

Annex 4: RSIF Scholars publications (2018 -2021)

1. Climate Change

- 1) Gebresamuel, G., **Abrha, H.**, Hagos, H., Elias, E., & Haile, M. (2021). Empirical modeling of the impact of climate change on altitudinal shift of major cereal crops in South Tigray, Northern Ethiopia. *Journal of Crop Improvement*, 1–24. <https://doi.org/10.1080/15427528.2021.1931608> (Male, Cohort 2)
- 2) Noulèkoun, F., Birhane, E., Kassa, H., Berhe, A., Gebremichael, Z. M., Adem, N. M., Syoum, Y., Mengistu, T., Lemma, B., Hagazi, N., **Abrha, H.**, Rannestad, M. M., & Mensah, S. (2021). Grazing exclosures increase soil organic carbon stock at a rate greater than “4 per 1000” per year across agricultural landscapes in Northern Ethiopia. *Science of the Total Environment*, 782, 146821. <https://doi.org/10.1016/j.scitotenv.2021.146821> (Male, Cohort 2)
- 3) Blomme, G., **Dusingizimana, P.**, Ntamwira, J., Kearsley, E., Gaidashova, S., Rietveld, A., van Schagen, B., & Ocimati, W. (2021). Comparing effectiveness, cost- and time-efficiency of control options for *Xanthomonas* wilt of banana under Rwandan agro-ecological conditions. *European Journal of Plant Pathology*, 160(2), 487–501. <https://doi.org/10.1007/s10658-021-02258-z> (Female, Cohort 2)
- 4) Yisehak, B., Shiferaw, H., **Abrha, H.**, Gebremedhin, A., Hagos, H., Adhana, K., & Bezabh, T. (2021). Spatio-temporal characteristics of meteorological drought under changing climate in semi-arid region of northern Ethiopia. *Environmental Systems Research*, 10(1), 21. <https://doi.org/10.1186/s40068-021-00226-4> (Male, Cohort 2)
- 5) Noulèkoun, F., Birhane, E., Mensah, S., Kassa, H., Berhe, A., Gebremichael, Z. M., Adem, N. M., Seyoum, Y., Mengistu, T., Lemma, B., Hagazi, N., & **Abrha, H.** (2021). Structural diversity consistently mediates species richness effects on aboveground carbon along altitudinal gradients in northern Ethiopian grazing exclosures. *Science of the Total Environment*, 776, 145838. <https://doi.org/10.1016/j.scitotenv.2021.145838> (Male, Cohort 2)
- 6) Kouyate, Z., Dao, K. M., Togola, O., Malle, A. K., Malle, O., Diakite, K., & **Traore, A.** (2021). Cowpea Seed Innovation Platform: A Hope for Small Seed Producers in Mali. In *Enhancing Smallholder Farmers' Access to Seed of Improved Legume Varieties Through Multi-stakeholder Platforms* (pp. 143–156). Springer Singapore. https://doi.org/10.1007/978-981-15-8014-7_10 (Male, Cohort 1)
- 7) Sharma, K., Kreuze, J., Abdurahman, A., Parker, M., **Nduwayezu, A.**, & Rukundo, P. (2021). Molecular diversity and pathogenicity of *Ralstonia solanacearum* species complex associated with bacterial wilt of potato in Rwanda. In *Plant Disease* (Vol. 105, Issue 4, pp. 770–779). American Phytopathological Society. <https://doi.org/10.1094/PDIS-04-20-0851-RE> (Male, Cohort 2)
- 8) Souleymane, S., Brahim, C., Tchoa, K., Seydou, T., **Adjata, K.**, Daouda, K., & Michel, Z. (2020). Salinity Stress Effect on the Germination of Three Cereals: Maize (*Zea mays*), Millet (*Pennisetum glaucum*) and Rice (*Oryza sativa*). *International Journal of Plant & Soil Science*, 69–78. <https://doi.org/10.9734/ijpss/2020/v32i430273> (Female, Cohort 2)
- 9) Rietveld, A.M., **Dusingizimana, P.**, Blomme, G., Gaidashova, S.V., Ocimati, W., Ntamwira, J. (2020). A superior technology to control Banana *Xanthomonas* Wilt (BXW) in Rwanda. *RTB Research Brief* 03. Lima, Peru: CGIAR Research Program on Roots, Tubers and Bananas. 6 p. <https://cgspace.cgiar.org/handle/10568/110019> (Female, Cohort 2)
- 10) **Sodedji, F. A. K.**, Agbahoungba, S., Nguetta, S. P. A., Agoyi, E. E., Ayenan, M. A. T., Sossou, S. H., Mamadou, C., Assogbadjo, A. E., & Kone, D. (2019). Resistance to legume pod borer (*Maruca vitrata* Fabricius) in cowpea: genetic advances, challenges, and future prospects. In *Journal of Crop Improvement* (Vol. 34, Issue 2, pp. 238–267). Taylor and Francis Inc. <https://doi.org/10.1080/15427528.2019.1680471> (Male, Cohort 1)
- 11) Ayenan, M. A. T., Danquah, A., Hanson, P., Ampomah-Dwamena, C., **Sodedji, F. A. K.**, Asante, I. K., & Danquah, E. Y. (2019). Accelerating Breeding for Heat Tolerance in Tomato (*Solanum lycopersicum* L.): An integrated approach. In *Agronomy* (Vol. 9, Issue 11, p. 720). MDPI AG. <https://doi.org/10.3390/agronomy9110720> (Male, Cohort 1)

