



A Study on the Economic Conditions on Stock Returns at Both the Firm and Industry Levels with Reference to Textiles Industry

Maheshwari Chikanal, Sowmya Sathish, Buvaneswari P

Abstract: *The Indian textile industry holds a significant position within the country's economic landscape. With a rich history and a diverse range of products, this industry plays a vital role in India's economy. It encompasses various segments including cotton, silk, wool, jute, and synthetic Fibers, contributing substantially to employment and export earnings. The sector's growth is fueled by a combination of traditional craftsmanship and modern technology, making it a dynamic force in both domestic and international markets [4]. This study employs descriptive research methodology, utilizing secondary data sourced from NSE India Ltd for analysis and insights. Stock market risk refers to the propensity of stock prices to fluctuate in response to changes in various market risk factors. This study delves into examining the risk and returns dynamics within the volatile equity markets, particularly emphasizing the heightened volatility within India's textile industry. As a result, the Stock market is justified underground of potentiality. This is due to increasing volume, market expansion & rapid growth in comparison to the cash market [5].*

Keywords: RBI, Probability, Cryptocurrency, Bitcoin.

I. INTRODUCTION

India's textile industry played a significant role in its economy, both in terms of imports and exports. India has been a major player in the global textile market, exporting a diverse range of textile products including garments, fabrics, yarns, and made-ups (such as towels, bed linen, etc.). The textile industry involves both exports and imports of textile products. Exports in the textile industry refer to the goods produced within a country's textile sector and sold to other countries. These can include a wide range of products such as clothing, fabrics, yarn, and finished textile goods [2].

Imports in the textile industry signify goods brought into a country from other nations. These imports could consist of raw materials, fabrics, finished products, or machinery necessary for the textile production process.

The balance between a country's textile exports and imports can significantly impact its economy, trade relations, and domestic industries. For instance, a high level of textile exports might signify competitiveness and strength in the textile sector, while heavy reliance on textile imports could suggest a dependence on external sources for textile goods. Economic factors wield significant influence over the textile industry, impacting various facets of its operations and growth. However, the specifics of India's textile imports and exports can vary annually based on factors like global demand, government policies, currency fluctuations, and international trade agreements. For the most current and detailed information, it's advisable to refer to recent reports or databases from India's Ministry of Textiles or trade-related agencies for updated statistics and trends in Indian textile imports and exports.

II. LITERATURE SURVEY

A significant strategic challenge confronting national economies today involves the rise of pivotal development focal points. These often encompass advanced industries, innovative technologies, and the growth of commercial, industrial, and social infrastructure. These elements are integral to the intricate processes of fostering sustainable development and the progression toward a knowledge-based economy [3]. It is characterized by a significant share of working capital, high mobility of financial assets, attracting short-term credit resources, high share of accounts payable, active marketing programs financing, investment resource orientation to innovation in production and technological process. This leads to a connected relationship between the sustainability of development and the financial stability of businesses. Fields such as chemical engineering, agriculture, and more recently textiles have seen a growing integration into space and military technologies. examines how economic factors affect stock returns at the firm and industry levels in Islamabad, Pakistan, at a number of universities. It looks at how variables like exchange rates, GDP growth, inflation, and interest rates affect stock performance and profitability. The study provides information that investors and policymakers need to understand the relationships between changes in the economy and movements in the stock market looks into what influences stock return in Indonesian textile and apparel companies that are listed on the Stock Exchange [6].

Manuscript received on 22 January 2024 | Revised Manuscript received on 30 January 2024 | Manuscript Accepted on 15 May 2024 | Manuscript published on 30 May 2024.

