Conference Series: Earth and Environmental Science, 208, 012070. https://doi.org/10.1088/1755-1315/208/1/012070

- [8] Ha, Q., & Vakiloroaya, V. (2012). A Novel Solar-Assisted Air-Conditioner System for Energy Savings with Performance Enhancement. Procedia Engineering, 49, 116–123. https://doi.org/10.1016/j.proeng.2012.10.119
- [9] Zhao, L., Zhang, J., Shen, Y., & Wu, W. (2015). Design and Implementation of Energy Saving Controller for Air- Conditioner in Building. International Journal of Smart Home, 9(8), 47–54. https://doi.org/10.14257/ijsh.2015.9.8.06
- [10] Chirico, F., Sacco, A., Bragazzi, N. L., & Magnavita, N. (2020). Can air-conditioning systems contribute to the spread of SARS/MERS/COVID-19 infection? Insights from a rapid review of the literature. *International journal of environmental research and public health*, 17(17), 6052.
- [11] Singh, S., Namboodiri, A., & Selvan, M. P. (2019). The agentbased system controls the air-conditioner and EV charging for residents in intelligent cities. *IET Smart Cities*, 1(2), 71-80.
- [12] Cretescu, I., Lutic, D., & Manea, L. R. (2017). Electrochemical Sensors for Monitoring of Indoor and Outdoor Air Pollution. Electrochemical Sensors Technology. Published. https://doi.org/10.5772/intechopen.68512
- [13] Behera, C., Bodwal, J., Sikary, A. K., Chauhan, M. S., & Bijarnia, M. (2016). Deaths Due to Accidental Air Conditioner Compressor Explosion: A Case Series. Journal of Forensic Sciences, 62(1), 254–257.

https://doi.org/10.1111/1556-4029.13242

- [14] SYSTEM AND METHOD FOR DETECTING REFRIGERANT LEAK AND CHEMICALS PRODUCED AS A RESULT OF HEATING OF THE REFRIGERANT, Audra Lopez, Albuquerque, NM (US); Eric Lopez, Albuquerque, NM (US), May 18, 2011
- [15] Zheng, K., Zhao, S., Yang, Z., Xiong, X., & Xiang, W. (2016). Design and implementation of LPWA-based air quality monitoring system. *IEEE Access*, *4*, 3238-3245.
- [16] Sheu, A. L., & Adagunodo, T. A. (2019, August). Performance Evaluation of Inverter-equipped Drive to Regulate the Speed of Motor and Cooling Output of Air Conditioner. In *Journal of Physics: Conference Series* (Vol. 1299, No. 1, p. 012029). IOP Publishing.
- [17] Chagla, Z., Hota, S., Khan, S., & Mertz, D. (2021). Re: it is time to address airborne transmission of COVID-19—*Clinical Infectious Diseases*.
- [18] Siddiqui, R., & Ahmed Khan, N. (2020). Centralized airconditioning and transmission of novel coronavirus. *Pathogens* and global health, 114(5), 228-229.
- [19] Sarma, U., & Boruah, P. K. (2011). Design and develop relative humidity and room temperature measurement system with an online data logging feature for monitoring the fermentation room of the tea factory. *Sensors & Transducers*, 135(12), 126.
- [20] Kim, M., Lim, J., Lee, J., & Lee, J. (2017). Determination of trace impurities of HFC-134a by gas chromatography with atomic emission detector (GC/AED). *Analytical Science and Technology*, 30(5), 240-251.
- [21] Almilaji, O., & Thomas, P. (2020). Air recirculation role in the infection with COVID-19, lessons learned from Diamond Princess cruise ship. *medRxiv*.
- [22] Wang, J., & Du, G. (2020). COVID-19 may transmit through aerosol. *Irish Journal of medical science*.



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