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| Autore | Vaseashta A (Ashok) |
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Sommario/riassunto

The book on the Spectrum of Dual-Use Technologies provides information on innovations, technologies, and studies that offer practical knowledge, information, or product insights; however, it also articulates potential risks, including cascading or catastrophic risks to society. The term "dual-use technology," primarily used for defense applications, is now also applied to financial and industrial sectors. The scope is continuously growing, and it is quintessential to stay ahead of the curve, especially with the exponential growth of artificial intelligence (AI). The book covers several topics, ranging from AI, synthetic and biomedical technologies, nanotechnology, export controls, and educational practices within defense organizations. The book offers insights and support to practitioners and defense personnel concerned with managing expertise, knowledge, information, and policy development. Additionally, many researchers, graduate and postgraduate students, scientists, policymakers, industry professionals, and practitioners will find this book helpful. Lastly, some chapters can be adopted as text supplements for independent study projects.