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| Autore | Zhao Dixian |
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| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters and index. |
| Nota di contenuto | Introduction -- PA and Transmitter Basics -- mm-Wave Active and Passive Devices -- Low-Power and Efficiency Enhancement Techniques for mm-Wave PAs -- mm-Wave Outphasing Transmitter -- mm-Wave Broadband Direct-Conversion TX towards 10+Gb/s -- mm-Wave Broadband Power Amplifier towards 20+dBm -- Conclusion and Outlook. |
| Sommario/riassunto | This book focuses on the development of design techniques and methodologies for 60-GHz and E-band power amplifiers and transmitters at device, circuit and layout levels. The authors show the recent development of millimeter-wave design techniques, especially of power amplifiers and transmitters, and presents novel design concepts, such as “power transistor layout” and “4-way parallel-series power combiner”, that can enhance the output power and efficiency of power amplifiers in a compact silicon area. Five state-of-the-art 60-GHz and E-band designs with measured results are demonstrated to prove the effectiveness of the design concepts and hands-on methodologies |

presented. This book serves as a valuable reference for circuit designers to develop millimeter-wave building blocks for future 5G applications.