1.	Record Nr.	UNINA9911004806603321
	Autore	Sasiela Richard J. <1940->
	Titolo	Electromagnetic wave propagation in turbulence : evaluation and application of Mellin transforms / / Richard J. Sasiela
	Pubbl/distr/stampa	Bellingham, Wash., : SPIE Press, 2007
	ISBN	9781615837250
		1615837256
		9780819478399
		0819478393
	Edizione	[2nd ed.]
	Descrizione fisica	1 online resource (386 p.)
	Collana	SPIE Press monograph ; ; PM171
	Disciplina	539.2
	Soggetti	Electromagnetic waves - Transmission
		Atmospheric turbulence
		Mellin transform
		Numerical calculations
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes index.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	1. Introduction. 1.1. Book plan -- 1.2. Introduction to Mellin transforms -- 1.3. Higher transcendental functions -- 2. Basic equations for wave propagation in turbulence. 2.1. Turbulence spectra -- 2.2. Rytov approximation. -- 2.3. Phase and log-amplitude variances -- 2.4. Power spectral density -- 2.5. Beam shape and Strehl ratio -- 3. Filter functions. 3.1. Circular aperture modes -- 3.2. Piston and tilt on an annulus -- 3.3. Finite apertures and focal anisoplanatism -- 3.4. Adaptive-optics systems -- 3.5. Structure function for a distributed beacon -- 3.6. Developing new variance filter functions -- 4. Zero-parameter problems. 4.1. Turbulence models and moments -- 4.2. Tilt and piston for collimated and focused beams -- 4.3. Gradient tilt -- 4.4. Difference between gradient and Zernike tilt -- 4.5. Zernike mode variance. -- 4.6. Piston and tilt of a gaussian beam -- 4.7. Beam movement at a target -- 4.8. Angle-of-arrival jitter -- 4.9. Scintillation for collimated and focused beams -- 4.10. Phase variance with finite servo bandwidth -- 4.11. Variances for beams corrected by adaptive optics.

Sommario/riassunto	At first glance, Mellin transforms can look formidable and complicated. With this book, Dr. Richard Sasiela invites readers to overcome these fears and see just how useful they can be. The book is aimed at two audiences: those interested in problems surrounding electromagnetic wave propagation in turbulence, and those interested in evaluating integrals. The author takes a systematic and in-depth approach to answering both audiences, separately and jointly, by demonstrating a way to obtain analytic answers, the integration method, and by developing a way to express solutions to electromagnetic wave propagation in turbulence problems in integral form. The book also demonstrates how Mellin transform techniques can be used to evaluate these integrals. This book touches on how Mellin transforms can be used in applications relating to image, radar, and acoustic processing, as well as chaos and fractal theory. The author has thoroughly updated this second edition and corrects some of his earlier work using new information and new technologies. He has also added new information on Strehl ratios and their different applications.

2. Record Nr.	UNINA9910805573403321
Autore	Chaput Bob
Titolo	Enterprise Cyber Risk Management as a Value Creator : Leverage Cybersecurity for Competitive Advantage / / by Bob Chaput
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2024
ISBN	9798868800948
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (414 pages)
Disciplina	260
Soggetti	Data protection Risk management Data and Information Security IT Risk Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Part I: A Case for Action -- Chapter 1: Enterprise Cyber Risk Management as a Value Creator -- Chapter 2: SEC and Other Important Cyber Regulations -- Chapter 3: The Courts Are Picking Up the Cyber Pace -- Chapter 4: The Most Critical Cybersecurity Decision -- Chapter 5: Justifying ECRM Funding -- Chapter 6: The C-Suite and Board Role -- Part II: Building and Implementing Your ECRM Program -- Chapter 7: Integrating ECRM into Business Strategy -- Chapter 8: Getting Started -- Chapter 9: ECRM Guiding Principles and Business Alignment -- Chapter 10: Three Vital ECRM Building Blocks -- Chapter 11: Adapting Your ECRM Process to Include Cyber Opportunities -- Chapter 12: Additional Essential ECRM Program Events -- Appendix A: What to Look for in an ECRM Company and Solution -- Appendix B: Enterprise Cyber Risk Management Software (ECRMS) -- Appendix C: The Benefits of a NIST-Based ECRM Approach -- Appendix D: Twenty-Five Essential Terms for Your ECRM Glossary -- AppendixE: Sample ECRM Program and Cybersecurity Strategy Table of Contents.
Sommario/riassunto	"This book should be mandatory reading for C-suite executives and board members. It shows you how to move from viewing cybersecurity as a risk to avoid, and a cost center that does not add value and is overhead, to seeing cybersecurity as an enabler and part of your core

strategy to transform your business and earn customer and stakeholder trust." —Paul Connelly, First CISO at the White House and HCA Healthcare This book will help you learn the importance of organizations treating enterprise cyber risk management (ECRM) as a value creator, a business enabler, and a mechanism to create a competitive advantage. Organizations began to see the real value of information and information technology in the mid-1980s. Forty years later, it's time to leverage your ECRM program and cybersecurity strategy in the same way. The main topics covered include the case for action with specific coverage on the topic of cybersecurity as a value creator,including how the courts, legislators, and regulators are raising the bar for C-suite executives and board members. The book covers how the board's three primary responsibilities (talent management, strategy, and risk management) intersect with their ECRM responsibilities. ECRM was once solely focused on managing the downside of risk by defending the organization from adversarial, accidental, structural, and environmental threat sources. Author Bob Chaput presents the view that we must focus equally on managing the upside of cyber strengths to increase customer trust and brand loyalty, improving social responsibility, driving revenue growth, lowering the cost of capital, attracting higher quality investments, creating competitive advantage, attracting and retaining talent, and facilitating M&A work. He focuses on the C-suite and board role in the first part and provides guidance on their roles and responsibilities, the most important decision about ECRM they must facilitate,and how to think differently about ECRM funding. You will learn how to the pivot from cost-center thinking to value-center thinking. Having built the case for action, in the second part, the book details the steps that organizations must take to develop and document their ECRM program and cybersecurity strategy. The book first covers how ECRM must be integrated into business strategy. The remainder of that part presents a sample table of contents for an ECRM Program and Cybersecurity Strategy document and works through each section to facilitate development of your own program and strategy. With all the content and ideas presented, you will be able to establish, implement, and mature your program and strategy.