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1674-1694 SONG, Liang; WANG, Yun-sheng; HU, Dong-yu; WU, Hao-chen; TANG, Tao; LIU, Shi-cheng

Insights into the long-term stability of landslide dams on the eastern margin of the Tibetan Plateau, China – A case study of the Diexi area

1695-1711 YANG, Hong-zhi; DONG, Jia-yu; GUO, Xu-liang

Geohazards and risk assessment along highway in Sichuan Province, China

1712-1724 YAN, Ping; JI, Sheng-tai; LI, Xiu-fen; ZHU, Hai-xia; WANG, Liang-liang; ZHAI, Mo; WANG, Ping; ZHAO, Hui-ying

Changes of spring wind erosion based on wind erosion climate factor in the black soil region of Northeast China

1725-1741 LI, Yong; ZHENG, Jing; WANG, Feng-nian; HU, Chao-wen; YANG, Fan; MA, Xin-gen; TAO, Zhi-gang

Movement and deformation characteristics of overlying rock mass in deep coal seam

1742-1758 RAWAT, Saurabh; GUPTA, Ashok Kumar; SHARMA, Pankaj

Sustainable remediation of failed slope using helical soil nails

1759-1773 LI, Yong; ZHENG, Jing; WANG, Feng-nian; MA, Xin-gen; ZHANG, Rui-xue; SUN, Ying-ying; YIN, Jian-bin; TAO, Zhi-gang

Experimental study on the movement law of overlying rock non-pillar coal overhead mining

1774-1789 ZHAO, Jin-peng; TAN, Zhong-sheng; LI, Lei; WANG, Xiu-ying

Supporting structure failure caused by the squeezing tunnel creep and its reinforcement measure

1790-1804 GUO, Han-qing; CHEN, Xiao-qing; SONG, Dong-ri; MU, Qing-yi; SADEGHI, Hamed; JIANG, Hao; LV, Ming

Effects of solar radiation and fine roots on suction of *Amorpha fruticosa*-vegetated soil

1805 ZHANG, Shuo-cheng; CHEN, Wen-hua

Erratum to: Dynamic response characteristics of a circular lined tunnel under anisotropy frost heave of overlying soil at the tunnel portal section in cold regions

1806 ZHU, Zhen-de; SHU, Xiao-yun; LI, Zhe; TIAN, Hong-ming; TIAN, Yun

Erratum to: Stress analysis of full-length grouted bolt under shear deformation of anchor interface

1807-1823 UZUN, Ali; AYLAR, Faruk; ZEYBEK, Halil İbrahim; GÜRGÖZE, Serkan; BAHADIR, Muhammet; ALEMDAĞ, Selçuk

Natural Walls of Anatolia: formation and development of Diş Kayalıkları as a structural landform (Sivas, Türkiye)

1824-1841 YUAN, Jin-tao; CHEN, Wan-xu; ZENG, Jie; YE, Xin-yue

Exploring the rules of cropland elevation uplift in China

1842-1853 LOIOLA, Priscilla P.; MORELLATO, Leonor Patrícia Cerdeira; CAMARGO, Maria Gabriela Gutierrez; KAMIMURA, Vitor A.; MATTOS, Jacqueline S.; STREHER, Annia Susin; LE STRADIC, Soizig

Shared-role of vegetation types, elevation and soil affecting plant diversity in an old-tropical mountain hotspot

1854-1864 GUHA, Supratim; TIWARI, Reet Kamal

Analyzing geomorphological and topographical controls for the heterogeneous glacier mass balance in the Sikkim Himalayas

1865-1883 ZHANG, Lan-hui; NING, Feng-wei; BAI, Xu-liang; ZENG, Xuan; HE, Chan-sheng

Performance evaluation of CLM5.0 in simulating liquid soil water in high mountainous area, Northwest China

1884-1899 CHEN, Xiao-jing; WANG, Jie; ZOU, Li-yang; YAO, Pan; LEI, Man-hong; LIAO, Jing-sheng

Ice flux of alpine glaciers controls erosion and landscape in the Nianbaoyeze Shan, northeastern Tibetan Plateau

1900-1910 LIU, Wei-ping; WANG, Shu-han; TIAN, Si-wen; OUYANG, Guo-quan; HU, Li-na; YUAN, Zhi-jun

Influence of crack characteristics on the morphological development of Benggang and hydrological processes

