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Autore	Bird G. A.
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Descrizione fisica	1 online resource (xvii, 458 p.) : ill. (some col.) ; + 1 computer disk (3 1/2 in.)
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Note generali	Accompanied by diskette. Previously issued in print: 1994.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	The molecular model -- Binary elastic collisions -- Basic kinetic theory -- Equilibrium gas properties -- Inelastic collisions and surface interactions -- Chemical reactions and thermal radiation -- Collisionless flows -- Analytical methods for transition regime flows -- Numerical methods for transition regime flows -- General issues related to direct simulations -- DSMC procedures in a homogeneous gas -- One-dimensional steady flows -- One-dimensional unsteady flows -- Two-dimensional flows -- Axially symmetric flows -- Three-dimensional flows -- Appendix A. Representative gas properties -- Appendix B. Probability functions and related integrals -- Appendix C. Sampling from a prescribed distribution -- Appendix D. Listing of program FMF. FOR -- Appendix E. Numerical artefacts -- Appendix F. Summary of the DSMC demonstration programs -- Appendix G. Listing of program DSMCOS. FOR.
Sommario/riassunto	The direct simulation Monte Carlo (or DSMC) method has become widely used for engineering and scientific studies of gas flows that involve low densities or very small physical dimensions. This book is

developed from first principles and has been extended to cover the new models and procedures.
