

1. Record Nr.	UNINA9910460941503321
Autore	Westbrook Catherine
Titolo	MRI at a glance // Catherine Westbrook
Pubbl/distr/stampa	Chichester, West Sussex, England : , : John Wiley & Sons, Ltd., , 2016 ©2016
ISBN	1-78785-122-2 1-119-05354-4 1-119-05353-6
Edizione	[Third edition.]
Descrizione fisica	1 online resource (xi, 123 pages) : illustrations (chiefly color)
Collana	At a glance series
Disciplina	616.07548
Soggetti	Magnetic resonance imaging Medical physics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro; QR code; TitlePage; Copyright; Preface; Acknowledgement; How to use your textbook; About the companion website; 1 Magnetism and electromagnetism; 2 Atomic structure; 3 Alignment; 4 Precession; 5 Resonance and signal generation; 6 Contrast mechanisms; 7 Relaxation mechanisms; 8 T1 recovery; 9 T2 decay; 10 T1 weighting; 11 T2 weighting; 12 PD weighting; 13 Conventional spin echo; 14 Fast or turbo spin echo - how it works; 15 Fast or turbo spin echo - how it is used; 16 Inversion recovery; 17 Gradient echo - how it works; 18 Gradient echo - how it is used; 19 The steady state 20 Coherent gradient echo21 Incoherent gradient echo; 22 Steady-state free precession; 23 Balanced gradient echo; 24 Ultrafast sequences; 25 Diffusion and perfusion imaging; 26 Functional imaging techniques; 27 Gradient functions; 28 Slice selection; 29 Phase encoding; 30 Frequency encoding; 31 K space - what is it?; 32 K space - how is it filled?; 33 K space and image quality; 34 Data acquisition - frequency; 35 Data acquisition - phase; 36 Data acquisition - scan time; 37 K space traversal and pulse sequences; 38 Alternative K space filling techniques; 39 Signal to noise ratio 40 Contrast to noise ratio41 Spatial resolution; 42 Chemical shift

artefacts; 43 Phase mismatching; 44 Aliasing; 45 Other artefacts; 46 Flow phenomena; 47 Time-of-flight MR angiography; 48 Phase contrast MR angiography; 49 Contrast-enhanced MR angiography; 50 Contrast agents; 51 Magnets; 52 Radiofrequency coils; 53 Gradients and other hardware; 54 MR safety - bio-effects; 55 MR safety - projectiles; Appendix 1(a): The results of optimizing image quality; Appendix 1(b): Parameters and their associated trade-offs; Appendix 2: Artefacts and their remedies; Appendix 3: Main manufacturers' acronyms

GlossaryIndex; Eula; Magnetic susceptibility; Paramagnetism; Diamagnetism; Ferromagnetism; Electromagnetism; Introduction; Motion within the atom; MR active nuclei; The classical theory; The quantum theory; What do the quantum and classical theories tell us?; Precessional (Larmor) frequency; Precessional phase; Energy absorption; Phase coherence; The MR signal; What is contrast?; Extrinsic contrast parameters; Intrinsic contrast mechanisms; The composition of fat and water; Relaxation processes; Field inhomogeneities; T1 recovery in fat; T1 recovery in water; Control of T1 recovery

T2 decay in fatT2 decay in water; Control of T2 decay; Typical values; Typical values; Typical values; Other types of weighting; Mechanisms of CSE; Contrast; Typical values; Uses; Mechanism; Contrast; Typical values; Uses; Mechanism; Contrast; Uses; Mechanism; Typical values; Uses; Echo generation in the steady state; Mechanism; Typical values; Uses; Mechanism; Typical values; Uses; Mechanism; Typical values; Uses; Mechanism; Typical values; Uses; Turbo gradient echo; Echo planar imaging; Typical values; Uses; Diffusion weighted imaging; Perfusion imaging; Functional MR imaging (fMRI)

