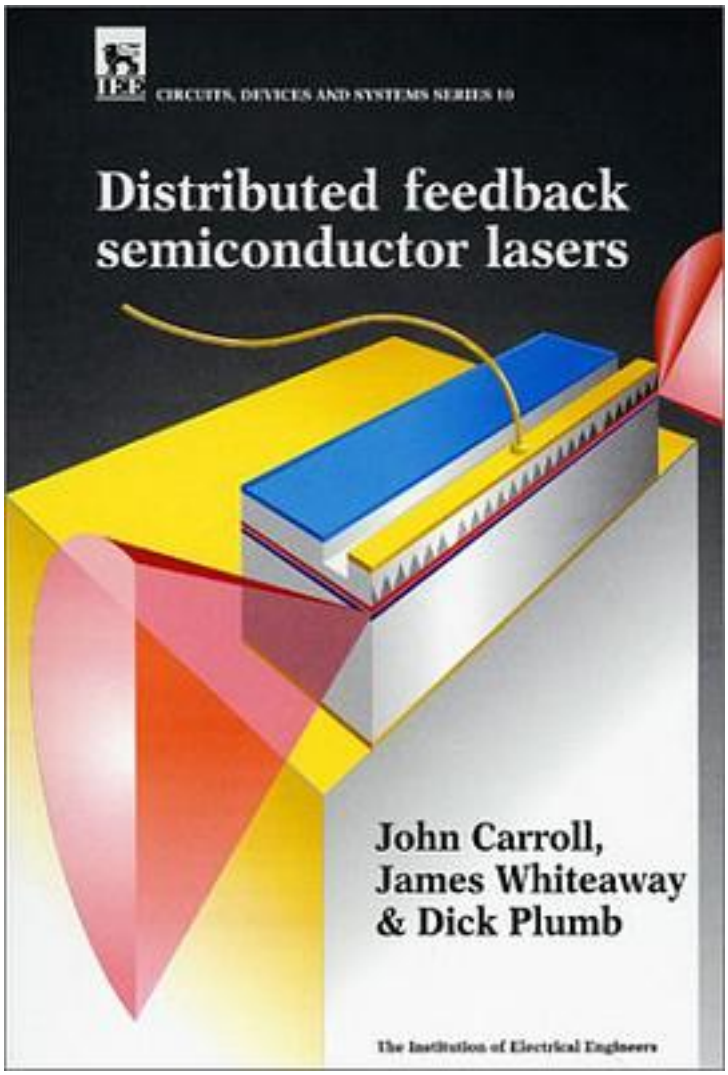
Distributed Feedback Semiconductor Lasers (IEE Circuits, Devices & Systems Series , No 10)



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As laser diodes continue to increase in use and versatility so their design has become more sophisticated, requiring extensive physical and mathematical modelling. Concentrating on presenting a thorough analysis of DFB lasers from a level suitable for research students, the book emphasises understanding of fundamental principles and gives extensive coverage of computer aided modelling techniques. It is supported by a suite of Matlab programs.

作者介绍:

目录: 1. The semiconductor-diode laser
2. Gain, loss and spontaneous emission
3. Principles of modelling guided waves
4. Optical energy exchange in guides
5. Basic principles of lasers with distributed feedback
6. More advanced distributed feedback laser design
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Appendix 2: Algorithms for the multilayer slab guide
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Appendix 7: Kramers-Krönig relationships
Appendix 8: Relative-intensity noise (RIN)
Appendix 9: Thermal, quantum and numerical noise
Appendix 10: Laser packaging
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标签

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评论

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