

CONTENTS

(Abstracted/indexed in: *Chemical Abstracts Service; Current Contents/Agriculture, Biology & Environmental Sciences; Current Geographical Publications; Dokumentation Wasser; Elsevier BIOBASE/Current Awareness in Biological Sciences; EMBiology; Focus on: Global Change; GEOBASE; Research Alert Direct; Science Citation Index; SciSearch*). Also covered in the abstract and citation database *Scopus®*. Full text available on *ScienceDirect®*.

Evaluation of N ₂ O and CO ₂ hot moments in managed grassland and cornfield, southern Hokkaido, Japan M. Li, M. Shimizu and R. Hatano	1
Spatial variability of suspended sediment yield in a gravel-bed river across four orders of magnitude of catchment area C.F. Mills and J.C. Bathurst	14
Relationships between soil organic carbon and precipitation along a climosequence in loess-derived soils of the Central Great Plains, USA S.T. Klopfenstein, D.R. Hirmas and W.C. Johnson	25
Regional estimation and validation of remotely sensed evapotranspiration in China C. Zhan, J. Yin, F. Wang and Q. Dong	35
Vegetation and soil property response of short-time fencing in temperate desert of the Hexi Corridor, northwestern China Y. Zhang and W. Zhao	43
Variability in the composition of charred litter generated by wildfire in different ecosystems A. Merino, B. Chávez-Vergara, J. Salgado, M.T. Fonttobel, F. García-Oliva and J.A. Vega	52
Response of soil enzyme activity to long-term restoration of desertified land Y.L. Zhang, L.J. Chen, X.H. Chen, M.L. Tan, Z.H. Duan, Z.J. Wu, X.J. Li and X.H. Fan	64
Overland flow directs soil moisture and ecosystem processes at patch scale in Mediterranean restored hillslopes L. Merino-Martín, M. Moreno-de las Heras, T. Espigares and J.M. Nicolau	71
Factors controlling Si export from soils: A soil column approach B. Ronchi, L. Barão, W. Clymans, F. Vandevenne, O. Batelaan, G. Govers, E. Struyf and A. Dassargues	85
Mineralogical and δ ¹⁸ O-δD isotopic study of kaolinized micaschists at Penestin, Armorican Massif, France: New constraint in the kaolinization process A. Gaudin, V. Ansan and T. Rigaudier	97
Soil geomorphology and frozen ground conditions at a subalpine talus slope having permafrost in the eastern Swiss Alps C. Kneisel, A. Emmert, P. Polich, B. Zollinger and M. Egli	107
Toward connecting subtropical algal blooms to freshwater nutrient sources using a long-term, spatially distributed, <i>in situ</i> chlorophyll-a record T. Blakey, A.M. Melesse and C.S. Rousseaux	119
Delineation of soil management zones for a rice cultivated area in eastern India using fuzzy clustering R. Tripathi, A.K. Nayak, M. Shahid, B. Lal, P. Gautam, R. Raja, S. Mohanty, A. Kumar, B.B. Panda and R.N. Sahoo	128
Prediction of soil organic matter variability associated with different land use types in mountainous landscape in southwestern Yunnan province, China S. Liu, N. An, J. Yang, S. Dong, C. Wang and Y. Yin	137
Temporal changes in soil salinity at four saline wetlands in NE Spain J. Herrero and C. Castañeda	145
Organic soils in Germany, their distribution and carbon stocks N. Roßkopf, H. Fell and J. Zeitz	157
Agricultural land use decouples soil nutrient cycles in a subtropical riparian wetland in China W. Wang, C. Wang, J. Sardans, Q. Min, C. Zeng, C. Tong and J. Peñuelas	171

