- Production of arc discharge plasma --Conclusions. Sommario/riassunto This book highlights a comprehensive understanding of the fabrication and growth of carbon nanostructures via the arc discharge process. Its content is designed to benefit academicians, students, researchers, scientists, and readers who are interested in gaining knowledge in this area. The book presents findings on the arc discharge process and provide detailed information on the optimal state and energy of carbon ions in arc discharge plasma, observed under different pressures and

ambient environments. The contents presented here can be applied to enhance the performance of various applications. This book provides a valuable resource for those looking to gain a deeper understanding of the arc discharge process and the growth of carbon nanostructures.

with practical applications in industries such as electronics,

semiconductors, and energy storage.