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Titolo	The chemistry of contrast agents in medical magnetic resonance imaging [[electronic resource] /] / edited by Andre E. Merbach, Lothar Helm, Eva Toth
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Descrizione fisica	1 online resource (514 p.)
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Altri autori (Persone)	HelmLothar MerbachAndre E TothEva
Disciplina	616.07/548
Soggetti	Contrast-enhanced magnetic resonance imaging Magnetic resonance imaging
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title Page; Copyright; Contents; List of Contributors; Preface; Chapter 1 General Principles of MRI; 1.1 Introduction; 1.2 Theoretical basis of NMR; 1.2.1 Short description of NMR; 1.2.2 Relaxation times; 1.2.3 Saturation transfer; 1.2.4 Concept of localization by magnetic field gradients; 1.3 Principles of magnetic resonance imaging; 1.3.1 Spatial encoding; 1.4 MRI pulse sequences; 1.4.1 Definition; 1.4.2 k-Space trajectory; 1.4.3 Basic pulse sequences 1.5 Basic image contrast: Tissue characterization without injection of contrast agents (main contrast of an MRI sequence: Proton density (P), T ₁ and T ₂ , T ₂ [*])1.5.1 Proton density weighting; 1.5.2 T1 weighting; 1.5.3 T2 weighting; 1.5.4 T2 [*] weighting; 1.6 Main contrast agents; 1.6.1 Gadolinium (Gd) complex agents; 1.6.2 Iron oxide (IO) agents; 1.6.3 CEST agents; 1.7 Examples of specialized MRI pulse sequences for angiography (MRA); 1.7.1 Time of flight angiography: No contrast agent; 1.7.2 Angiography using intravascular contrast agent (Blood pool CA) injection; 1.7.3 DSC DCE MRI

ReferencesChapter 2 Relaxivity of Gadolinium(III) Complexes: Theory and Mechanism; 2.1 Introduction; 2.2 Inner-sphere proton relaxivity; 2.2.1 Hydration number and hydration equilibria; 2.2.2 Gd-H distance; 2.2.3 Proton/water exchange; 2.2.4 Rotation; 2.3 Second- and outer-sphere relaxation; 2.4 Relaxivity and NMRD profiles; 2.4.1 Fitting of NMRD profiles; 2.4.2 Relaxivity of low-molecular-weight Gd(III) complexes; 2.4.3 Relaxivity of macromolecular MRI contrast agents; 2.4.4 Contrast agents optimized for application at high magnetic field; 2.5 Design of high relaxivity agents: Summary
ReferencesChapter 3 Synthesis and Characterization of Ligands and their Gadolinium(III) Complexes; 3.1 Introduction-general requirements for the ligands and complexes; 3.2 Contrast agents employing linear polyamine scaffold; 3.2.1 Synthesis of linear polyamine backbone; 3.2.2 N-functionalization of linear polyamine scaffold; 3.3 Contrast agents employing cyclen scaffold; 3.3.1 Synthesis of the macrocyclic skeleton; 3.3.2 N-functionalization of macrocyclic scaffold; 3.4 Other types of ligands; 3.4.1 H4TRITA and related ligands; 3.4.2 H3PCTA and related ligands; 3.4.3 TACN derivatives
3.4.4 Ligands with HOPO coordinating arms and related groups3.4.5 H4AAZTA and related ligands; 3.5 Bifunctional ligands and their conjugations; 3.6 Synthesis and characterization of the Ln(III) complexes; 3.6.1 General synthetic remarks; 3.6.2 Characterization of the complexes; List of Abbreviations; References; Chapter 4 Stability and Toxicity of Contrast Agents; 4.1 Introduction; 4.2 Equilibrium calculations
4.2.1 Constants that characterize metal ligand interactions (protonation constants of the ligands, stability constants of the complexes, conditional stability constants, ligand selectivity, and concentration of free Gd^{3+} : pM)

Sommario/riassunto

"The second edition of The Chemistry of Contrast Agents in Medical Magnetic Resonance Imaging is a comprehensive treaty covering all aspects of production, use, operating mechanism and theory of these diagnostic agents used to produce high contrast images in MRI. It has been completed to now include recent developments on "classical" Gd-based and iron-oxide probes and chapters dedicated to the most significant advances in molecular imaging probes. Chemical Exchange Saturation Transfer is discussed, which is a novel means of generating MRI contrast"--

2. Record Nr.	UNINA9910138853503321
Autore	Deventer Donald R. van
Titolo	Advanced financial risk management [[electronic resource]] : tools and techniques for integrated credit risk and interest rate risk management // Donald R. van Deventer, Kenji Imai, Mark Mesler
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ISBN	1-118-59721-4 1-118-27857-7 1-299-18976-8
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (876 p.)
Collana	Wiley finance series
Altri autori (Persone)	ImaiKenji MeslerMark
Disciplina	332.7
Soggetti	Gestió del risc Risc de crèdit Gestió d'actius i passius Asset-liability management Credit - Management Interest rate risk - Management Financial risk management Llibres electrònics
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	pt. 1. Risk management : definitions and objectives -- pt. 2. Risk management techniques for interest rate analytics -- pt. 3. Risk management techniques for credit risk analytics -- pt. 4. Risk management applications : instrument by instrument -- pt. 5. Portfolio strategy and risk management.
Sommario/riassunto	Practical tools and advice for managing financial risk, updated for a post-crisis world Advanced Financial Risk Management bridges the gap between the idealized assumptions used for risk valuation and the realities that must be reflected in management actions. It explains, in detailed yet easy-to-understand terms, the analytics of these issues from A to Z, and lays out a comprehensive strategy for risk

management measurement, objectives, and hedging techniques that apply to all types of institutions. Written by experienced risk managers, the book covers everything from the