*Correspondence Author(s)

Maheshwari Chikanal*, Department of Management Studies, Raja Rajeswari College of Engineering Bangalore (Karnataka), India. Email: rekhasangmans@gmail.com

Sowmya Sathish, Department of Management Studies, Don Bosco Institute of Technology, Bangalore (Karnataka), India. Email: drsowmyasathish@gmail.com

Buvaneswari P, Department of Management Studies, Don Bosco Institute of Technology, Bangalore (Karnataka), India. Email: India.pbuvaneswari@gmail.com

© The Authors. Published by Lattice Science Publication (LSP). This is an [open access](https://creativecommons.org/licenses/by-nc-nd/4.0/) article under the CC-BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

A Study on the Economic Conditions on Stock Returns at Both the Firm and Industry Levels with Reference to Textiles Industry

Examining these variables offers focused insights into the elements influencing stock performance in this industry. For investors negotiating the difficulties of garment and textile investments in the Indonesian market, the report provides insightful advice discusses the textile and clothing industry's performance in the United States during the COVID-19 epidemic. It most likely examines how the crisis impacted the sector's performance and operations overall, providing insights into the difficulties encountered and changes implemented. The study, which was published online in July 2021, offers insightful viewpoints on how the pandemic has affected the textile and clothing industries in the US. examines the impact of nation and industry on international stock returns, with a particular emphasis on the United States and Asia [8] [9]

It probably investigates how differences among sectors and nations affect stock market performance, providing information about how these variables are interrelated globally. This analysis clarifies the complex factors influencing stock returns around the world. focuses on how some textile industry companies in Pakistan's stock price volatility are affected by dividend policies. It probably looks into how dividend policies affect this industry's stock price swings, providing information about the connection between dividend choices and stock market volatility [10]. The research's conclusions may offer insightful advice to investors navigating Pakistan's textile industry's complexities. most likely looks into what influences the textile industry in Bangladesh's financial performance. It most likely looks at a number of variables that affect the financial performance of this sector, providing real data and analysis unique to Bangladesh's textile industry. The research findings may offer significant recommendations to interested parties seeking to comprehend and improve the financial performance of Bangladesh's textile industry [11]. The system should focus on the most important indicators and ensure unidirectional interpretation of changes in indicators. One of the main obstacles to a textile enterprise's development is their insufficient funding. Therefore, textile enterprises should monitor the adequacy of financial resources in order to ensure development, sufficiency of their own resources and the effectiveness of their own financial management.

A. Need for study

This research aims to bridge this gap by offering insights to investors on analysing the risk profiles associated with stocks, specifically within the Textile sector. By providing a deeper understanding of these aspects, this study aims to empower investors to make informed decisions regarding their stock holdings. The recent worldwide shutdown and ensuing economic decline have caused substantial fluctuations in stock markets. At present, there's a notable absence of a comprehensive framework that allows investors to evaluate stock risk profiles thoroughly. This lack of clarity leaves investors uninformed about the complexities involved in assessing risks and returns when dealing with stocks [12] [13].

B. Objectives of the Study:

- To study about the risk and return of share prices in Textile sector.
- To compare the risk and rate of return of different Textile industry.
- To compare the coefficient of variation and beta of the Textile industry.
- To identify the best investment from selected Textile industry.

C. Research Methodology

- **Research Design:** The research design used in this study is Descriptive research.
- **Data Collection:** The data for this study is Secondary Data. The data is collected from secondary sources such as various websites, journals, newspapers, books, etc.
- **Source of Data:** NSE India Ltd.
- **Sample Size:** Top Five Textile industry
- **Period of Study:** 2012-2022
- **Statistical Tool to be used:** Rate of Return, Sample Mean, Standard Deviation, Variance Coefficient of Variation and Beta

III. DATA ANALYSIS & INTERPRETATION

Table 1 Annual Rate of Return of Alok

Year	Opening Price	Closing Price	Annual Rate of Return	Growth Rate
2019	3.05	3.05	0.2	1.2000
2020	21.3	23.35	0.219	1.2192
2021	25.75	26.35	0.205	1.2047
2022	25.75	26.35	0.205	1.1981
2023	21.35	21.1	0.198	1.1977
Total			1.020	6.0196
Mean			0.2039	
Variance			6.7300	
Standard Deviation			0.0082	
Beta			-0.00251	

