1. Record Nr.	UNISA996418188903316
Titolo	Basic Representation Theory of Algebras [[electronic resource] /] / by Ibrahim Assem, Flávio U, Coelho
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-35118-1
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (X, 311 p. 288 illus.)
Collana	Graduate Texts in Mathematics, , 0072-5285 ; ; 283
Disciplina	512.9
Soggetti	Associative rings Rings (Algebra) Category theory (Mathematics) Homological algebra Associative Rings and Algebras Category Theory, Homological Algebra
Lingua di pubblicazi	one Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction Chapter 1: Modules, algebras and quivers Chapter 2: The radical and almost split sequences Chapter 3: Constructing almost split sequences Chapter 4: The Auslander–Reiten quiver of an algebra Chapter 5: Endomorphism algebras Chapter 6: Representation-finite algebras Bibliography Index.
Sommario/riassunto	This textbook introduces the representation theory of algebras by focusing on two of its most important aspects: the Auslander-Reiten theory and the study of the radical of a module category. It starts by introducing and describing several characterisations of the radical of a module category, then presents the central concepts of irreducible morphisms and almost split sequences, before providing the definition of the Auslander-Reiten quiver, which encodes much of the information on the module category. It then turns to the study of endomorphism algebras, leading on one hand to the definition of the Auslander algebra and on the other to tilting theory. The book ends with selected properties of representation-finite algebras, which are now the best understood class of algebras. Intended for graduate students in

representation theory, this book is also of interest to any mathematician wanting to learn the fundamentals of this rapidly growing field. A graduate course in non-commutative or homological algebra, which is standard in most universities, is a prerequisite for readers of this book.