1. Record Nr. UNINA9910144619603321 Autore Nastasescu Constantin Titolo Methods of Graded Rings / / by Constantin Nastasescu, Freddy van Oystaeyen Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 2004 **ISBN** 3-540-40998-X Edizione [1st ed. 2004.] Descrizione fisica 1 online resource (XIII, 306 p.) Collana Lecture Notes in Mathematics, , 0075-8434; ; 1836 Disciplina 512.46 Soggetti Algebra Associative rings Rings (Algebra) Category theory (Mathematics) Homological algebra Group theory **Physics** Associative Rings and Algebras Category Theory, Homological Algebra **Group Theory and Generalizations** Mathematical Methods in Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references (pages [291]-302) and index. The Category of Graded Rings -- The Category of Graded Modules --Nota di contenuto Modules over Stronly Graded Rings -- Graded Clifford Theory --Internal Homogenization -- External Homogenization -- Smash Products -- Localization of Graded Rings -- Application to Gradability -- Appendix A: Some Category Theory -- Appendix B: Dimensions in an Abelian Category -- Bibliography -- Index. Sommario/riassunto The topic of this book, graded algebra, has developed in the past decade to a vast subject with new applications in noncommutative geometry and physics. Classical aspects relating to group actions and

gradings have been complemented by new insights stemming from Hopf algebra theory. Old and new methods are presented in full detail

and in a self-contained way. Graduate students as well as researchers in algebra, geometry, will find in this book a useful toolbox. Exercises, with hints for solution, provide a direct link to recent research publications. The book is suitable for courses on Master level or textbook for seminars.