2. Energy including Renewables

- 1) **Obila, J. O.**, Lei, H., Ayieta, E. O., Ogacho, A. A., Aduda, B. O., & Wang, F. (2021). Optoelectronic property refinement of FASnI3 films for photovoltaic application. *Materials Letters*, 300, 130099. <https://doi.org/10.1016/j.matlet.2021.130099> (Male, Cohort 2)
- 2) **Obila, J. O.**, Lei, H., Ayieta, E. O., Ogacho, A. A., Aduda, B. O., & Wang, F. (2021). Improving the efficiency and stability of tin-based perovskite solar cells using anilinium hypophosphite additive. *New Journal of Chemistry*, 45(18), 8092–8100. <https://doi.org/10.1039/d1nj00602a> (Male, Cohort 2)
- 3) Nyantakyi, E. K., **Mohammed, S.**; Anumah, P.; Borkloe, J.; Morgan, A. (2020) Investigation of hydrocarbon generation potential of OML 64 in Warri State, Nigeria. *Journal of Applied Geochemistry*; 22(2/3), 192-201 <https://www.proquest.com/docview/2490729566> (Male, Cohort 2)
- 4) Nyantakyi, E. K., **Mohammed, S.**; Anumah, P.; Borkloe, J.; Morgan, A. (2020) Investigation of hydrocarbon generation potential of OML 64 in Warri State, Nigeria. *Journal of Applied Geochemistry*; 22(2/3), 192-201

<https://www.proquest.com/docview/2490729566> (Male, Cohort 2)

