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Patents:

1. J. C. Mohanta and G. C. Mohanta, "Development of stub setting mechanism for testing of Transmission line tower", **Patent No. 431241, Date of Grant: 09.05.2023.**
2. Sri krishna singh, J. C. mohanta, "An automatic writing machine for drawing sketch and writing text and the method involved thereof", Patent numbered: 201811045697, Date of Publication: 31/05/2019 (*Hearing Completed waiting for grant*).
3. J. C. Mohanta and G. C. Mohanta, "A Site Inspection Autonomous Unmanned Aerial Vehicle System" Application No.: 202211042865, Date of Publication: July 26, 2022 (*Hearing Completed waiting for grant*).

Book Publications:

1. Mohanta Jagadish Chandra (Author), Introduction to Mobile Robots Navigation, ISBN-10: 3659680648 and ISBN-13 : 978-3659680649, (2015).
2. Jagadish Chandra Mohanta and Mohd. Nayab Zafar, A Text Book on Mobile Robot Path Planning and Navigation Control, ISBN-978-620-5-63295-6 (2023).

Book Chapters:

1. Mohd.Nayab Zafar, J. C. Mohanta: Effect of Temperature on Path and Trajectory Tracking of Mobile Robots in a Cluttered Environment. In: Springer book titled Advances in Interdisciplinary Engineering, DOI: 10.1007/978-981-15-9956-9_4. Lecture Notes in Mechanical Engineering [SCOPUS-LNME]
2. Alok Sanyal, Mohd. Nayab Zafar, J. C. Mohanta& Md. Faiyaz Ahmed. Path Planning Approaches for Mobile Robot Navigation in Various Environments: A Review, DOI: https://doi.org/10.1007/978-981-15-9956-9_55. Lecture Notes in Mechanical Engineering [SCOPUS-LNME]
3. MD. Faiyaz Ahmed, J. C. Mohanta, Inspection of Overhead Power Transmission Conductors with Autonomous Quadcopter. In: International Conference on 3rd Electric Power and Renewable Energy Conference (EPREC-2022) at NIT Jamshedpur, India. 2022. [SCOPUS-LNEE]
4. Alok Sanyal, MD. Faiyaz Ahmed, J. C. Mohanta. Recent developments and challenges in solar harvesting of photovoltaic system: Areview. Emerging Trends in Mechanical and Industrial Engineering [SCOPUS-LNME].
5. Satyajit Malode, Jagadish Chandra Mohanta, and Ravi Prakash. A Comparative Water Life Cycle Assessment of Pulverized Coal-Fired Power Plants with Various Post-combustion Controls. Emerging Trends in Mechanical and Industrial Engineering ISBN978-981-19-6944-7[SCOPUS-LNME].

6. Kashif Ayaz Khan, Abhas Raj, Bhagwat Bhaskar Sharma, Md. Faiyaz Ahmed, and J. C. Mohanta. Design and Analysis of Helmet with Integrated Cooling and Air Filtration System. Proceedings of the International Conference in Recent Advances in Mechanical Engineering. Excel India. ISBN: 978-93-91355-76-0 (e-Book).
7. Shikher Verma, J. C. Mohanta, and, Md. Faiyaz Ahmed. Solidification and Occurrence of Defects in Gravity Die Casting with Respect to Different Cooling Systems. Proceedings of the International Conference in Recent Advances in Mechanical Engineering. Excel India. ISBN: 978-93-91355-76-0 (e-Book).
8. Bhaskar Malaviya, J. C. Mohanta, Binayaka Nahak, Md. Faiyaz Ahmed, and Akshaya Kumar Rout. Sheet Hydroforming Bulge Height Test Analysis of Stainless Steel, Galvanized Iron, Copper and Aluminium. Proceedings of the International Conference in Recent Advances in Mechanical Engineering. Excel India. ISBN: 978-93-91355-76-0 (e-Book).
9. Pankaj Singh Yadav, J. C. Mohanta, Vandana Agrawal, and Md. Faiyaz Ahmed. 3D Printing and Prototype Development of Mecanum Wheel Chair with Control Strategies. . Proceedings of the International Conference in Recent Advances in Mechanical Engineering. Excel India. ISBN: 978-93-91355-76-0 (e-Book).

International Journals

1. Faiyaz Ahmed, J. C. Mohanta, Anupam Keshari, Power Transmission Line Inspections: Methods, Challenges, Current Status and Usage of Unmanned Aerial Systems, Vol. 110(54), pp: 1-25 (2024). **[SCI Springer]**.
2. Alok Sanyal, J. C. Mohanta, Faiyaz Ahmed, Development of Dual Axis Solar Tracker for Efficient Sun Energy Harvesting, Vol. 1, pp: 251–275 (2024), doi: [10.1177/09544089241241453](https://doi.org/10.1177/09544089241241453) **[SCI]**.
3. Pankaj Singh Yadav, J. C. Mohanta, Vandana Agrawal, MD Faiyaz Ahmed, Modeling and performance evaluation of mecanum wheel platform with reduced vibration and a robust path planning, Vol. 46(292), pp: 1-25 **[SCI (Q3)]**.
4. S Malode, R Prakash, J C Mohanta, A Life Cycle Assessment of Coal-Fired Thermal Power Plants with Post Combustion Control Techniques: An India Scenario, **Environmental Science and Pollution Research**, vol.30, pp: 90639-90655, (2023). **[SCI Springer]**.
5. R Prakash, S Malode, J C Mohanta, Jatin, D Husain, Energy-water nexus for thermal power generation in India: challenges and opportunities, **Environment Development & sustainability**, vol:1 pp: 1-21 DOI: <https://doi.org/10.1007/s10668-023-03075-6>(2023) **[SCI Springer]**.
6. MD. Faiyaz Ahmed, J. C. Mohanta, Inspection and identification of transmission line insulator breakdown based on deep learning using aerial images, **Electric Power Systems Research**, Volume 211, (2022), Pages 1-15. <https://doi.org/10.1016/j.epsr.2022.108199>. **[SCI, Elsevier]**.
7. MD. Faiyaz Ahmed, J. C. Mohanta, Alok Sanyal, PS Yadav, Path Planning of Unmanned Aerial Systems for Visual Inspection of Power Transmission Lines & Towers, **IETE Journal of Research**, Vol : 1 Page No. 1-21, DOI:doi.org/10.1080/03772063.2023.2175053

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9. PS Yadav, Agrawal V, JC Mohanta, and Md. Faiyaz Ahmed, A Theoretical Review of Mobile Robot Locomotion based on Mecanum Wheels, *Journal of Novel Carbon Resource Sciences*, Vol. 9, Pp: 396-403, (2022), doi: 10.5109/4794163 [Scopus].
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12. MD. Faiyaz Ahmed, J.C. Mohanta, and Mohd. Nayab Zafar, Development of smart quadcopter for autonomous overhead power transmission line inspections, *Materials Today: Proceedings*, Vol. 51(1), pp: 261-268, (2022), DOI: 10.1016/j.matpr.2021.05.271 [Scopus].
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