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Titolo	Quantum theory of angular momentum : irreducible tensors, spherical harmonics, vector coupling coefficients, 3nj symbols / / D. A. Varshalovich, A. N. Moskalev, V. K. Khersonskii
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Descrizione fisica	1 online resource (x, 514 pages) : illustrations
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Soggetti	Angular momentum (Nuclear physics) Quantum theory
Lingua di pubblicazione	Inglese
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Nota di contenuto	Elements of Vectors and Tensor Theory -- Angular Momentum Operators -- Irreducible Tensors -- Wigner D-Functions -- Spherical Harmonics -- Spin Functions -- Tensor Spherical Harmonics -- Clebsch-Gordan Coefficients and 3jm-Symbols -- 6j-Symbols and the Racah Coefficients -- 9j- and 12j-Symbols -- Graphical Methods in Angular Momentum Theory -- Sums Involving Vector Addition and Recoupling Coefficients -- Matrix Elements of Irreducible Tensor Operators -- Glossary of Symbols and Notations.
Sommario/riassunto	This is the most complete handbook on the quantum theory of angular momentum. Containing basic definitions and theorems as well as relations, tables of formula and numerical tables which are essential for applications to many physical problems, the book is useful for specialists in nuclear and particle physics, atomic and molecular spectroscopy, plasma physics, collision and reaction theory, quantum chemistry, etc. The authors take pains to write many formulae in different coordinate systems thus providing users with added ease in consulting this book. Each chapter opens with a comprehensive list of its contents to ease the search for any information needed later. New results relating to different aspects of the angular momentum thoery are also included. Containing close to 500 pages this book also gathers

together many useful formulae besides those related to angular momentum. The book also compares different notations used by previous authors.