3. Food security and Agribusiness

- 1) Kalee, N. E., **Gahamanyi, N.**, & Hoza, A. S. (2021). Prevalence and antimicrobial susceptibility profiles of *Staphylococcus aureus* from raw bovine milk in dairy and pastoral farms in Morogoro region, Tanzania. *German Journal of Veterinary Research*, 1(2), 1–7. <https://doi.org/10.51585/GJVR.2021.2.0007> (Male, Cohort 1)
- 2) **Gahamanyi, N.**, Munyaneza, E., Dukuzimana, E., Tuyiringire, N., Pan, C.-H., & Komba, E. V. G. (2021). Ethnobotany, Ethnopharmacology, and Phytochemistry of Medicinal Plants Used for Treating Human Diarrheal Cases in Rwanda: A Review. *Antibiotics*, 10(10), 1231. <https://doi.org/10.3390/antibiotics10101231> (Male, Cohort 1)
- 3) Kivumbi, C. C., Yona, C., **Hakizimana, J. N.**, & Misinzo, G. (2021). An assessment of the epidemiology and socioeconomic impact of the 2019 African swine fever outbreak in Ngara district, western Tanzania. *Veterinary and Animal Science*, 14, 100198. <https://doi.org/10.1016/J.VAS.2021.100198> (Male, Cohort 1)
- 4) **Njeru, F. N.**, & Kusolwa, P. M. (2021). Nanobodies: their potential for applications in biotechnology, diagnosis and antiviral properties in Africa; focus on application in agriculture. *Biotechnology & Biotechnological Equipment* 35(1), 1331–1342. <https://doi.org/10.1080/13102818.2021.1974943> (Cohort 2, Female)
- 5) **Maina, S.**, Ryu, D. H., Cho, J. Y., Jung, D. S., Park, J.-E., Nho, C. W., Bakari, G., Misinzo, G., Jung, J. H., Yang, S.-H., & Kim, H.-Y. (2021). Exposure to Salinity and Light Spectra Regulates Glucosinolates, Phenolics, and Antioxidant Capacity of *Brassica carinata* L. Microgreens. *Antioxidants* 2021, Vol. 10, Page 1183, 10(8), 1183. <https://doi.org/10.3390/ANTIOX10081183> (Cohort 1, Female)
- 6) **Hakizimana, J. N.**, Ntirandekura, J. B., Yona, C., Nyabongo, L., Kamwendo, G., Chulu, J. L. C., ... Misinzo, G. (2021). Complete genome analysis of African swine fever virus responsible for outbreaks in domestic pigs in 2018 in Burundi and 2019 in Malawi. *Tropical Animal Health and Production*, 53(438), pp. 1–10. <https://doi.org/10.1007/S11250-021-02877-Y> (Male, Cohort 1)
- 7) **Gahamanyi, N.**, Song, D.-G., Yoon, K.-Y., Mboera, L. E. G., Matee, M. I., Mutangana, D., Komba, E. V. G., Pan, C.-H., & Amachawadi, R. G. (2021). Genomic Characterization of Fluoroquinolone-Resistant Thermophilic *Campylobacter* Strains Isolated from Layer Chicken Feces in Gangneung, South Korea by Whole-Genome Sequencing. *Genes* 2021, Vol. 12, Page 1131, 12(8), 1131. <https://doi.org/10.3390/GENES12081131> (Male, Cohort 1)
- 8) **Gahamanyi, N.**, Song, D. G., Yoon, K. Y., Mboera, L. E. G., Matee, M. I., Mutangana, D., Amachawadi, R. G., Komba, E. V. G., & Pan, C. H. (2021). Antimicrobial Resistance Profiles, Virulence Genes, and Genetic Diversity of Thermophilic *Campylobacter* Species Isolated from a Layer Poultry Farm in Korea. *Frontiers in Microbiology*, 12, 554. <https://doi.org/10.3389/fmicb.2021.622275> (Male, Cohort 1)
- 9) **Hakizimana, J. N.**, Yona, C., Kamana, O., Nauwynck, H., & Misinzo, G. (2021). African swine fever virus circulation between tanzania and neighboring countries: A systematic review and meta-analysis. In *Viruses* (Vol. 13, Issue 2, p. 306). MDPI AG. <https://doi.org/10.3390/v13020306> (Male, Cohort 1)
- 10) **Mabwi, H. A.**, Kim, E., Song, D. G., Yoon, H. S., Pan, C. H., Komba, E. V. G., Ko, G. P., & Cha, K. H. (2020). Synthetic gut microbiome: Advances and challenges. In *Computational and Structural Biotechnology Journal* (Vol. 19, pp. 363–371). Elsevier B.V. <https://doi.org/10.1016/j.csbj.2020.12.029> (Male, Cohort 1)
- 11) Alhassan, H., **Abu, B. M.**, & Nkegbe, P. K. (2020). Access to Credit, Farm Productivity and Market Participation in Ghana: A Conditional Mixed Process Approach. *Margin*, 14(2), 226–246. <https://doi.org/10.1177/0973801020904490> (Male, Cohort 2)
- 12) **Gahamanyi, N.**, Mboera, L. E. G., Matee, M. I., Mutangana, D., & Komba, E. V. G. (2020). Prevalence, Risk Factors, and Antimicrobial Resistance Profiles of Thermophilic *Campylobacter* Species in Humans and Animals in Sub-Saharan Africa: A Systematic Review. In *International Journal of Microbiology* (Vol. 2020). Hindawi Limited. <https://doi.org/10.1155/2020/2092478> (Male, Cohort 1)
- 13) **Gahamanyi, N.**, Song, D. G., Cha, K. H., Yoon, K. Y., Mboera, L. E. G., Matee, M. I., Mutangana, D., Amachawadi, R. G., Komba, E. V. G., & Pan, C. H. (2020). Susceptibility of *campylobacter* strains to selected natural products and frontline antibiotics. *Antibiotics*, 9(11), 1–14. <https://doi.org/10.3390/antibiotics9110790> (Male, Cohort 1)
- 14) **Waema, M. W.**, Misinzo, G., Kagira, J. M., Agola, E. L., & Ngowi, H. A. (2020). DNA-Detection Based Diagnostics for *Taenia solium* Cysticercosis in Porcine. In *Journal of Parasitology Research* (Vol. 2020). Hindawi Limited. <https://doi.org/10.1155/2020/5706981> (Male, Cohort 1)
- 15) Asitik, A. J., & **Abu, B. M.** (2020). Women empowerment in agriculture and food security in Savannah Accelerated Development Authority zone of Ghana. *African Journal of Economic and Management Studies*, 11(2), 253–270. <https://doi.org/10.1108/AJEMS-03-2019-0102> (Male, Cohort 2)
- 16) **Hakizimana, J. N.**, Nyabongo, L., Ntirandekura, J. B., Yona, C., Ntakirutimana, D., Kamana, O., Nauwynck, H., & Misinzo, G. (2020). Genetic Analysis of African Swine Fever Virus From the 2018 Outbreak in South-Eastern Burundi. *Frontiers in Veterinary Science*, 7, 578474. <https://doi.org/10.3389/fvets.2020.578474> (Male, Cohort 1)

