

Review of: "Enhancing Soil Stabilization in Soft Soils Through The Addition of Sand to Soil-Cement Piles: a Comprehensive Study"

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Potential competing interests: No potential competing interests to declare.

The research paper is a good research work but it requires minor revision to strengthen its review quality. The below research papers are suggested for inclusion in the research paper background and listed accordingly.

1. **Onyelowe, K.C.**, Fazel Mojtahedi, F., Golaghaei Darzi, & Kontoni, D.-P.N. (2023). Solving large deformation problems in geotechnical and geo-environmental engineering with the smoothed particle hydrodynamics: a state-of-the-art review of constitutive solutions. *Environ Earth Sci* 82, 394 (2023). <https://doi.org/10.1007/s12665-023-11079-8>
2. Kumar, P., Ganasen, G., Onyelowe, K.C. & L. Krishnaraj (2023). Comparative Study on Net-zero Masonry Walls Made of Clay and Fly Ash Bricks and Grouts/Mortars/Stuccos with The Effect of Super Fine Fly Ash Blended Cement – Low Carbon Cement. *International Journal of Low-Carbon Technologies*, Volume 18, 2023, Pages 1008–1014, <https://doi.org/10.1093/ijlct/ctad087>
3. Ravi, M., Murugesan, B., & Onyelowe, K.C. (2023). Performance evaluation of marine and industrial wastes in cement to envelope low carbon environment in manufacturing process, *International Journal of Low-Carbon Technologies*, Volume 18, 2023, Pages 986–998. <https://doi.org/10.1093/ijlct/ctad082>
4. Onyelowe, K.C., Jagan J, Kontoni, D.-P.N., Moghal, A. A. B., Onuoha, I. C., Viswanathan R., & Soni, D. K. (2023). Utilization of GEP and ANN for Predicting the Net-Zero Compressive Strength of Fly Ash Concrete Towards Carbon Neutrality Infrastructure Regime, *International Journal of Low-Carbon Technologies*, <https://doi.org/10.1093/ijlct/ctad081>
5. Onyelowe, K.C. & Ebid, A.M. (2023). The influence of fly ash and blast furnace slag on the compressive strength of high-performance concrete (HPC) for sustainable structures. *Asian J Civ Eng* (2023). <https://doi.org/10.1007/s42107-023-00817-9>
6. Onyelowe, K.C., Kontoni, D.-P. N., Pilla, S.R.M. *et al.* (2023). Runtime-based metaheuristic prediction of the compressive strength of net-zero traditional concrete mixed with BFS, FA, SP considering multiple curing regimes. *Asian J Civ Eng* (2023). <https://doi.org/10.1007/s42107-023-00839-3>
7. **Onyelowe, K.C.**, Ebid, A.M. & Ghadikolaei, M.R. (2023). GRG-optimized response surface powered prediction of concrete mix design chart for the optimization of concrete compressive strength based on industrial waste precursor effect. *Asian J Civ Eng* (2023). <https://doi.org/10.1007/s42107-023-00827-7>
8. **Onyelowe, K.C.**, Ebid, A.M. & Hanandeh, S. (2023). The influence of nano-silica precursor on the compressive

strength of mortar using Advanced Machine Learning for sustainable buildings. *Asian J Civ Eng* (2023).

