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Nota di contenuto	Intro -- Contents -- Contributors -- 1: Preoperative Evaluation: History -- Introduction -- Conscious Sedation -- Medications, Allergies, Preexisting Conditions, and Contraindications -- Hemodialysis Catheter Procedures -- Angiogram and Angioplasty Procedures -- Thrombectomy -- Stent Placement -- Fistula Salvage Procedure for Lack of Maturation -- Peritoneal Dialysis (PD) Catheter Placement -- References -- 2: Preoperative Evaluation: Physical Examination -- Introduction -- General Examination -- Examination of Dialysis Access -- Physical Examination Prior to Access Placement -- Physical Examination Prior to Interventional Procedures on Arteriovenous Fistulae and Early Fistula Failure -- Inflow Problems -- Augmentation Test -- Accessory Veins -- Late Fistula Failure -- Outflow Venous Stenosis -- Fistula Collapse or Arm Elevation Test -- Aneurysm Formation -- High-Output Heart Failure -- Distal Ischemia -- Thrombosed Access -- Physical Examination Prior to Interventional Procedures on Arteriovenous Grafts -- Determining the Direction of Flow -- Venous Stenosis -- Pseudoaneurysms -- Infections -- Thrombosed Access -- Physical Examination Prior to Interventional Procedures on Central Venous Catheters -- Central Venous Stenosis -- Infections -- Conclusions -- References -- 3: Admission After Intervention: When and Why -- Which Patients Require Hospitalization

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4: Communicating Effectively for Interventional Nephrologists -- Introduction: Why a Chapter on Communication in an Interventional Text? -- What Is Good Communication and How Does It Impact Care? -- Strategies for Excellent Communication -- Active Listening -- Use of Questions -- Feedback Model -- Communicating with Referral Sources -- The Patient -- Nephrologists -- Surgeons -- Dialysis Units -- Payers -- Organizational Communication -- Conclusion -- References -- 5: Anticoagulants and Thrombolytics -- Introduction -- Heparin -- Bleeding Risk During Interventional Procedures -- Dialysis Catheter Procedures -- Heparin-Induced Thrombocytopenia -- Planning Interventions in Patients Receiving Warfarin -- Warfarin to Prevent Thrombosis of Dialysis Accesses -- Newer Anticoagulant Medications -- Thrombolytics -- Summary and Recommendations -- References -- 6: Noninvasive Screening and Testing for PAD in CKD Patients -- Introduction -- Pathophysiology of PAD in CKD -- Epidemiology of PAD in CKD Population -- Noninvasive Screening Methods -- Physical Exam and History -- Noninvasive Testing -- Invasive Testing -- References -- 7: Overview of PAD Treatment in the CKD Population: Indications, Medical Strategies, and Endovascular Techniques -- Introduction -- Indications -- Medical Treatment of PKD -- Invasive Diagnostics of PKD -- Interventional Approach -- Precautions -- Conclusion -- References -- 8: Unconventional Venous Access: Percutaneous Translumbar and Transhepatic Venous Access for Hemodialysis -- Introduction -- Catheter-Based Hemodialysis -- Patient Selection -- Indications -- Contraindications -- Technique -- Translumbar IVC Catheter Placement -- Transhepatic Catheter Placement -- Complications -- Conclusion -- References -- 9: Approach to a Nonfunctioning Catheter -- Introduction -- Initial Evaluation and Treatment.
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		Examination -- Differential Diagnosis and Pathophysiology -- Diagnostic Approach to Chest Pain -- Management -- Coronary Artery Disease -- Interventional Therapy for Coronary Artery Disease -- Medical Therapy for Coronary Artery Disease -- Subclavian Coronary Steal Syndrome -- Technical Details -- Conclusion -- References -- 21: Approach to Cyanotic Digits and Hand Paresis -- Introduction -- Cyanotic Fingers and Hand Ischemia -- Management. Ischemic Monomelic Neuropathy (Nerve Injury).
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	Nota di contenuto	Chapter 1 Signals -- Chapter 2 The Discrete Fourier Transform -- Chapter 3 Properties of the DFT -- Chapter 4 Two-Dimensional DFT -- Chapter 5 Aliasing and Leakage -- Chapter 6 Convolution and Correlation -- Chapter 7 Fourier Series -- Chapter 8 The Discrete-Time Fourier Transform -- Chapter 9 The Fourier Transform -- Cahpter 10 Fast Computation of the DFT.
	Sommario/riassunto	This book sheds new light on Transform methods, which dominate the study of linear time-invariant systems in all areas of science and engineering, such as circuit theory, signal/image processing, communications, controls, vibration analysis, remote sensing,

biomedical systems, optics, and acoustics. It presents Fourier analysis primarily using physical explanations with waveforms and/or examples, only using mathematical formulations to the extent necessary for its practical use. Intended as a textbook for senior undergraduates and graduate-level Fourier analysis courses in engineering and science departments, and as a supplementary textbook for a variety of application courses in science and engineering, the book is also a valuable reference for anyone – student or professional – specializing in practical applications of Fourier analysis. The prerequisite for reading this book is a sound understanding of calculus, linear algebra, signals and systems, and programming at the undergraduate level. Review of last version “The Fourier analysis is mainly presented from a practical point of view, where the mathematical theory is very simplified. This book is mainly written for broad readership of graduate students and researchers in physics, computer science, and engineering with special interest in signal processing. … Doubtless, this textbook will stimulate the practical education in the Fourier analysis and its applications in signal processing.” (Manfred Tasche, zbMATH 1407.94002, 2019).