1.	Record Nr.	UNINA9910299425003321
	Autore	Misra Achyuta Ayan
	Titolo	Tectonic Inheritance in Continental Rifts and Passive Margins / / by Achyuta Ayan Misra, Soumyajit Mukherjee
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
	ISBN	3-319-20576-5
	Edizione	[1st ed. 2015.]
	Descrizione fisica	1 online resource (97 p.)
	Collana	SpringerBriefs in Earth Sciences, , 2191-5369
	Disciplina	551.8
	Soggetti	Structural geology
		Geophysics
		Sedimentology
		Structural Geology
		Geophysics/Geodesy
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Introduction General aspects Effect of preexisting anisotropies on fault propagation Preexisting fabrics Role of lithosphere rheology on rift architecture Discussions and Conclusions.
	Sommario/riassunto	This work reviews the mechanism of rifting with a focus on pre- existing tectonic weaknesses in pre-rift and/or basement rocks, i.e., on tectonic inheritance. The passive margins that are studied in this book are the Norwegian Continental Shelf, the Eastern North America and the East and West Indian Continental Margins. The continental rifts that have been analysed are the East African Rift System, the Brazilian Continental Rift Systems and the European Cenozoic Rift System. It states how rifts and passive margins serve as valuable locations for hydrocarbon exploration. Tectonic inheritance/heritage examines the influence of pre-existing/pre-rift elements on the geometry, genesis and propagation of rift-related faults. Such elements include anisotropies in the shallow crustal levels, as well as the rheology of the lithosphere. Inheritance greatly influences the architecture of rifted passive margins including the attitude of faults and geometry of horsts, (half-) grabens, transfer zones etc. Inheritance is also a determining