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Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgment of Reviewers""; ""Contents""; ""Acronyms and Abbreviations""; ""Summary""; ""1 Introduction""; ""2 Nanoscale Phenomena Underpinning Nanophotonics""; ""3 Enabling Technologies""; ""4 Potential Military Applications of Nanophotonics""; ""5 Foreign Investment Capabilities""; ""6 Overall Comments""; ""Appendixes""; ""Appendix A: Biographical Sketches of Committee Members""; ""Appendix B: Presentations to the Committee""; ""Appendix C: Previous Studies""; ""Appendix D: Selected Research Groups In Plasmonics""
Sommario/riassunto	The Committee on Technology Insight-Gauge, Evaluate & Review set up by the NRC at the request of the Defense Intelligence Agency, has selected a number of emerging technologies to investigate for their potential threats to and opportunities for national security. This first study focused on emerging applications of nanophotonics, which is about the interaction of matter and light at the scale of the wavelength

of the light. Manipulation of matter at that scale allows tailoring the optical properties to permit a wide-range of commercial and defense applications. This book presents a review of the nanoscale phenomena underpinning nanophotonics, an assessment of enabling technologies for developing new applications, an examination of potential military applications, and an assessment of foreign investment capabilities

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