

1. Record Nr.	UNINA9911011348903321
Autore	Fan Shuhao
Titolo	CMOS-based Portable NMR/MRI Microsystems / / by Shuhao Fan, Qi Zhou, Ka-Meng Lei, Rui P. Martins, Pui-In Mak
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-031-91447-3
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (131 pages)
Altri autori (Persone)	ZhouQi LeiKa-Meng MartinsRui P MakPui-In
Disciplina	621.3815
Soggetti	Electronic circuit design Embedded computer systems Electronics Electronics Design and Verification Embedded Systems Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Ch 1: Introduction -- Ch 2: State-of-the-Art ASIC for micro-NMR Transceiver: Architecture and Design Considerations -- Ch 3: A Miniaturized 3-D-MRI Scanner Featuring a High-Voltage SOI ASIC -- Ch 4: A Miniature Multi-Nuclei NMR/MRI Platform with a High-Voltage SOI ASIC -- Ch 5: Non-Invasive Object Reconstruction and Flow Analysis -- Ch 6: Conclusion and Outlook.
Sommario/riassunto	This book describes the complete design of CMOS-based multi-nuclear NMR/MRI microsystems. The authors emphasize optimizing semiconductor chip design to enhance the performance of compact CMOS-based NMR/MRI systems. They also discuss the integrated circuit design of customized modules, such as 3-D gradient controllers specifically for MRI, high-resolution multi-phase generators for advanced composite radio-frequency excitation pulse synthesis, etc. The integration of these specific modules not only drives system

innovation but also expands functionality. Discusses developments in CMOS integrated circuit design for miniaturized NMR/MRI platforms over recent decades; Focuses on key integrated circuit design considerations for transceivers in compact NMR systems; Details the design of application-specific integrated circuits (ASICs) for a miniaturized 3-D MRI platform and a compact multi-nuclei NMR/MRI system, both featuring a portable magnet, for enhanced accessibility.

2. **Record Nr.** UNINA9910138344203321

Titolo Entomologische berichten

Pubbl/distr/stampa Amsterdam

Descrizione fisica 1 online resource

Soggetti Entomology
entomology
periodicals
Entomologie
Periodical
Periodicals.

Lingua di pubblicazione Olandese

Formato Materiale a stampa

Livello bibliografico Periodico

Note generali "Uitgegeven door de Nederlandsche Entomologische Vereeniging."