Spectroscopy

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| 2. Record Nr. | UNISALENTO991003202629707536 |
| Autore | Bodel, Jean |
| Titolo | Le jeu de Saint Nicolas / de Jean Bodel ; introduction, édition, traduction, notes, glossaire complet, tables par Albert Henry |
| Pubbl/distr/stampa | Bruxelles : Presses universitaires de Bruxelles, 1962 |
| Descrizione fisica | 397 p. ; 22 cm |
| Altri autori (Persone) | Henry, Albert |
| Disciplina | 842.1 |
| Lingua di pubblicazione | Francese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
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- | | |
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| 3. Record Nr. | UNINA9910965668603321 |
| Autore | Northrop Robert B. |
| Titolo | Introduction to complexity and complex systems / / by Robert B. Northrop |
| Pubbl/distr/stampa | Boca Raton, FL : , : CRC Press, an imprint of Taylor and Francis, , 2010 |
| ISBN | 1-4665-0016-6
0-429-11309-9
1-4398-9498-1 |
| Edizione | [First edition.] |
| Descrizione fisica | 1 online resource (542 p.) |
| Disciplina | 570.11 |
| Soggetti | Complexity (Philosophy)
Chaotic behavior in systems
Biocomplexity |
| 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. |
| Nota di contenuto | Front Cover; Contents; Preface; Author; 1. Introduction to Complexity and Complex Systems; 2. Introduction to Large Linear Systems; 3. |

Introduction to Biochemical Oscillators and Complex, Nonlinear Biochemical Systems; 4. Modularity, Redundancy, Degeneracy, Pleiotropy, and Robustness in Complex Biological Systems; 5. Evolution of Biological Complexity: Invertebrate Immune Systems; 6. Complex Adaptive and Innate Human Immune Systems; 7. Complexity in Quasispecies and MicroRNAs; 8. Introduction to Physiological Complexity: Examples of Models of Some Complex Physiological Systems

9. Quest for Quantitative Measures of Complexity10. "Irreducible" and "Specified Complexity" in Living Systems; 11. Introduction to Complexity in Economic Systems; 12. Dealing with Complexity; Appendix A: Simnon™ Programs Used in Chapters 3 and 8; Appendix B: How to Use Root Locus to Determine the Stability of SISO Linear Control Systems; Appendix C: Bode Plots; Appendix D: Nyquist Plots; Glossary; Bibliography and Related Readings; Back Cover

Sommario/riassunto

The boundaries between simple and complicated, and complicated and complex system designations are fuzzy and debatable, even using quantitative measures of complexity. However, if you are a biomedical engineer, a biologist, physiologist, economist, politician, stock market speculator, or politician, you have encountered complex systems. Furthermore, your success depends on your ability to successfully interact with and manage a variety of complex systems. In order not to be blindsided by unexpected results, we need a systematic, comprehensive way of analyzing, modeling, and simulating complex systems to predict non-anticipated outcomes. In its engaging first chapters, the book introduces complex systems, Campbell's Law, and the Law of Unintended Consequences, and mathematics necessary for conversations in complex systems. Subsequent chapters illustrate concepts via commonly studied biological mechanisms. The final chapters focus on higher-level complexity problems, and introduce complexity in economic systems. Designed as a reference for biologists and biological engineers, Introduction to Complexity and Complex Systems lends itself to use in a classroom course to introduce advanced students studying biomedical engineering, biophysics, or physiology to complex systems. Engaging and illustrative, this book aids scientists and decision makers in managing biological complexity and complex systems.

4. Record Nr.	UNISANNIOUMC0012749
Autore	Windscheid, Bernhard
Titolo	2 / Bernardo Windscheid
Pubbl/distr/stampa	Torino, : Unione Tipografico-Editrice Torinese, 1930
Edizione	[Rist. stereotipa]
Descrizione fisica	909 p. ; 24 cm.
Disciplina	340.54
Soggetti	Digesto
Collocazione	D (AR) 27 921
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia