

2022

Botella, C.; Bonnet, P.; **Hui, C.**, et al (2022) 'Dynamic Species Distribution Modeling Reveals the Pivotal Plant Invasion', *Biology*, 11(1293).

Cazzolla Gatti, R. (**Hui, C.**) and Souza, A. (2022) 'The number of tree species on earth', *Proceedings of the National Academy of Sciences*, 119(6), pp. 1–11. doi: 10.1073/pnas.2115329119/-/DCSupplemental.Published.

Crichton, D. (**Bassett, B.A.**) et al. (2022) 'Hydrogen Intensity and Real-Time Analysis Experiment: 256-element array status and overview', *Journal of Astronomical Telescopes, Instruments, and Systems*. SPIE, 8(1), p. 11019. doi: 10.1117/1.JATIS.8.1.011019.

Deane, D. C. (**Hui, C.**) et al. (2022) 'A null model for quantifying the geometric effect of habitat subdivision on species diversity', *Global Ecology and Biogeography*, 31(3), pp. 440–453. doi: 10.1111/geb.13437.

Diedericks, Genevieve; Broeckhoeven, C. (**Hui, C.**) et al (2022) 'The Role of Directed Dispersal in Driving Genetic and Morphological Structure in Invasive Smallmouth', *Frontiers in Ecology and Evolution*, 9(January), p. 790829. doi: 10.3389/fevo.2021.790829.

Frimpong, A. (**Ndifon, W.**) et al. (2022) 'Perturbations in the T cell receptor b repertoire during malaria infection in children : A preliminary study', *Frontiers in Imm*, (October), pp. 1–14. doi: 10.3389/fimmu.2022.971392.

Hynd, R., **Ikpe, D.** and Pendleton, T. (2022) 'Two critical times for the SIR model', *Journal of Mathematical Analysis and Applications*, 505(2), pp. 1–19. doi: 10.1016/j.jmaa.2021.125507.

Ikpe, D., Sithole, Y. and Gyamerah, S. A. (2022) 'On a consistent state-space bond markets model for pricing long-maturity bonds', *International Journal of Financial Engineering*, 0(0), p. 2250024. doi: 10.1142/S2424786322500244.

Knowles, K. (**Oozeer, N**) et al. (2022) 'The MeerKAT Galaxy Cluster Legacy Survey: I. Survey Overview and Highlights', *Astronomy and Astrophysics*, 657. doi: 10.1051/0004-6361/202141488.

Liang, J. (**Hui, C.**) et al. (2022) 'Co-limitation towards lower latitudes shapes global forest diversity gradients', *Nature Ecology & Evolution*, 6(10), pp. 1423–1437. doi: 10.1038/s41559-022-01831-x.

Macfadyen, S. (**Hui, C.**) et al. (2022) 'Drowning in data , thirsty for information and starved for understanding : A biodiversity information hub for cooperative environmental monitoring in South Africa', *Biological Conservation*. Elsevier Ltd, 274(April), p. 109736. doi: 10.1016/j.biocon.2022.109736.

Mani, G. (**Khumalo, P.B.**) et al. (2022) 'Common Coupled Fixed Point Theorems on C*-Algebra-Valued Partial Metric Spaces', *Journal of Function Spaces*, 2022. doi: 10.1155/2022/3336095.

Mirugwe, A., Nyirenda, J. and **Dufourq, E.** (2022) 'Automating Bird Detection Based on Webcam Captured Images using Deep Learning', in *Proceedings of 43rd Conference of the South African Institute of Computer Scientists and Information Technologists*, pp. 62–76.

Muthukrishna, D. (**Lochner, M**) et al. (2022) 'Real-Time Detection of Anomalies in Large-Scale Transient Surveys', *Monthly Notices of the Royal Astronomical Society*, 25, pp. 1–25.

Ndlovu, T. Q., Shozi, M. L. and Costa, F. P. (2022) 'Mathematical Investigations of a Kinetic Model for Glycerol Hydrogenolysis Via Heterogeneous Catalysis', *MATCH Commun. Math. Comput. Chem.*, 88, pp. 437–460. doi: 10.46793/match.88-2.437N.

Nickelsen, D. and Touchette, H. (2022) 'PHYSICAL REVIEW E 105 , 064102 (2022) Noise correction of large deviations with anomalous scaling', *Physical Review E*. American Physical Society, 064102(105), pp. 1–13. doi: 10.1103/PhysRevE.105.064102.

Rasera, Y. (**Agarwal, S.**) et al. (2022) 'Astrophysics The RayGalGroupSims cosmological simulation suite for the study of relativistic effects : An application to lensing-matter clustering statistics', *Astronomy & Astrophysics*, 661(A90).

Reeve, S. (**Hui, C.**) et al. (2022) 'Rare, common, alien and native species follow different rules in an understory plant community', *Ecology and Evolution*, 12(3), pp. 1–20. doi: 10.1002/ece3.8734.

Su, M. (**Hui, C.**) et al. (2022) 'How Multiple Interaction Types Affect Disease Spread and Dilution in Ecological Networks', *Frontiers in Ecology and Evolution*, 10(May), pp. 1–11. doi: 10.3389/fevo.2022.862986.

Vimercati, G. (**Hui, C.**) et al. (2022) 'The EICAT + framework enables classification of positive impacts of alien taxa on native biodiversity', *Plos Biology*, 20(8), pp. 1–22. doi: 10.1371/journal.pbio.3001729.

Wacira, J. M., Ranirina, D. and **Bah, B.** (2022) 'Low Rank Matrix Approximation for Imputing Missing Categorical Data', in Jembere, E. et al. (eds) *Artificial Intelligence Research*. Cham: Springer International Publishing, pp. 242–256.

Zhang, Q. (**Hui, C.**) et al. (2022) 'Wheat yield losses from pests and pathogens in China', *Agriculture, Ecosystems & Environment*, 326, p. 107821. doi: <https://doi.org/10.1016/j.agee.2021.107821>.