- 17) **Maina, S.**, Misinzo, G., Bakari, G., & Kim, H. Y. (2020). Human, animal and plant health benefits of glucosinolates and strategies for enhanced bioactivity: A systematic review. In *Molecules* (Vol. 25, Issue 16, p. 3682). MDPI AG. <https://doi.org/10.3390/molecules25163682> (Female, Cohort 1)
- 18) **Hakizimana, J. N.**, Kamwendo, G., Chulu, J. L. C., Kamana, O., Nauwynck, H. J., & Misinzo, G. (2020). Genetic profile of African swine fever virus responsible for the 2019 outbreak in northern Malawi. *BMC Veterinary Research*, 16(1), 1–10. <https://doi.org/10.1186/s12917-020-02536-8> (Male, Cohort 1)
- 19) Umuhozariho, M. G., Hagenimana, T., Nsabimana, P., **Sirimu, C.**, Uwobasa, N., & Uwineza, A. P. (2020). Effect of oven and freeze drying on nutritional composition of pumpkin (*Cucurbita maxima*) processed flour. *Rwanda Journal of Agricultural Sciences*, 2(1), 33–39. <https://www.ajol.info/index.php/rjeas/article/view/200843> (Male, Cohort 2)
- 20) Shao, E. R., Somi, N. P., **Kifato, E. G.**, Gunda, D. W., Kilonzo, S. B., & Nyombi, B. M. (2019). Bacterial contamination and antimicrobial susceptibility pattern of isolates from stethoscopes at a referral hospital in Tanzania. *Tanzania Medical Journal*, 30(1), 37–52. <https://tmj.or.tz/index.php/tmj/article/view/288> (Male, Cohort 1)

