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Nota di contenuto	Front Cover; Dedication; Contents; Preface; Acknowledgments; Chapter 1: Introduction; Chapter 2: Marching Cubes and Variants; Chapter 3: Dual Contouring; Chapter 4: Multilinear Interpolation; Chapter 5: Isosurface Patch Construction; Chapter 6: Isosurface Generation in 4D; Chapter 7: Interval Volumes; Chapter 8: Data Structures for Faster Isosurface Construction; Chapter 9: Multiresolution Tetrahedal Meshes; Chapter 10: Multiresolution Polyhedral Meshes; Chapter 11: Isovalues; Chapter 12: Contour Trees; Appendix A: Geometry; Appendix B: Topology; Appendix C: Graph Theory; Appendix D: Notation Bibliography
Sommario/riassunto	Ever since Lorensen and Cline published their paper on the marching cubes algorithm, isosurfaces have been a standard technique for the visualization of 3D volumetric data. Yet there is no book exclusively devoted to isosurfaces. This book presents the basic algorithms for isosurface construction and gives a rigorous mathematical perspective to some of the algorithms and results. It offers a solid introduction to research in this area as well as an organized overview of the various algorithms associated with isosurfaces

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