

List of the most important scientific achievements for 2021

Life Sciences

Bolet, Arnau - Stanley, Edward L. - Daza, Juan D. - Arias, J. Salvador - Čerňanský, Andrej - Vidal-Garcia, Marta - Bauer, Aaron M. - Bevitt, Joseph J. - Evans, Susan E.
Unusual morphology in the mid-Cretaceous lizard *Oculudentavis*
In: *Current Biology*. - Vol. 31, No. 15 (2021), Art. No. 3303
IF - JCR: 2020 - 10,834

Damialis, Athanasios - Gilles, Stefanie - Sofiev, Mikhail - Sofieva, Viktoria - Kolek, Franziska - COVID-19/POLLEN study Group (medzi nimi Dušička, Jozef a Ščevková, Jana) et al.
Higher airborne pollen concentrations correlated with increased SARS-CoV-2 infection rates, as evidenced from 31 countries across the globe
In: *Proceedings of the National Academy of Sciences of the United States of America*. - Vol. 118, No. 12 (2021), Art. No. e2019034118
IF - JCR: 2020 - 11,205

Jablonski, Daniel - Gkontas, Ioannis - Poursanidis, Dimistris - Lymberakis, Petros - Poulakakis, Nikos
Stability in the Balkans: phylogeography of the endemic Greek stream frog, *Rana graeca*
In: *Biological Journal of the Linnean Society*. - Vol. 132, No. 4 (2021), s. 829-846
IF - JCR: 2020 - 2,138

Mišová, Ivana - Pitel'ová, Alexandra - Budiš, Jaroslav - Gazdarica, Juraj - Sedláčková, Tatiana - Jordáková, Anna - Benko, Zsigmond - Šmondrová, Mária - Mayerová, Nina - Pichlerová, Karoline - Striešková, Lucia - Prevorovský, Martin - Gregáň, Juraj - Čipák, Luboš - Szemes, Tomáš - Bágel'ová Poláková, Silvia
Repression of a large number of genes requires interplay between homologous recombination and HIRA
In: *Nucleic Acids Research*. - Vol. 49, No. 6 (2021), s. 1914-1934
IF - JCR: 2020 - 16,971

Okuliarová, Monika - Mažgútová, Nikoleta - Majzúnová, Miroslava - Rumanová, Valentína Sophia - Zeman, Michal
Dim Light at Night Impairs Daily Variation of Circulating Immune Cells and Renal Immune Homeostasis
In: *Frontiers in Immunology*. - Vol. 11, No. (2021), Art. No. 614960
IF - JCR: 2020 - 7,561

Savková, Karin - Huszár, Stanislav - Baráth, Peter - Pakanová, Zuzana - Kozmon, Stanislav - Vancová, Marie - Tesařová, Martina - Blaško, Jaroslav - Kaliňák, Michal - Singh, Vinayak - Korduláková, Jana - Mikušová, Katarína
An ABC transporter Wzm–Wzt catalyzes translocation of lipid-linked galactan across the plasma membrane in mycobacteria

In: Proceedings of the National Academy of Sciences of the United States of America. - Vol. 118, No. 17 (2021), Art. No. e2023663118
IF - JCR: 2020 - 11,205

Vaculík, Marek - Kováč, Ján - Fialová, Ivana - Fiala, Roderik - Jašková, Katarína - Luxová, Miroslava
Multiple effects of silicon on alleviation of nickel toxicity in young maize roots
In: Journal of Hazardous Materials. - Vol. 2021, No. 415 (2021), Art. No. 125570
IF - JCR: 2020 - 10,588

Varga, Viktor - Štefuca, Vladimír - Mihálová, Lenka - Levarski, Zdenko - Struhárňanská, Eva - Blaško, Jaroslav - Kubinec, Robert - Farkaš, Pavel - Sitkey, Vladimír - Turňa, Ján - Rosenberg, Michal - Stuchlík, Stanislav
Recombinant Enzymatic Redox Systems for Preparation of Aroma Compounds by Biotransformation
In: Frontiers in Microbiology. - Vol. 12, June (2021), Art. No. 684640
IF - JCR: 2020 - 5,64

Zhang, Tengyue - Vďačný, Peter
Re-discovery and novel contributions to morphology and multigene phylogeny of Myxophyllum steenstrupi (Ciliophora: Pleuronematida), an obligate symbiont of terrestrial pulmonates
In: Zoological Journal of the Linnean Society. - Vol. 192, No. 1 (2021), s. 1-23
IF - JCR: 2020 - 3,286