4. **ICTs including Big Data and Artificial Intelligence**

1. **Maniraguha, F.**, Vodacek, A., Ndashimye, E., & Rushingabigwi, G. (2021). Ground Clutter Mitigation and Insect Signature Detection for Polarimetric C-Band Doppler Weather Radar. 2021 *IEEE Global Humanitarian Technology Conference* (GHTC), 289–296. <https://doi.org/10.1109/GHTC53159.2021.9612449> (Male, Cohort 2)
2. **Nyasulu C.**, Diattara A., Traore A., Ba C. (2021) Enhancing Farmers Productivity Through IoT and Machine Learning: A State-of-the-Art Review of Recent Trends in Africa. In: Faye Y., Gueye A., Gueye B., Diongue D., Nguer E.H.M., Ba M. (eds) *Research in Computer Science and Its Applications*. CNRIA 2021. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 400. *Springer, Cham*. https://doi.org/10.1007/978-3-030-90556-9_10 (Male, Cohort 2)
3. **F. Thiam**, M. Mbaye and A. M. Wyglinski, "Generic Reliability Analysis Model of IoT : Agriculture use case," 2021 *IEEE 93rd Vehicular Technology Conference* (VTC2021-Spring), 2021, pp. 1-5. <https://doi.org/10.1109/vtc2021-spring51267.2021.9448791> (Female, Cohort 1)
4. **E. Nizeyimana**, D. Hanyurwimfura, R. Shibusaki and J. Nsenga, "Design of a Decentralized and Predictive Real-Time Framework for Air Pollution Spikes Monitoring," 2021 *IEEE 6th International Conference on Cloud Computing and Big Data Analytics* (ICCCBDA), 2021, pp. 501-504. <https://doi.org/10.1109/ICCCBDA51879.2021.9442611> (Male, Cohort 2)
5. **Effah, E.**, & Thiare, O. (2020). Realistic Cluster-Based Energy-Efficient and Fault-Tolerant (RCEEFT) Routing Protocol for Wireless Sensor Networks (WSNs). *Advances in Intelligent Systems and Computing*, 1129 AISC, 320–337. https://doi.org/10.1007/978-3-030-39445-5_25 (Male, Cohort 1)
6. **Fidele, M.**, Damien, H., & **Eric, N.** (2020). Effect of Window Size on PAPR Reduction in 4G LTE Network Using Peak Windowing Algorithm in Presence of Non-linear HPA. 2020 *IEEE 5th International Conference on Signal and Image Processing*, ICSIP 2020, 1128–1133. <https://doi.org/10.1109/ICSIP49896.2020.9339272> (Male, Cohort 2)
7. Thiam, C., & **Thiam, F.** (2019b). Energy Efficient Cloud Data Center Using Dynamic Virtual Machine Consolidation Algorithm. *Lecture Notes in Business Information Processing*, 353, 514–525. https://doi.org/10.1007/978-3-030-20485-3_40 (Female, Cohort 1)
8. Thiam, C., & **Thiam, F.** (2019a, October 1). Optimizing electrical energy consumption in cloud data center. 2019 *3rd International Conference on Intelligent Computing in Data Sciences*, ICDS 2019. <https://doi.org/10.1109/ICDS47004.2019.8942232> (Female, Cohort 1)
9. Thiam, C., & **Thiam, F.** (2019). An Energy-Efficient VM migrations optimization in Cloud Data Centers. *IEEE AFRICON Conference, 2019-September*. <https://doi.org/10.1109/AFRICON46755.2019.9133776> (Female, Cohort 1)
10. Thiam, C., **Thiam, F.**, & Mbaye, M. (2019). Optimized energy and SLA-aware virtual machine placement strategies in Cloud: Study. 5th *IEEE International Smart Cities Conference*, ISC2 2019, 44–49. <https://doi.org/10.1109/ISC246665.2019.9071675> (Female, Cohort 1)
11. Dogbe, A., **Effah, E.**, & Annan, R. K. (2019). Global System for Mobile (GSM) Communication Based Smart-Prepaid Energy Meter Monitoring System. *Research and Applications: Embedded System*, 2(3). <http://hbrppublication.com/OJS/index.php/RAES/article/view/1035> (Male, Cohort 1)

5. **Minerals, Mining and Materials Engineering**

- 1) Ichwani, R., **Koeh, R.**, Oyewole, O. K., Huda, A., Oyewole, D. O., Cromwell, J., Martin, J. L., Grimm, R. L., & Soboyejo, W. O. (2021). Interfacial fracture of hybrid organic-inorganic perovskite solar cells. *Extreme Mechanics Letters*, 101515. <https://doi.org/10.1016/j.eml.2021.101515> (Male, Cohort 1)
- 2) **Koeh, R. K.**, Ichwani, R., Oyewole, D. O., Kigozi, M., Amune, D., Sanni, D. M., Adeniji, S. A., Oyewole, O. K., Bello, A., Ntsoenzok, E., & Soboyejo, W. O. (2021). Tin Oxide Modified Titanium Dioxide as Electron Transport Layer in

- Formamidinium-Rich Perovskite Solar Cells. *Energies* 2021, Vol. 14, Page 7870, 14(23), 7870. <https://doi.org/10.3390/EN14237870> (Male, Cohort 1)
- 3) **Koech, R. K.**, Ichwani, R., Martin, J. L., Oyewole, D. O., Oyelade, O. v., Olanrewaju, Y. A., Sanni, D. M., Adeniji, S. A., Grimm, R. L., Bello, A., Oyewole, O. K., Ntsoenzok, E., & Soboyejo, W. O. (2021). A study of the effects of a thermally evaporated nanoscale CsBr layer on the optoelectronic properties and stability of formamidinium-rich perovskite solar cells. *AIP Advances*, 11(9), 095112. <https://doi.org/10.1063/5.0064398> (Cohort 1, Male)
 - 4) **Afolayan, D. O.**, Onwualu, A. P., Eggleston, C. M., Adetunji, A. R., Tao, M., & Amankwah, R. K. (2021). Safe Mining Assessment of Artisanal Barite Mining Activities in Nigeria. *Mining* 2021, Vol. 1, Pages 224-240, 1(2), 224–240. <https://doi.org/10.3390/MINING1020015> (Cohort 1, Male)
 - 5) **Alfredy, T.**, Elisadiki, J., & Jande, Y. A. C. (2021). Capacitive deionization: a promising technology for water defluoridation: a review. *Water Supply*, 0, 1. <https://doi.org/10.2166/WS.2021.287> (Cohort 2, Female)
 - 6) **Habinshuti, J. B.**, Munganyinka, J. P., Adetunji, A. R., Mishra, B., Ofori-Sarpong, G., Komadja, G. C., Tanvar, H., Mukiza, J., & Onwualu, A. P. (2021). Mineralogical and physical studies of low-grade tantalum-tin ores from selected areas of Rwanda. *Results in Engineering*, 11, 100248. <https://doi.org/10.1016/J.RINENG.2021.100248> (Male, Cohort 1)
 - 7) **Moirana, R. L.**, Mkunda, J., Perez, M. P., Machunda, R., & Mtei, K. (2021). The influence of fertilizers on the behavior of fluoride fractions in the alkaline soil. *Journal of Fluorine Chemistry*, 250, 109883. <https://doi.org/10.1016/J.JFLUCHEM.2021.109883> (Female, Cohort 2)
 - 8) Oyewole, D. O., **Koech, R. K.**, Ichwani, R., Ahmed, R., Hinostroza Tamayo, J., Adeniji, S. A., Cromwell, J., Colin Ulloa, E., Oyewole, O. K., Agyei-Tuffour, B., Titova, L. v., Burnham, N. A., & Soboyejo, W. O. (2021). Annealing effects on interdiffusion in layered FA-rich perovskite solar cells. *AIP Advances*, 11(6), 065327. <https://doi.org/10.1063/5.0046205> (Male, Cohort 1)
 - 9) **Afolayan, D. O.**, Adetunji, A. R., Onwualu, A. P., Ogolo, O., & Amankwah, R. K. (2021). Characterization of barite reserves in Nigeria for use as weighting agent in drilling fluid. *Journal of Petroleum Exploration and Production*, 11(5), 2157–2178. <https://doi.org/10.1007/s13202-021-01164-8> (Male, Cohort 1)
 - 10) **Moirana, R. L.**, Kivevele, T., Mkunda, J., Mtei, K., & Machunda, R. (2021). Trends towards Effective Analysis of Fluorinated Compounds Using Inductively Coupled Plasma Mass Spectrometry (ICP-MS). In *Journal of Analytical Methods in Chemistry* (Vol. 2021). Hindawi Limited. <https://doi.org/10.1155/2021/8837315> (Female, Cohort 2)
 - 11) Mahamat, A. A., **Linda Bih, N.**, Ayeni, O., Azikiwe Onwualu, P., Savastano, H., & Oluwole Soboyejo, W. (2021). Development of Sustainable and Eco-Friendly Materials from Termite Hill Soil Stabilized with Cement for Low-Cost Housing in Chad. *Buildings*, 11(3), 86. <https://doi.org/10.3390/buildings11030086> (Female, Cohort 2)
 - 12) Adeniji, S. A., Cromwell, J., Oyewole, D. O., Oyelade, O. v., **Koech, R. K.**, Sanni, D. M., Oyewole, O. K., Babatope, B., & Soboyejo, W. O. (2021). Pressure-assisted fabrication of perovskite light emitting devices. *AIP Advances*, 11(2), 025112. <https://doi.org/10.1063/5.0035953> (Male, Cohort 1)
 - 13) Bello, A; Sanni, D M; Adeniji, S A; Anye, V; Orisekeh, K; Kigozi, M; **Koech, R. K.** (2020) Combustion synthesis of battery-type positive electrodes for robust aqueous hybrid supercapacitor. *Journal of Energy Storage*, 27(2), 101160 <https://doi.org/10.1016/j.est.2019.101160> (Male, Cohort 1)
 - 14) Oyewole, O., Oyewole, D., Oyelade, O., Adeniji, S., **Koech, R. K.**, Asare, J., Agyei-Tuffour, B., & Soboyejo, W. (2020). Failure of Stretchable Organic Solar Cells under Monotonic and Cyclic Loading. *Macromolecular Materials and Engineering*, 305(11), 2000369. <https://doi.org/10.1002/mame.202000369> (Male, Cohort 1)
 - 15) Sanni, D. M., Ntsoenzok, E., Saintaimé, E., Adeniji, S. A., Oyelade, O. V. , **Koech, R. K.**, Amune, D. I., Bello, A. (2020) The role of hafnium acetylacetonate buffer layer on the performance of lead halide perovskite solar cells derived from dehydrated lead acetate as Pb source (*AIP Advances*, 2020) <https://doi.org/10.1063/5.0012646> (Male, Cohort 1)
 - 16) Komadja, G. C., Pradhan, S. P., Roul, A. R., Adebayo, B., **Habinshuti, J. B.**, Glodji, L. A., & Onwualu, A. P. (2020). Assessment of stability of a Himalayan road cut slope with varying degrees of weathering: A finite-element-model-based approach. *Heliyon*, 6(11), e05297. <https://doi.org/10.1016/j.heliyon.2020.e05297> (Male, Cohort 1)
 - 17) Mukiza, J., Habarurema, G., Gerber, T. I. A., Hosten, E., Nkuranga, J. B., **Habinshuti, J. B.**, & Betz, R. (2020). Simultaneous cyclisation and coordination of dithizone to the fac-[Re(CO)3]+ core. *Inorganic Chemistry Communications*, 113, 107804. <https://doi.org/10.1016/j.inoche.2020.107804> (Male, Cohort 1)
 - 18) **Koech, R. K.**, Kigozi, M., Bello, A., Onwualu, P. A., & Soboyejo, W. O. (2019). Recent advances in solar energy harvesting materials with particular emphasis on photovoltaic materials. *IEEE PES/IAS PowerAfrica Conference: Power Economics and Energy Innovation in Africa, PowerAfrica 2019*, 627–632. <https://doi.org/10.1109/PowerAfrica.2019.8928859> (Male, Cohort 1)

