1.	Record Nr.	UNINA9910452485003321
	Titolo	Heterogeneous cellular networks : theory, simulation, and deployment / / Xiaoli Chu, University of Sheffield, David Lopez-Perez, Bell Labs, Alcatel-Lucent, Yang Yang, Shanghai Institute of Microsystem and Information Technology, Fredrik Gunnarsson, Ericsson Research [[electronic resource]]
	Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2013
	ISBN	1-316-08989-4
		1-107-05560-1
		1-107-05782-5
		1-107-05906-2
		1-107-05455-9
		1-139-14970-9
		1-107-05669-1
	Descrizione fisica	1 online resource (xxxvii, 460 pages) : digital, PDF file(s)
	Disciplina	621.3845/6
	Soggetti	Cell phone systems
		Internetworking (Telecommunication)
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Machine generated contents note: 1. Introduction Xiaoli Chu and David Lopez-Perez; 2. Radio propagation modeling Zhihua Lai, Guillaume Villemaud, Meiling Luo and Jie Zhang; 3. System-level simulation and evaluation models David Lopez-Pe;rez and Mats Folke; 4. Access mechanisms of low-power nodes Vikram Chandrasekhar, Tony Ekpenyong and Ralf Bendlin; 5. Interference modeling and spectrum allocation Tony Q.S. Quek and Marios Kountouris; 6. Self-organization Fredrik Gunnarsson; 7. Dynamic interference management Ismail Guvenc, Fredrik Gunnarsson and David Lopez-Pe;rez; 8. Uncoordinated femtocells David Lopez-Pe;rez and Xiaoli Chu; 9. Cooperative relaying Jing Xu, Jiang Wang and Ting Zhou; 10. Network MIMO techniques Gan Zheng, Yongming Huang, Kai-Kit Wong and Ting Zhou; 11. Mobility, handoff and location management Huaxia Chen, Shengyao Jin, Honglin

Hu and Yang Yang; 12. Network coding Haishi Ning and Cong Ling; 13. Cognitive radio Miguel Lopez Benitez; 14. Energy-efficient mechanisms Weisi Guo, Min Chen and Athanasios V. Vasilakos.

Sommario/riassunto	This detailed, up-to-date introduction to heterogeneous cellular networking introduces its characteristic features, the technology underpinning it and the issues surrounding its use. Comprehensive and in-depth coverage of core topics catalogue the most advanced, innovative technologies used in designing and deploying heterogeneous cellular networks, including system-level simulation and evaluation, self-organisation, range expansion, cooperative relaying, network MIMO, network coding and cognitive radio. Practical design considerations and engineering tradeoffs are also discussed in detail, including handover management, energy efficiency and interference management techniques. A range of real-world case studies, provided by industrial partners, illustrate the latest trends in heterogeneous cellular networks development. Written by leading figures from industry and academia, this is an invaluable resource for all researchers and practitioners working in the field of mobile communications.