

1. Record Nr.	UNINA9910508458403321
Titolo	Anatomy for Urologic Surgeons in the Digital Era : Scanning, Modelling and 3D Printing // edited by Emre Huri, Domenico Veneziano
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-59479-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (358 pages)
Collana	Medicine Series
Disciplina	505 611.6
Soggetti	Urology Radiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	History of Urological Anatomy -- Part-1: Standards in Anatomical Representation. The History of Medical Illustration -- 3D Reconstruction and CAD Models -- Physical Models -- Cadaveric Models -- 1. Lab Animal Models and Analogies with Humans -- Part-2: Frontiers in Imaging-Acquisition Technologies. Ultrasound Technologies -- CT Scan -- MRI: A Journey from 1.5 to 10 Tesla -- PSMA- Based Imaging -- Part-3: Latest visualization and surgical planning tools. Introduction and Taxonomy -- Augmented Reality -- Virtual Reality and Animation -- 3D Medical Printing -- Synthetic models -- Creating Standards for 3D Soft- Tissue Modelling -- Part-4: Understanding anatomy and translating it to everyday surgery. Exploration of Pelvic Anatomy: Cadaveric Dissection Atlas -- Pelvic District: Approaches to Prostate Cancer -- Retroperitoneal District: Approaches to Renal Diseases -- Abdominal District: Radical Cystectomy and Neobladder Configurations -- Stone Treatment: The Endoscopic Perspective -- Stone Treatment: The Percutaneous Perspective -- Benign Prostatic Hyperplasia: elements of embryology and surgical anatomy -- Lymph node dissection patterns -- Preventing Complications.
Sommario/riassunto	This book provides a practical guide in the use of imaging and visualization technologies in urology. It details how output from diagnostic systems, can be represented through synthetic, virtual and

augmented reality tools, such as holograms and three dimensional (3D) modelling and how they can improve everyday surgical procedures including laparoscopic, robotic-assisted, open, endoscopic along with the latest and most innovative approaches. Anatomy for Urologic Surgeons in the Digital Era: Scanning, Modelling and 3D Printing systematically reviews diagnostic imaging, visualization tools available in urology and is a valuable resource for all practicing and in-training urological surgeons. .