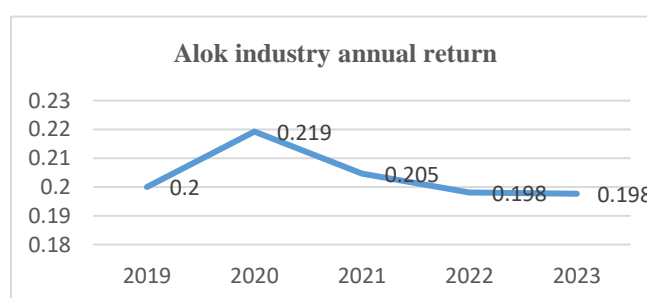


Figure 1 Annual Rate of Return for Alok industry

A. Interpretation

If an investor invest rupee 1 on Alok Industry stock at the end of 2019, the investor would have earned rupees 6.0196 at the end of 2023 i.e., the investor's total return is Rs.5.0196. Alok Industry return deviates about 0.0082 from the average rate of return. So, Alok Industry has comparatively lower return deviation from its average and a Beta lower than 1 (indicating lower volatility compared to the market),



it might be perceived as a lower-risk investment option. However, investing decisions shouldn't rely solely on these risk factors.

Table 2 Annual Rate of Return of Bombay Dyeing

Year	Opening Price	Closing Price	Annual Return	Growth Rate
2019	75.5	75.2	0.1992	1.1992
2020	77	76.5	0.1987	1.1987
2021	108.1	107.85	0.1995	1.1995
2022	78.65	78.55	0.1997	1.1997
2023	149.35	148.5	0.1989	1.1989
Total			0.9945	5.9961
Mean			0.1992	
Variance			1.7000	
Standard deviation			0.0004123	
Beta			-0.08934	

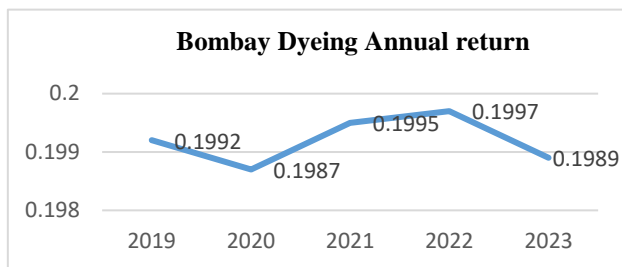


Figure 2 Annual Rate of Return for Bombay Dyeing

B. Interpretation

Investor invest money on Bombay dyeing stock by conducting a thorough analysis of Bombay Dyeing Industry, Industry return deviates about 0.0004123 from the average rate of return. So, Assessing its financial health, industry trends, management quality, growth prospects, competitive positioning, and overall market conditions. It's also advisable to diversify investments across different assets or sectors to spread risk [7].

Table 3 Annual Rate of Return of Nitin Spinner

Year	Opening price	Closing price	Annual return	Growth rate
2019	51.05	48.55	0.1902	1.1902
2020	70.25	72	0.2050	1.205
2021	260.4	267.6	0.2055	1.2055
2022	202.85	207.4	0.2045	1.2045
2023	323.25	333.2	0.2062	1.2062
Total			1.0114	6.0114
Mean			0.2023	
Variance			4.5886	
Standard deviation			0.006774	
Beta			-0.0385615	