<https://doi.org/10.1007/s42107-023-00832-w>

9. **Onyelowe, K.C.**, Ebid, A.M. & Hanandeh, S. (2023). Advanced machine learning prediction of the unconfined compressive strength of geopolymer cement reconstituted granular sand for road and liner construction applications. *Asian J Civ Eng* (2023). <https://doi.org/10.1007/s42107-023-00829-5>
10. **Onyelowe, K. C.**, Ebid, A. M., Hanandeh, S., Moghal, A. A. B., Onuoha, I. C., Obianyo, I. I., & Ubachukwu, O. A. (2023). The influence of fines on the hydro-mechanical behavior of sand for sustainable compacted liner and sub-base construction applications. *Asian Journal of Civil Engineering*, <https://doi.org/10.1007/s42107-023-00800-4>
11. **Onyelowe, K. C.** & Kontoni, D.-P. N. (2023). The net-zero and sustainability potential of SCC development, production and flowability in structures design. *International Journal of Low Carbon Technologies*, Vol. 18, Pp. 530-541. <https://doi.org/10.1093/ijlct/ctad033>
12. Ebid, A. M., **Onyelowe, K. C.**, Kontoni, D.-P. N., Gallardo, A. Q., & Hanandeh, S. (2023). Heat and mass transfer in different concrete structures: a study of self-compacting concrete and geopolymer concrete. *International Journal of Low Carbon Technologies*, Vol. 18, Pp. 404-411. <https://doi.org/10.1093/ijlct/ctad022>.
13. **Onyelowe, K. C.**, Ebid, A. M., Sujatha, E. R., Fazel-Mojtahedi, F., Golaghaei-Darzi, A., Kontoni, D.-P. N., Nooralddin-Othman, N. (2023). Extensive overview of soil constitutive relations and applications for geotechnical engineering problems. *Heliyon* 9, Pp. 1-30. <https://doi.org/10.1016/j.heliyon.2023.e14465>
14. **Onyelowe, K. C.**, Ebid, A. M., Mahdi, H. A., Onyelowe, F. K. C., Shafieyoon, Y., Onyia, M. E., & Onah, H. N. (2023). AI Mix Design of Fly Ash Admixed Concrete Based on Mechanical and Environmental Impact Considerations. Special Issue, 2023 27 "Innovative Strategies in Civil Engineering Grand Challenges" *Civil Engineering Journal*, Vol. 9. Pp. 27-45. <https://doi.org/10.28991/CEJ-SP2023-09-03>
15. **Onyelowe, K. C.**, Ebid, A. M., Mahdi, H. A., & Baldovino, J. A. (2023). Selecting the Safety and Cost Optimized Geo-Stabilization Technique for soft clay slopes. *Civil Engineering Journal*, Vol. 9(2), Pp. 453-464. <https://doi.org/10.28991/CEJ-2023-09-02-015>
16. **Onyelowe, K. C.**, Mojtabehi, F. F., Ebid, A. M., Rezaei, A., Osinubi, K. J., Eberemu, A. O., Salahudeen, B., Gadzama, E. W., Rezazadeh, D., Jahangir, H., Yohanna, P., Onyia, M. E., Jalal, F. E., Iqbal, M., Ikpa, C., Obianyo, I. I., & Rehman, Z. U. (2022). Selected AI optimization techniques and applications in geotechnical engineering, *Cogent Engineering*. 10 (1). <https://doi.org/10.1080/23311916.2022.2153419>
17. **Onyelowe, K.C.**, Jayabalan, J., Ebid, A.M., Samui, P., Singh, R.P., Soleymani, A., & Jahangir, H. (2022). Evaluation of the Compressive Strength of CFRP-Wrapped Circular Concrete Columns Using Artificial Intelligence Techniques. *Designs* 2022, 6, 112. <https://doi.org/10.3390/designs6060112>
18. **K. C. Onyelowe**, J. Jayabalan, A. M. Ebid, P. Samui, A. Soleymani, H. Jahangir, R. P. Singh & H. A. Mahdi. (2022). Modeling the confined compressive strength of CFRP-jacketed noncircular concrete columns using artificial intelligence techniques. *Cogent Engineering*, 9(1). <https://doi.org/10.1080/23311916.2022.2122156>
19. **K. C Onyelowe**, E. R. Sujatha, F. I. Aneke & A. M. Ebid. (2022). Solving geophysical flow problems in Luxembourg; SPH constitutive review. *Cogent Engineering*, 9(1). <https://doi.org/10.1080/23311916.2022.2122158>
20. **Onyelowe, K.C.**, Mojtabehi, F.F., Azizi, S., Mahdi, H.A., Sujatha, E.R., Ebid, A.M., Darzi, A.G., & Aneke, F.I. (2022).

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21. **Onyelowe, K.C.**, Naghizadeh, A., Aneke, F.I. *et al.* (2023). Characterization of net-zero pozzolanic potential of thermally-derived metakaolin samples for sustainable carbon neutrality construction. *Sci Rep* **13**, 18901 (2023). <https://doi.org/10.1038/s41598-023-46362-y>
22. M. Vishnupriyan, R. Annadurai, Kennedy C Onyelowe & Nakkeeran Ganasen. Review on Electronic Waste Used as Construction Materials - A Scientometric Analysis. *Cogent Engineering*. DOI:10.1080/23311916.2023.2283307

The conclusion section needs to be strengthened with the rich results of the research work and include future research scope and focus in it.,