6. General papers (Not included in Thematic areas tally)

1. **Munganyinka, J. P., Thiam, F., Maina, S.**, Fisher, M., Skilton, R., Osiru, M., Achoka, P., & Abdulle, S. (2020). Studying Abro0061d during the COVID-19 Pandemic: The Experiences of Three African Women PhD Students. *ADVANCE Journal*, 2(2), 18065. <https://doi.org/10.5399/osu/advjrnl.2.2.6> (All Female, Cohort 1)

2. Mohammed, S., Morgan, A., & Nyantakyi, E. (2020). On the influence of uncited publications on a researcher's h-index. *Scientometrics* 2020 122:3, 122(3), 1791–1799. <https://doi.org/10.1007/S11192-020-03356-1> (Male, Cohort 2)
3. Mohammed, S., Nyantakyi, E. K., Morgan, A., Anumah, P., & Sarkodie-kyeremeh, J. (2020). Use of relative extra citation counts and uncited publications to enhance the discriminatory power of the h-index. *Scientometrics* 2020 126:1, 126(1), 181–199. <https://doi.org/10.1007/S11192-020-03777-Y> (Male, Cohort 2)
4. Hausermann, H., Ferring, D., Atosona, B., Mentz, G., Amankwah, R., Chang, A., Hartfield, K., Effah, E., Asuamah, G. Y., Mansell, C., & Sastri, N. (2018). Land-grabbing, land-use transformation and social differentiation: Deconstructing “small-scale” in Ghana’s recent gold rush. *World Development*, 108, 103–114. <https://doi.org/10.1016/J.WORLDDEV.2018.03.014> (Male, Cohort 1)