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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Frontmatter -- Preface to the First Edition -- Preface to the Second Edition -- Preface to the Third Edition -- Contents -- Chapter 1: Knots and isotopies -- Chapter 2: Geometric concepts -- Chapter 3: Knot groups -- Chapter 4: Commutator subgroup of a knot group -- Chapter 5: Fibered knots -- Chapter 6: A characterization of torus knots -- Chapter 7: Factorization of knots -- Chapter 8: Cyclic coverings and Alexander invariants -- Chapter 9: Free differential calculus and Alexander matrices -- Chapter 10: Braids -- Chapter 11: Manifolds as branched coverings -- Chapter 12: Montesinos links -- Chapter 13: Quadratic forms of a knot -- Chapter 14: Representations of knot groups -- Chapter 15: Knots, knot manifolds, and knot groups -- Chapter 16: Bridge number and companionship -- Chapter 17: The 2-variable skein polynomial -- Appendix A: Algebraic theorems -- Appendix B: Theorems of 3-dimensional topology -- Appendix C: Table -- Appendix D: Knot projections 01-949 -- References -- Author index -- Glossary of Symbols -- Index
Sommario/riassunto	This book is an introduction to classical knot theory. Topics covered include: different constructions of knots, knot diagrams, knot groups, fibred knots, characterisation of torus knots, prime decomposition of knots, cyclic coverings and Alexander polynomials and modules together with the free differential calculus, braids, branched coverings and knots, Montesinos links, representations of knot groups, surgery of

3-manifolds and knots, Jones and HOMFLYPT polynomials. Knot theory has expanded enormously since the first edition of this book published in 1985. In this third completely revised and extended edition a chapter about bridge number and companionship of knots has been added. The book contains many figures and some tables of invariants of knots. This comprehensive account is an indispensable reference source for anyone interested in both classical and modern knot theory. Most of the topics considered in the book are developed in detail; only the main properties of fundamental groups, covering spaces and some basic results of combinatorial group theory are assumed to be known. The text is accessible to advanced undergraduate and graduate students in mathematics.

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