1. Record Nr. UNINA9910337947703321

Autore	Mabit Lionel
Titolo	Assessing Recent Soil Erosion Rates through the Use of Beryllium-7 (Be-7) [[electronic resource] /] / edited by Lionel Mabit, William Blake
Pubbl/distr/stampa	Cham, : Springer Nature, 2019 Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-10982-8
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (VII, 69 p. 26 illus., 7 illus. in color.)
Disciplina	630
Soggetti	Agriculture Soil science Soil conservation Environmental sciences Physical geography Natural resources Soil Science & Conservation Environmental Science and Engineering Physical Geography Natural Resources
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Foreword -- Chapter 1. The use of beryllium-7 as a soil and sediment tracer -- Chapter 2. How to design a beryllium-7 based soil distribution study at the field scale: a step-by-step approach -- Chapter 3. Measurement of 7Be in environmental materials -- Chapter 4. Conversion of 7Be activity concentrations into soil and sediments redistribution amounts -- Chapter5. Research into practice – linking 7Be evidence to land management policy change for improved food security.
Sommario/riassunto	This open access book is the first comprehensive guideline for the beryllium-7 (Be-7) technique that can be applied to evaluate short-term patterns and budgets of soil redistribution in agricultural

landscapes. While covering the fundamental and basic concepts of the approach, this book distinguishes itself from other publications by offering step-by-step instructions on how to use this isotopic technique effectively. It covers experimental design considerations and clear instruction is given on data processing. As accurate laboratory measurement is crucial to ensure successful use of Be-7 to investigate soil erosion, a full chapter is devoted to its specific determination by gamma spectrometry. This open access contribution further describes new developments in the Be-7 technique and includes a concluding chapter highlighting its potential benefits to support the implementation of area-wide soil conservation policy.