1911-1920. CORDEIRO, Anais de Almeida Campos; KLANDERUD, Kari; VILLA, Pedro Manuel; NERI, Andreza Viana

Patterns of species richness and beta diversity of vascular plants along elevation gradient in Brazilian *páramo*

1921-1939 WANG, Cheng-xi; YAN, Jian-wu; LIANG, Wei; SUN, Shao-bo; GOU, Fen; LI, Xiao-fei; LUO, Yuan-yuan; WANG, Feng-jiao

Assessing the impacts of natural conditions and human activities on terrestrial water storage in Loess Plateau, China

1940-1953 DILNESSA, Gashaye; ZERIHUN, Woldu; SILESHI, Nemomissa; ENYEW, Adgo

Impacts of environmental conditions on woody plant diversity, structure and regeneration in forest patches of Guna Mountain: Este District, South Gondar Zone, Ethiopia

1954-1967 WANG, Ji-ren; ZHENG, Jian; SU, Jian; ZHENG, Bo-hong; SUN, Zhao-qian

Inconsistent increasing of climate potential productivity resulting from global warming and land use transitions in the Dongting Lake Basin, from 2000 to 2020

1968-1983 WANG, Li; HUANG, Jun-jie; CHEN, Yong; WANG, Shi-mei; FAN, Zhi-hong; GUO, Fei; LI, Xiao-wei

Evaluation of the treatment effect of rear slope cutting on hydrodynamic pressure landslides: A case study

1984-2002 PENG, Yi; ZHAO, Qi-hua; HAN, Gang; CHEN, Yu-shu

Deep-seated rock fracture of valley slopes in China: A review

2003-2014 XU, Yue-xue; ZHU, Hong-chun; LI, Jin-yu; ZHANG, Sheng-jia

Hierarchical pattern recognition of landform elements considering scale adaptation

2015-2028 ZHAO, Ming-wei; FANG, Yue; YANG, Can-can; JU, Xiao-xiao; HUANG, Xiao-li; JIANG, Ling; WANG, Chun; XU, Yan

Peak extraction and classification from digital elevation models based on the relationship between morphological characteristics and spatial position

2029-2040 SONG, Zhan-ping; CHENG, Yun; ZHANG, Ze-kun; YANG, Teng-tian

Tunnelling performance prediction of cantilever boring machine in sedimentary hard-rock tunnel using deep belief network

2041-2057 ZHOU, Jian; YANG, Xin-an; CHU, Zheng

Load laws of composite lining in mountain tunnel model tests and numerical simulation validation

2058-2075 SUN, Xiao-ming; QI, Zhen-min; ZHANG, Yong; MIAO, Cheng-yu; ZHAO, Cheng-wei; HE, Man-chao

Failure mechanism and control countermeasures of surrounding rock at deep large section chamber intersection in the Wanfu Coal Mine

2076-2092 LI, Gan; MA, Wei-bin; YU, Chang-yi; TAO, Zhi-gang; WANG, Feng-nian

Optimization of anchorage support parameters for soft rock tunnel based on displacement control theory

2093-2106 ZHU, Chen-hao; ZHAO, Lian-heng; HU, Shi-hon; ZUO, Shi; YU, Cheng-hao

Seismic dynamic stability of double-slider rock slopes containing tension cracks

2107-2132 ZHANG, Qi-yuan; HU, Kai-heng; LIU, Shuang; LIU, Wei-ming

Controls on the regional distribution of landslide dams and implications for fluvial landform evolution in Bhutan and its surrounding area

2133-2148 XIONG, Bo-bo; YANG, Shi-jie; ZHAO, Bing-qin; LU, Xiao-chun; TIAN, Bin; LI, Cheng; WU, Xuan-xuan; TU, Xiao-long

Conductivity characteristics of landslide considering porosity, saturation, temperature and ion concentration

2149-2163 NIGRELLI, Guido; CHIARLE, Marta

1991-2020 climate normal in the European Alps: focus on high-elevation environments

2164-2180 GUO, Xiao-hua; FORMAN, Steven; WANG, Yuan-yuan; ZHANG, Yu-feng; LIU, Xin-yu

Tectonic and climatic controls for fluvial terraces of the Yellow River over the past 2.6 Ma at Northeast Tibetan Plateau and Ordos Block

2181-2196 ZHAO, Xin-yue; ZHAO, Mao-qiang; WANG, Pan-pan; DAI, Yu-quan; PU, Wan-qiu; HUANG, Cheng-min

