

Mobility of TX100 suspended multiwalled carbon nanotubes (MWCNTs) and the facilitated transport of phenanthrene in real soil columns J. Fang, X.-q. Shan, B. Wen and R.-x. Huang .....	1
Release pattern of non-exchangeable potassium reserves in Alfisols, Inceptisols and Entisols of West Bengal, India G.K. Sarkar, A.P. Chattopadhyay and S.K. Sanyal .....	8
Using the long-term memory effect of pesticide and metabolite soil residues to estimate field degradation half-life and test leaching predictions J. Farlin, T. Gallé, M. Bayerle, D. Pittois, C. Braun, H. El Khabbaz, C. Lallement, U. Leopold, J. Vanderborght and L. Weihermueller .....	15
Zinc, cadmium and thallium distribution in soils and plants of an area impacted by sphalerite-bearing mine wastes E. Álvarez-Ayuso, V. Otones, A. Murciego, A. García-Sánchez and I. Santa Regina .....	25
Gradual and anthropogenic soil change for fertility and carbon on marginal sandy soils A.M. Tye, D.A. Robinson and R.M. Lark .....	35
Approaching environmental phosphorus limits on a volcanic soil of Southern Chile J.H. Mejías, M. Alfaro and J. Harsh .....	49
Petrography and diagenesis of cavity-fill dolocretes, Kuwait F.I. Khalaf and F.A. Abdullah .....	58
The fate of tebutiuron in microcosm with riparian forest seedlings S.T.T. Bicalho and T. Langenbach .....	66
Assessing humification and organic C compounds by laser-induced fluorescence and FTIR spectroscopies under conventional and no-till management in Brazilian Oxisols F. Tivet, J.C. de Moraes Sá, R. Lal, D.M.B.P. Milori, C. Briedis, P. Letourmy, L.A. Pinheiro, P.R. Borszowski and D. da Cruz Hartman .....	71
Improving the MicroResp™ substrate-induced respiration™ method by a more complete description of CO <sub>2</sub> behavior in closed incubation wells P. Renault, M. Ben-Sassi and A. Bérard .....	82
Utilization of fractional extraction for characterization of the interactions between humic acids and metals M. Kalina, M. Klučáková and P. Sedláček .....	92
Least limiting water range of the soil seedbed for long-term tillage and cropping systems in the central Great Plains, USA O.G. Filho, H. Blanco-Canqui and A.P. da Silva .....	99
Phosphorus status in archaeological arable topsoil relicts—Is it possible to reconstruct conditions for prehistoric agriculture in Germany? F. Lauer, S. Pätzold, R. Gerlach, J. Protze, S. Willbold and W. Amelung .....	111

*(Contents continued on last page of this issue)*

*(continued from back cover)*

Fractal distribution of mass from the millimeter- to decimeter-scale in two soils under native and restored tallgrass prairie D.R. Hirmas, D. Giménez, V. Subroy and B.F. Platt . . . . .	121
Vertical and lateral distributions of <sup>137</sup> Cs in cultivated and uncultivated soils on Mediterranean hillslopes L. Gaspar and A. Navas . . . . .	131
Application of RothPC-1 to soil carbon profiles in cracking soils under minimal till cultivation T. Wells, G.R. Hancock, C. Dever and C. Martinez . . . . .	144
Effect of scanning and image reconstruction settings in X-ray computed microtomography on quality and segmentation of 3D soil images A.N. Houston, S. Schmidt, A.M. Tarquis, W. Otten, P.C. Baveye and S.M. Hapca . . . . .	154
Spatio-temporal modeling of soil characteristics for soilscape reconstruction A. Zwertvaegher, P. Finke, P. De Smedt, V. Gelorini, M. Van Meirvenne, M. Bats, J. De Reu, M. Antrop, J. Bourgeois, P. De Maeyer, J. Verniers and P. Crombé . . . . .	166
Evolution of the pore structure of constructed Technosols during early pedogenesis quantified by image analysis N.S. Jangorzo, F. Watteau and C. Schwartz . . . . .	180
Digital assessment of soil-salinity dynamics after a major flood in the Niger River valley D. Michot, C. Walter, I. Adam and Y. Guéro . . . . .	193
Agronomic application of food processing industrial sludge to improve soil quality and crop productivity K. Mahapatra, D.S. Ramteke, L.J. Paliwal and N.K. Naik . . . . .	205
Biological and chemical factors controlling the patchy distribution of soil water repellency among plant species in a Mediterranean semiarid forest E. Lozano, P. Jiménez-Pinilla, J. Mataix-Solera, V. Arcenegui, G.M. Bárcenas, J.A. González-Pérez, F. García-Orenes, M.P. Torres and J. Mataix-Beneyto . . . . .	212
Self-restoration of post-agrogenic Albeluvisols: Soil development, carbon stocks and dynamics of carbon pools O. Kalinina, O. Chertov, A.V. Dolgikh, S.V. Goryachkin, D.I. Lyuri, S. Vormstein and L. Giani . . . . .	221
Temporal stability and variability of field scale soil moisture on mountainous hillslopes in Northeast Asia C. Sur, Y. Jung and M. Choi . . . . .	234
Weathering and particle entrapment at the rock–lichen interface in Italian volcanic environments S. Vingiani, F. Terribile and P. Adamo . . . . .	244
Soil maps of the world A.E. Hartemink, P. Krasilnikov and J.G. Bockheim . . . . .	256
Unsaturated hydraulic conductivity modeling for porous media with two fractal regimes A.G. Hunt, B. Ghanbarian and K.C. Saville . . . . .	268
Quantifying mineral abundances of complex mixtures by coupling spectral deconvolution of SWIR spectra (2.1–2.4 μm) and regression tree analysis V.L. Mulder, M. Plötze, S. de Bruin, M.E. Schaepman, C. Mavris, R.F. Kokaly and M. Egli . . . . .	279
The hidden nature of parent material in soils of Italian mountain ecosystems F.A. Miletì, G. Langella, M.A. Prins, S. Vingiani and F. Terribile . . . . .	291
Characterization of tillage effects on the spatial variation of soil properties using ground-penetrating radar and electromagnetic induction F. Jonard, M. Mahmoudzadeh, C. Roisin, L. Weihermüller, F. André, J. Minet, H. Vereecken and S. Lambot . . . . .	310