

# Contents

<b>1</b>	<b>Introduction</b>	1
1.1	Radio Resource Management	1
1.2	Power Control and Interference Management	8
	References	15
<b>2</b>	<b>CDMA-Based Wireless Cellular Networks</b>	17
2.1	Motivations for Power Control	17
2.2	Power Allocations in a Single Cell Network	19
2.3	Effect of Imperfect Power Control	24
2.4	Adaptive Power and Adaptive Rate	25
2.5	Power Allocations in a Multi-cell Network	29
2.6	Soft Handoff and Power Allocations	32
	References	36
<b>3</b>	<b>Wireless Networks with Two-hop Relaying</b>	39
3.1	Multihop Relaying	39
3.2	Performance for Amplify-and-Forward	41
3.3	Performance for Decode-and-Forward	49
	References	56
<b>4</b>	<b>Advanced Wireless Communication Networks</b>	57
4.1	Out-of-band Relaying in Wireless Cellular Networks	57
4.2	Cooperative Relaying in Wireless Cellular Networks	70
4.3	Cognitive Radio Networks with Spectrum Underlay	82
	References	93
<b>A</b>	<b>Irreducible Matrix and Dominant Eigenvalue</b>	95
	References	95
<b>B</b>	<b>Posynomial and Related Optimization Problems</b>	97
	References	99



<http://www.springer.com/978-1-4614-3283-8>

Power Distribution and Performance Analysis for  
Wireless Communication Networks

Zhao, D.

2012, IX, 99 p. 46 illus., Softcover

ISBN: 978-1-4614-3283-8