Influence of surface roughness on the development of moss-dominated biocrusts on mountainous rock-cut slopes in West Sichuan, China

2197-2213 SUI, Qi-ru; CHEN, Qin-huang; WANG, Dan-dan; TAO, Zhi-gang

Application of machine learning to the Vs-based soil liquefaction potential assessment

2214-2227 LI, Xia; ZHU, Wan-ze; WANG, Wen-wu; MA, Sheng-lan; SHENG, Zhe-liang; SHU, Shu-miao

Drought adaptation of *Bauhinia faberi* var. *Microphylla* seedlings with dual inoculation of arbuscular mycorrhizal fungi

2228-2241 WANG, Jian-yong; ZHANG, Zhi-xiang

Spatial patterns of the main trees in a plant micro-reserve constructed in the 2022 Beijing Winter Olympics mountainous competition zone

2242-2262 GELA, Agumassie Genet; MENGISTU, Daniel Ayalew; BEKELE, Daniel Asfaw

Watershed prioritization for conservation planning using RUSLE and morphometric methods, Northwestern Ethiopia

2263-2281 ALI, Zeshan; IQBAL, Mudassar; KHAN, Ihsan Ullah; MASOOD, Muhammad Umer; UMER, Muhammad; LODHI, Muhammad Usama Khan; TARIQ, Muhammad Atiq Ur Rehman

Hydrological response under CMIP6 climate projection in Astore River Basin, Pakistan

2282-2297 SUN, Tao; YANG, Yan-mei; WANG, Ze-gen; YONG, Zhi-wei; XIONG, Jun-nan; MA, Guo-li; LI, Jie; LIU, Ao

Spatiotemporal variation of ecological environment quality and extreme climate drivers on the Qinghai-Tibetan Plateau

2298-2314 LI, Feng-jiao; LIAO, Xia; LIU, Jia-ming; JIANG, Li-li; WANG, Meng-di; LIU, Jin-feng

Investigating the tourism image of mountain scenic spots in China through the lens of tourist perception

2315-2343 ZHANG, Xuan-yun; ZHANG, Shi-chao; LIU, Jing-yu; RAN, Na; ZHANG, Xiang; NING, Qi-wen

Moderate scale and realization potential of new citrus-planting business entities in hilly and mountainous areas in China

2344-2357 JIN, Tao; CHEN, Yang; SHU, Bo; GAO, Min; QIU, Jian

Spatiotemporal evolution of ecosystem service value and topographic gradient effect in the Da-Xiao Liangshan Mountains in Sichuan Province, China

2358-2369 LI, Guang; LIU, Shuai-qi; MA, Feng-shan; GUO, Jie; HUI, Xin

Ground subsidence mechanism of a filling mine with a steeply inclined ore body

2370-2387 DENG, Jie; ZHAO, Jian-jun; LAI, Qi-yi; LI, Ai-nong; XIE, Ming-li; LI, Qing-miao; ZHAO, Xiao

Mechanism of subsidence-buckling and instability of slopes in thick-layered rigid rock under mining

2388-2404 ZHANG, Xiu-lian; ZHANG, Fang; WANG, Ya-zhe; TAO, Zhi-gang; ZHANG, Xiao-yun

Strength prediction model for water-bearing sandstone based on near-infrared spectroscopy

2405-2421 LI, Yuan-zheng; SHEN, Jun-hui; ZHANG, Wei-xin; ZHANG, Kai-qiang; PENG, Zhang-hai; HUANG, Meng

Slope deformation partitioning and monitoring points optimization based on cluster analysis

2422-2435 CHEN, Jing-yi; CHEN, Xiao-qing; SONG, Dong-ri; LV, Ming; GUO, Han-qing; SADEGHI, Hamed

Characteristics of root-permeated soil under simple-shear and direct-shear conditions

2436-2452 ABUT, Yavuz; BOZBEY, İlknur; KURT BAL, Ece

Sustainability of lime stabilized road subgrade in mountainous regions of Türkiye

2453-2467 SOTO, Victor; DELGADO-GRANADOS, Hugo; WELSH, Carlos M.; YOSHIKAWA, Kenji

Glacial reconstruction and periglacial dynamics at the end of Late Pleistocene on the surface of Cofre de Perote volcano, México: a climatological retrospective

2468-2486 JEWITT, Debbie; MORRIS, Craig D; O'CONNOR, Tim G.; TEDDER, Michelle J.

