

1. Record Nr.	UNINA9910300209703321
Titolo	7.0 Tesla MRI Brain White Matter Atlas // edited by Zang-Hee Cho
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-642-54392-8
Edizione	[2nd ed. 2015.]
Descrizione fisica	1 online resource (478 p.)
Disciplina	616.8047548
Soggetti	Radiology Nervous system - Radiography Neurosciences Nervous system - Surgery Imaging / Radiology Neuroradiology Neurosurgery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- 1. MR Diffusion Tensor Imaging (DTI) and Track-Density Imaging (TDI) -- a. MR Diffusion Tensor Imaging (DTI) and Super-Resolution Track-Density Imaging (TDI) -- b. Track-Density Imaging (TDI) -- Examples of DTI and TDI-1 -- 2. Views, Directions, and Orientations of Brain Images -- a. Views and Directions of the Brain Image -- b. Definition of the Central Intercommissural Line -- c. Volume Rendered 3D Images -- Acknowledgments -- PART 1. Coronal Images of Tractography and Corresponding In-Vivo 7.0-T MRI Anatomy -- PART 2. Sagittal Images of Tractography and Corresponding In-Vivo 7.0-T MRI Anatomy -- PART 3. Axial Images of Tractography and Corresponding In-Vivo 7.0-T MRI Anatomy.
Sommario/riassunto	The introduction of techniques that permit visualization of the human nervous system is one of the foremost advances in neuroscience and brain-related research. Among the most recent significant developments in this respect are ultra-high field MRI and the image post-processing technique known as track density imaging (TDI). It is these techniques (including super-resolution TDI) which represent the

two major components of 7.0 Tesla MRI – Brain White Matter Atlas. This second edition of the atlas has been revised and updated to fully reflect current application of these technological advancements in order to visualize the nervous system and the brain with the finest resolution and sensitivity. Exquisitely detailed color images offer neuroscientists, neurologists, and neurosurgeons a superb resource that will be of value both for the purpose of research and for the treatment of common brain diseases such as Alzheimer's disease and multiple sclerosis.
