

Nanotechnology for defence applications

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Note sur le contenu : Introduction: A journey from bulk to nanostructures- a new length scale
Nanotechnology for defence applications Explosive and propellants CBRN threats, detection & protection
Camouflage and stealth Lightweight Armors & Platforms A smart soldier Future military needs Final
Remarks

Résumé ou extrait : La 4e de couv. indique : "This book examines the application of nanoscience and nanotechnology in military defence strategies. Both historical and current perspectives on military technologies are discussed. The book provides comprehensive details on current trends in the application of nanotechnology to ground, air, and naval specializations. Furthermore, nanotechnology-enabled high energy explosives and propellants, chemical, biological, radiation, and nuclear threats and their detection/protection, and camouflage and stealth for signature management of military targets in multispectral wavelength signals are analyzed. The book also covers nanotechnology-enabled armor and platforms, which may serve as lightweight and high mechanical strength options in contrast to conventional systems. Finally, the book also emphasizes future military applications of nanotechnology and its integration into 'smart' materials. Provides comprehensive details on trends in the application of

nanotechnology to ground, air, and naval defence systems; Examines the application of nanoscience and nanotechnology in military defence strategies; Offers pathways and research avenues for development of nanotechnology and materials applications in military capacities."

Sujet - Nom commun : Matériaux nanostructurés -- Utilisation militaire
Nanotechnologie -- Utilisation militaire