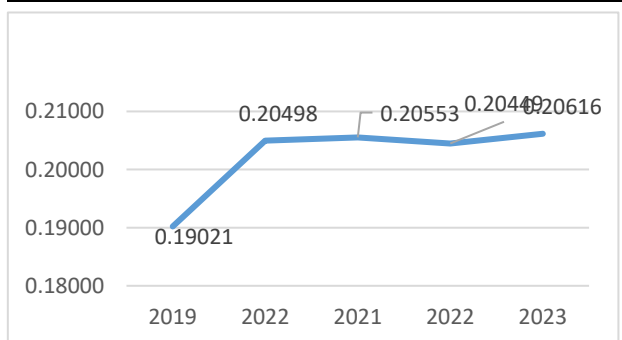


Figure 3 Annual Rate of Return for Nitin Spinner

C. Interpretation

Nitin spinner stock return deviates about 6.74% from the average rate of return. So, it is difficult to assess the future

returns from the past returns. Beta is less than so it is less volatile than market. So, it is less risk to invest in this security. Stocks with lower volatility tend to experience smaller price fluctuations over time. They may demonstrate more stability in their price movements compared to the broader market.

Table 4 Annual Rate of Return of Page industries

Year	Opening Price	Closing Price	Annual Rate	Growth Rate
2019	23393	23150	0.1979	1.1979
2020	27610	26865	0.1946	1.1946
2021	40422	39593	0.1959	1.1959
2022	42837	42742	0.1996	1.1996
2023	38513	38364	0.1992	1.1992
Total			0.9872	5.9872
Mean			0.1974	
Variance			4.58885	
Standard deviation			0.002142159	
Beta			-0.0893351	

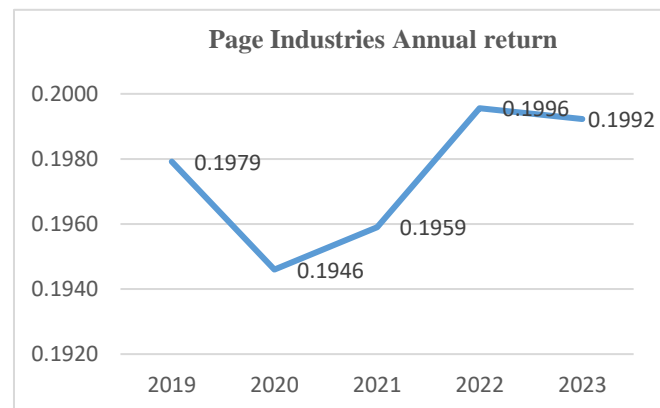


Figure 4 Annual Rate of Return for Page Industries

D. Interpretation

Page Industries has a return deviation of 2.13% from the average rate of return. This indicates that historically, its returns have shown relatively limited variability around the average, suggesting a more stable performance compared to higher-volatility stocks [14-17]. The negative beta of Page Industries, specifically -0.0894, signifies an inverse relationship between its returns and the market returns. This means that when the broader market goes up, this stock's returns tend to move in the opposite direction, possibly decreasing.

Table 5 Annual Rate of Return of Arvind Industries

Year	Opening Price	Closing Price	Annual Rate of Return	Growth Rate
2019	39.95	38.85	0.1945	1.1945
2020	46.75	46.15	0.1974	1.1974
2021	120.75	116.15	0.1924	1.1924
2022	89.65	88.65	0.1978	1.1978
2023	261.45	255.60	0.1955	1.1955
Total			0.9776	5.9776
Mean			0.1955	
Variance			4.9067	
Standard deviation			0.002215	
Beta			-0.0025088	

A Study on the Economic Conditions on Stock Returns at Both the Firm and Industry Levels with Reference to Textiles Industry