- Dominant species of mid-elevation grasslands of the uKhahlamba-Drakensberg Park are predicted to be largely immune to climate change**
- 2487-2501 DIAZ-ROJAS, Camila; PEDROZA-RAMOS, Adriana X; BARRERA-HERRERA, July A; ROA-FUENTES, Camilo A
- Influence of local and landscape environmental factors on alpha and beta diversity of macroinvertebrates in Andean rivers**
- 2502-2518 LUO, Bang-lin; LI, Jiang-wen; GONG, Chun-ming; ZHONG, Shou-qin; WEI, Chao-fu
- Driving forces and their interactions of soil erosion in soil and water conservation regionalization at the county scale with a high cultivation rate**
- 2519-2535 CHEN, Mei; GAO, Jia-yong; CHEN, Hong-lian; JING, Jun; LI, Rui
- Elevation, bedrock exposure, land use, interbedded limestone and clastic rock, and vegetation coverage dominate the spatiotemporal variability of soil erosion in karst basin**
- 2536-2556 ZHAO, Ming-wei; QI, Jiao-jiao; JU, Xiao-xiao; ZHANG, Yu-wei; WANG, Chun; XU, Yan; SUN, Jing-lu
- A novel gully network extraction method combining hydrological confluence process and surface morphology**
- 2557-2579 NEGI, Bhawna; KHATRI, Kavita; BARGALI, Surendra S.; BARGALI, Kiran; FARTYAL, Archana; CHATURVEDI, R.K.
- Impact of invasive *Ageratina adenophora* on relative performance of woody vegetation in different forest ecosystems of Kumaun Himalaya, India**
- 2580-2591 WEI, Meng; SUN, Zheng; CUI, Bu-li; HE, Yang; DONG, Zhi-cheng; MENG, Ling-xiao
- Accumulation behavior of heavy metals by *Bidens pilosa* L. from metallurgical slag: effects on plant physiology and absorption characteristics**
- 2592-2602 TYAGI, Vidit; SINGH, Surendra P.; SINGH, Ripu Daman; GUMBER, Surabhi; THADANI, Rajesh; PANDEY, Rajiv
- Influence of slope position and aspect on the vegetation attributes and tree-water relations in forests of the central Himalayas**
- 2603-2627 ASGHAR, Aamir; SU, Li-jun; ZHAO, Bo; USMANI, Nadeem Ahmad
- Integrating predictive modeling techniques with geospatial data for landslide susceptibility assessment in northern Pakistan**
- 2628-2643 WANG, Dao-zheng; LIAN, Bao-qin; WANG, Xin-gang; CHEN, Xiao-qing; WANG, Jia-ding; WANG, Fei
- Influence of rheological characteristics on the fluidization catastrophe of tailings flows**
- 2644-2664 ZENG, Ying; ZHANG, Ying-bin; LIU, Jing; XU, Pei-yi; ZHU, Hui; YU, Hai-hong; HE, Yun-yong
- Assessment of earthquake-induced landslide hazard zoning using the physics-environmental coupled Model**
- 2665-2679 LI, Xia; CHENG, Jiu-Long; YU, De-Hao
- A methodological framework of landslide quantitative risk assessment in areas with incomplete historical landslide information**
- 2680-2691 LIU, Yong; XU, Qing-jie; LI, Xing-rui; YANG, Ling-feng; XU, Hong
- Prediction of landslide block movement based on Kalman filtering data assimilation method**
- 2692-2707 CHEN, Yang; SHU, Bo; CHEN, Yu; HU, Jin-hao; WEI, Dong
- Spatial distribution and potential poverty-returning factors of former poverty-stricken villages in the Liangshan Mountains, China**
- 2708-2730 HAN, Ya-feng; LIU, Xin-rong; ABI, Erdi; TU, Yi-liang; XU, Bin; ZHOU, Xiao-han; DENG, Zhi-yun; WANG, Zhong-hao
- Effects of anti-pull ties on the bearing behaviors of shallow tunnel-type anchorages in soft rock**
- 2731-2743 ZHU, Chun; XU, Jia-jun; WANG, Ya-jun; HE, Man-chao; CUI, Sheng-hua; ZHANG, Xiao-hu; TAO, Zhi-gang
- Numerical simulation on the impact characteristics between rockfalls of different shapes and gravel cushions**

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2869-2884 IM, Sergei

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