SINERGI
Universitas Mercu Buana
http://publikasi.mercubuana.ac.id/index.php/sinergi

COVER LETTER

[*Jaja Kustija*]
[*Universitas Pendidikan Indonesia*]
[*jaja.kustija@upi.edu*]
[*0816619867]*

[*21 December 2023*]

Dear,
I/We wish to submit an original research article entitled "***Revitalizing IoT – Based Air Quality Monitoring System for Major Cities in Indonesian***" for consideration by SINERGI.
We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We promise not to withdraw this article after it has been processed by the Editorial Team. If there is a withdrawal, we are willing to pay a penalty of USD 150 (IDR 2000K) to the SINERGI Editorial Team.
In this paper, I/we report on / show that:

Field	:	Electrical Engineering
Topic	:	Air Quality Monitoring System
Brief Background	:	An air quality monitoring system is very necessary as information about whether the surrounding air is healthy or contains dangers that can cause various diseases, such as respiratory problems, vision problems, heart disease, and even the risk of cancer. Air quality monitoring in big cities is still rarely real time and easily accessible. In this era of 5.0, there is an SDGs agenda which is the mandate of the world community. Several points related to the SDGs vision and mission include, point 3, point 9, point 11, point 13, and point 15. Air quality parameters are very important to monitor including CO levels, dust particulate levels, temperature and humidity. This research creates an IoT-based tool for monitoring air quality that can be accessed in real time from various places.
Research Problem	:	Air quality needs to be monitored, in existing conditions it still requires improvements in system development, such as obstacles in obtaining accurate and real-time data and difficulties in accessing information, so that it requires improving performance and reading data in real-time. Air quality determines the level of population health, population health determines productivity and

		cost savings for treatment. Air quality monitoring is needed to improve air quality.
Overview of Method	:	The research method used is Analysis, Design, Development, Implementation, and Evaluation (ADDIE). This research began by collecting information about air quality monitoring systems from various sources such as articles, books or related papers. Next, identify the needs for using the system. The next stage involves system design, including architecture, block diagrams, and selection of appropriate components. After that, system development was carried out based on the previous design. The next step is to implement the air quality monitoring system that has been developed in certain locations. The final step involves evaluating the system performance by calculating the accuracy of the designed prototype, which will be analyzed for future research.
Significant finding	:	A monitoring system tool has been created that can monitor CO levels, dust particles, temperature and humidity and can be developed to monitor other necessary parameters. The specifications of this tool are that it can measure the air quality range from 200 to 10,000 ppm, the temperature range that can be measured is from -40^{O}C to 80^{O}C, and the measurable humidity range is from 0% to 100%. The air quality monitoring system tool that has been created can play a role in contributing to the achievement of the SDGs, carrying out sustainable technological innovation in preserving the environment and human health in the era of society 5.0.

We have no conflicts of interest to disclose.
Thank you for your consideration of this manuscript.

Sincerely,
[*Jaja Kustija*]

SINERGI
Universitas Mercu Buana
http://publikasi.mercubuana.ac.id/index.php/sinergi

AUTHORSHIP STATEMENT

I'm wish to submit an original research article entitled "***Revitalizing IoT – Based Air Quality Monitoring System for Major Cities in Indonesian***" for consideration by SINERGI.
All persons who meet authorship criteria are listed as authors, and all authors certify that they have participated sufficiently in work to take public responsibility for the content, including participation in the concept, design, analysis, writing, or revision of the manuscript.

Author 1		
Name	:	Jaja Kustija
Affiliation	:	Program Study Electrical Engineering Education, Universitas Pendidikan Indonesia, Bandung, Indonesia
Email Address	:	Jaja.kustija@upi.edu
Author 2		
Name	:	Diki Fahrizal
Affiliation	:	Program Study Electrical Engineering Education, Universitas Pendidikan Indonesia, Bandung, Indonesia
Email Address	:	Diki15@upi.edu
Author 3		
Name	:	Muhammad Nasir
Affiliation	:	Research Center for Environment and Clean Technology, BRIN, Indonesia
Email Address	:	muha053@brin.go.id

POTENTIAL REVIEWERS

I have three researchers who are potential reviewers for our articles that have been sent through the SINERGI publisher. They are top national and international researchers in the fields of electrical engineering, electronic components, and process protocols and data communications. Hopefully this can be a suggestion regarding who will be the reviewer in this article.

Reviewer 1	:	
Name	:	Iwan Kustiawan
Affiliation	:	Electrical of Engineering, Universitas Pendidikan Indonesia, Bandung, Indonesia
Email Address	:	
Scopus url	:	https://www.scopus.com/authid/detail.uri?authorId=57193755128
Google Scholar url	:	https://scholar.google.com/citationshl=en&user=PdXhZNcAAAAJ&view_op=list_works&sortby=pubdate
Reviewer 2	:	
Name	:	Didin Wahyudin
Affiliation	:	Electrical Engineering of Education, Universitas Pendidikan Indonesia, Bandung, Indonesia
Email Address	:	deewahyu@upi.edu
Scopus url	:	https://www.scopus.com/authid/detail.uri?authorId=56032914600
Google Scholar url	:	https://scholar.google.com/citations?hl=en&user=McZmgU4AAAAJ
Reviewer 3	:	
Name	:	Roer Eka Pawinanto
Affiliation	:	Industrial Automation and Robotics Engineering Education, Universitas Pendidikan Indonesia, Bandung, Indonesia
Email Address	:	Roer_eka@upi.edu
Scopus url	:	https://www.scopus.com/authid/detail.uri?authorId=56027903500
Google Scholar url	:	https://scholar.google.com/citations?hl=en&user=OkQm-PYAAAAJ&view_op=list_works&sortby=pubdate