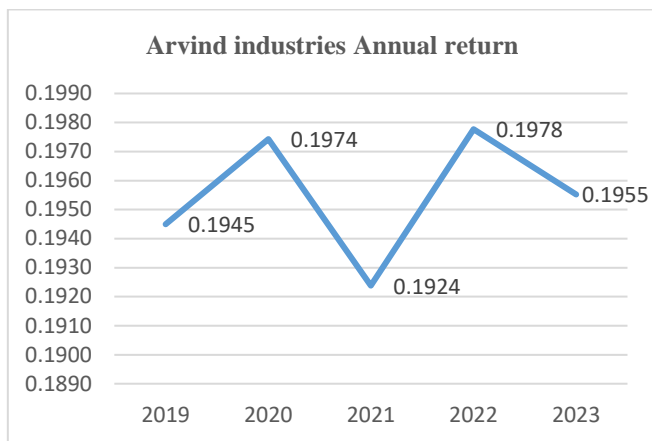


Figure 5 Annual Rate of Return for Arvind Industries

E. Interpretation

Arvind Industries return deviate from normal return is 2.21%, Including negative beta stocks in a diversified portfolio can potentially reduce overall portfolio risk. Their inverse relationship with the market may help balance out risk during market turbulence. investors often use stocks with negative beta to diversify their portfolios or as a hedge against market downturns. However, it's crucial to conduct thorough research on the specific stock, its industry, and underlying factors affecting its performance before considering it for investment.

Table 6 Annual Rate of Return of Nifty 50 Index

Year	Opening Price	Closing Price	Annual Rate of Return	Growth Rate
2019	12137.05	12168.45	0.2005	1.2005
2020	13062.2	13981.75	0.2141	1.2141
2021	17104.4	17354.05	0.2029	1.2029
2022	18871.95	18105.3	0.1919	1.1919
2023	20194.1	21731.4	0.2152	1.2152
Total			1.0246	6.0246
Mean			0.3415	
Variance			9.59117	
Standard deviation			0.009793452	

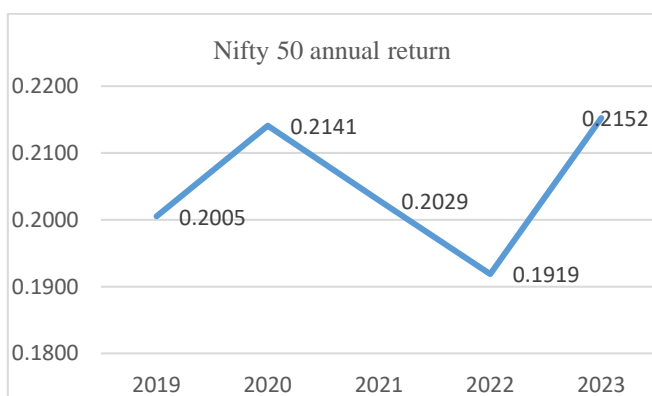


Figure 6 Annual Rate of Return for Nifty 50 index

F. Interpretation

The deviation of Nifty from its average return over the last five years being 9.79% indicates the variability or volatility in the performance of the Nifty index during this period. Nifty experienced significant ups and downs, resulting in a deviation from its average return. These fluctuations could be due to various factors such as economic conditions,

geopolitical events, policy changes, or market sentiment shifts.

Table 7 Overall Performance of Textile industry

Company Name	Mean	Standard Deviation	Variance	Beta
Nifty Index 50	0.3415	0.0098	9.59117	1.31
Alok Industry	0.2055	0.0096	6.73000	0.43778
Bombay Dyeing	0.1992	0.00010	1.70000	0.03225
Nitin Spinner Ltd	0.2023	0.006774	4.59970	-0.038561
Page Industries	0.1974	0.002143	4.58885	0.038560
Aravind Textiles	0.1955	0.002215	4.90670	-0.002509

G. Interpretation

The Nifty index shows higher volatility but also higher mean returns compared to individual companies. Alok Industry seems to have a good mean return with moderate volatility, while Bombay Dyeing exhibits low volatility. Nitin Spinner Ltd, Page Industries, and Aravind Textiles show varying levels of volatility and relationships with the market. Alok Industry has the highest beta (0.43778), indicating relatively higher volatility compared to the market. Page Industries and Aravind Textiles have slightly positive betas, while Nitin Spinner Ltd has a negative beta, suggesting an inverse relationship with the market.

