

1. Record Nr.	UNINA9910555176303321
Titolo	Soil-water-root processes : advances in tomography and imaging // Stephen H. Anderson and Jan W. Hopmans, editors
Pubbl/distr/stampa	Madison, Wisconsin : , : Soil Science Society of America, , 2013
ISBN	0-89118-959-9
Descrizione fisica	1 online resource (xi, 289 pages)
Collana	SSSA Special Publication ; ; 61
Disciplina	625.735
Soggetti	Soil moisture - Measurement Soil porosity - Measurement Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Using synchrotron-based X-ray microtomography and functional contrast agents in environmental applications / Dorthe Wildenschild, Mark L. Rivers, Mark L. Porter, Gabriel C. Iltis, Ryan T. Armstrong, and Yohan Davit -- Tomographic investigations relevant to the rhizosphere / Keith W. Jones, Jun Wang, Yu-chen Chen, Qingxi Yuan, W. Brent Lindquist, Lauren Beckingham, Catherine A. Peters, Wooyong Um, Lee Newman, Tara Sabo-Attwood, and Ryan Tappero -- Synchrotron X-ray microtomography -- new means to quantify root induced changes of rhizosphere physical properties / Jazmin E. Aravena, Markus Berli, Manoj Menon, Teamrat A. Ghezzehei, Ajay K. Mandava, Emma E. Regentova, Natarajan S. Pillai, John Steude, Michael H. Young, Peter S. Nico, and Scott W. Tyler -- Effects of root-induced biopores on pore space architecture investigated with industrial X-ray computed tomography / Sebastian K. Pagenkemper, Stephan Peth, Daniel Uteau Puschmann, and Rainer Horn -- Computed tomographic evaluation of earth materials with varying resolutions / Ranjith P. Udawatta, Stephen H. Anderson, Clark J. Gantzer, and Shmuel Assouline -- Applications of neutron imaging in soil-water-root systems / Ahmad B. Moradi, Sascha E. Oswald, Manoj Menon, Andrea Carminati, Eberhard Lehmann, and Jan W. Hopmans -- Magnetic resonance imaging techniques for visualization of root growth and root water uptake processes / A. Pohlmeier, S. Haber-Pohlmeier, M. Javaux, and H. Vereecken --

Segmentation of X-ray CT data of porous materials: a review of global and locally adaptive algorithms / Markus Tuller, Ramaprasad Kulkarni, and Wolfgang Fink -- Heterogeneous porous media structure analysis with computed tomography images and a multiphase bin semivariogram / Glenn O. Brown and Jason R. Vogel -- Characterization of porous media computer tomography images using semivariogram families / Jason R. Vogel and Glenn O. Brown -- Electrical resistivity tomography of the root zone / Alex Furman, Ali Arnon-Zur, and Shmuel Assouline -- Geophysical methods for field-scale imaging of root zone properties and processes / J. Vanderborght, J.A. Huisman, J. van der Kruk, and H. Vereecken.