Plastic mulching with drip irrigation increases soil carbon stocks of natrargid soils in arid areas of northwestern China Z.-g. Li, C.-y. Tian, R.-h. Zhang, I. Mohamed, Y. Liu, G.-s. Zhang, J.-f. Pan and F. Chen	179
Clay transformation and pedogenic calcite formation on a lithosequence of igneous rocks in northwestern Iran M. Yousefifard, S. Ayoubi, R.M. Poch, A. Jalalian, H. Khademi and F. Khormali	186
Effect of tea plantation age on the distribution of soil organic carbon fractions within water-stable aggregates in the hilly region of Western Sichuan, China W. Li, Z. Zheng, T. Li, X. Zhang, Y. Wang, H. Yu, S. He and T. Liu	198
Determination of background levels and pollution assessment for seven metals (Cd, Cu, Ni, Pb, Zn, Fe, Mn) in sediments of a Mediterranean coastal lagoon C. Hernández-Crespo and M. Martín	206
Arbuscular mycorrhizal fungal species composition, propagule density, and soil alkaline phosphatase activity in response to continuous and alternate no-tillage in Northern China J. Hu, A. Yang, J. Wang, A. Zhu, J. Dai, M.H. Wong and X. Lin	215
Gully morphology, hillslope erosion, and precipitation characteristics in the Appalachian Valley and Ridge province, southeastern USA I.E. Luffman, A. Nandi and T. Splegel	221
Effects of copper on methane emission, methanogens and methanotrophs in the rhizosphere and bulk soil of rice paddy T.-T. Mao, R. Yin and H. Deng	233
Effect of urbanisation on the water retention function in the Three Gorges Reservoir Area, China X. Peng, D. Shi, H. Guo, D. Jiang, S. Wang, Y. Li and W. Ding	241
Properties of soil materials derived from fly ash 11 years after revegetation of post-mining excavation J. Weber, S. Strączyńska, A. Kocowicz, M. Gilewska, A. Bogacz, M. Gwiżdż and M. Debicka	250
Water repellency under coniferous and deciduous forest — Experimental assessment and impact on overland flow V. Butzen, M. Seeger, A. Marruedo, L. de Jonge, R. Wengel, J.B. Ries and M.C. Casper	255
Spatial prediction of landslide hazard at the Yihuang area (China) using two-class kernel logistic regression, alternating decision tree and support vector machines H. Hong, B. Pradhan, C. Xu and D. Tien Bui	266
Erosion-induced carbon redistribution, burial and mineralisation — Is the episodic nature of erosion processes important? F.P., D.V. and V.O.K.	282
Assessing soil quality of gleyed paddy soils with different productivities in subtropical China Z. Liu, W. Zhou, S. Li, P. He, G. Liang, J. Lv and H. Jin	293
Soil organic carbon fractions and sequestration across a 150-yr secondary forest chronosequence on the Loess Plateau, China Y.-G. Zhao, X.-F. Liu, Z.-L. Wang and S.-W. Zhao	303
Growth performance of Sainfoin and its effects on the runoff, soil loss and sediment concentration in a semi-arid region of Turkey F. Yüksek and T. Yüksek	309
Physical verification of the effect of land features and antecedent moisture on runoff curve number M. Lal, S.K. Mishra and A. Pandey	318
Magnetic parameters indicate the intensity of chemical weathering developed on igneous rocks in China N. Su, S.-Y. Yang, X.-D. Wang, L. Bi and C.-F. Yang	328
Influence of wildfire severity on soil physical degradation in two pine forest stands of NW Spain M.E. Varela, E. Benito and J.J. Keizer	342
Assessment of the AnnAGNPS model in simulating runoff and nutrients in a typical small watershed in the Taihu Lake basin, China Z. Li, C. Luo, Q. Xi, H. Li, J. Pan, Q. Zhou and Z. Xiong	349
Spatiotemporal variation and trends in rainfall erosivity in China's dryland region during 1961–2012 F. Yang and C. Lu	362
Horizontal wind erosion flux and potential dust emission in arid and semiarid regions of China: A major source area for East Asia dust storms H. Wang, X. Jia, K. Li and Y. Li	373
Field investigation of a trash-board, tillage depth and low speed effect on the displacement and burial of straw A.E. Farid Eltom, W. Ding, Q. Ding, A.A. Tagar, Z. Talha and Gamareldawla	385
Response of roll wave to suspended load and hydraulics of overland flow on steep slope C. Zhao, J. Gao, M. Zhang, T. Zhang and F. Wang	394
Effects of vegetation and physicochemical properties on solute transport in reclaimed soil at an opencast coal mine site on the Loess Plateau, China Q. Zhen, W. Ma, M. Li, H. He, X. Zhang and Y. Wang	403

Effect of greenhouse soil management on soil aggregation and organic matter in northeast China Y. Yan, L. Cheng-Hua and P. Zhong-Jian	412
Towards sound comparisons of soil carbon stocks: A proposal based on the cumulative coordinates approach P. Rovira, T. Sauras, J. Salgado and A. Merino	420
Soil processes and nutrient bioavailability in the rhizosphere of <i>Bolax gummifera</i> in a subantarctic environment (Martial Mountains, Ushuaia—Argentina) X.L. Otero, A. González-Guzman, V.S. Souza-Junior, A. Pérez-Alberti and F. Macías	432
Relative sea-level and climatic changes in the Amazon littoral during the last 500 years M.C.L. Cohen, I.C.C. Alves, M.C. França, L.C.R. Pessenda and D. de Fátima Rossetti	441
Special Section: Key Processes and Factors to Mitigate Land Degradation; Edited by: Ryusuke HATANO, Suwardi and Sonoko Dorothea BELLINGRATH-KIMURA	
Key Processes and Factors to Mitigate Land Degradation	
R. HATANO, Suwardi, S.D. BELLINGRATH-KIMURA	453
Changes in soil carbon and nitrogen stocks followed the conversion from secondary forest to Chinese fir and Moso bamboo plantations F. Guan, X. Tang, S. Fan, J. Zhao and C. Peng	455
Large-scale carbon sequestration in post-agrogenic ecosystems in Russia and Kazakhstan I. Kurganova, V. Lopes de Gerenu and Y. Kuzyakov	461
Influence of different rates of gypsum application on methane emission from saline soil related with rice growth and rhizosphere exudation E.E. Theint, S. Suzuki, E. Ono and S.D. Bellingrath-Kimura	467
Effect of manure application on seasonal carbon fluxes in a temperate managed grassland in Southern Hokkaido, Japan M. Shimizu, A. Limin, A.R. Desyatkin, T. Jin, M. Mano, K. Ono, A. Miyata, H. Hata and R. Hatano	474
Spatial and temporal variations in nutrients in water and riverbed sediments at the mouths of rivers that enter Lake Hachiro, a shallow eutrophic lake in Japan A. Hayakawa, S. Ikeda, R. Tsushima, Y. Ishikawa and S. Hidaka	486
Effects of soil erosion and seabird activities on chemical properties of surface soils on an oceanic island in Ogasawara Islands, Japan S. Hiradate, S. Morita, K. Hata, T. Osawa, K. Sugai and N. Kachi	495