H. Findings

Alok industry annual returns for each year range around 0.1987 to 0.1997, showcasing a relatively consistent performance over the five years. indicating a stable return and growth trend in this period. This characteristic might make it an interesting asset for diversification but requires careful consideration regarding its behavior in different market conditions.

Bombay dyeing return from 2019 to 2023 range between 19.87% and 19.97%, showcasing a remarkably consistent performance over these years. Steady Growth indicating a stable growth trend. The low standard deviation implies minimal variability, suggesting a steady and predictable performance. The growth rate also consistently ranges from 1.1902 to 1.2062, indicating a stable growth trend. The mean return stands at 20.23%, aligning closely with the individual annual returns, showcasing a consistent average return. This investment has shown relatively consistent and robust returns over the years but with higher volatility compared to the previous investment.

The growth rates consistently range from 1.1946 to 1.1996, indicating a steady growth trend. The negative beta implies a potential inverse relationship with the market, necessitating consideration of other factors, such as market conditions and risk tolerance, before making investment decisions.

Arvind Industries' deviation from the normal return is 2.21%, indicating that its returns have varied from the expected or average returns by this percentage [1].



Incorporating stocks with a negative beta into a diversified portfolio can potentially mitigate overall portfolio risk. Their inverse correlation with the market offers a counterbalance during market instability. Investors often leverage stocks with negative beta to diversify their portfolios or as a hedge against market downturns.

Demonstrates the highest mean return and standard deviation among the listed options, suggesting higher returns but also higher volatility compared to individual stocks.

Alok Industry: Shows a moderate mean return and standard deviation, indicating decent returns with moderate volatility.

Bombay Dyeing: Exhibits a low standard deviation, signifying low volatility in returns.

Nitin Spinner Ltd and Aravind Textiles: Both have negative betas, indicating an inverse relationship with the market, potentially useful for diversification.

Page Industries: Shows slightly higher volatility than Bombay Dyeing but still relatively lower compared to the market index (Nifty Index 50).

Arvind Textiles: This represents the average return on investment over a specific period, in this case, for Aravind Textiles.

IV. CONCLUSION

This investment has demonstrated stability and consistency in returns with relatively lower volatility compared to the previous dataset. The negative beta implies a potential inverse relationship with the market, necessitating consideration of other factors, such as market conditions and risk tolerance, before making investment decisions. The Nifty index shows higher volatility but also higher mean returns compared to individual companies. Alok Industry seems to have a good mean return with moderate volatility, while Bombay Dyeing exhibits low volatility. Nitin Spinner Ltd, Page Industries, and Aravind Textiles show varying levels of volatility and relationships with the market. Investors might consider these factors alongside other fundamental and qualitative analyses before making investment decisions.

DECLARATION STATEMENT

Funding	No, I did not receive.
Conflicts of interest	No conflicts of interest to the best of our knowledge
Ethical approval and consent to participate	No, the article does not require ethical approval and consent to participate with evidence.
Availability of data and material	Not relevant.
Authors contributions	All authors have equal participation in this article.

REFERENCES

- Boström, Magnus, Erik Andersson, Monika Berg, Karin Gustafsson, Eva Gustavsson, Erik Hysing, Rolf Lidskog, Erik Löfmarck, Maria Ojala, Jan Olsson, and et al. 2018. Conditions for transformative learning for sustainable development: A theoretical review and approach. *Sustainability* 10: 4479.
- Prakash, Yerragola, B. Charwak, and P. Vijaya Kumar. 2020. Textile industry in new India: Challenges and opportunities. *International Journal of Indian Culture and Business Management* 21: 435–58.
- Ahmad, Sumera, Suraya Miskon, Rana Alabdan, and Iskander Tlili. 2020. Towards sustainable textile and apparel industry: Exploring the role of business intelligence systems in the era of industry 4.0. *Sustainability* 12: 2632.

- Franco, Maria. 2017. Circular economy at the micro level: A dynamic view of incumbents' struggles and challenges in the textile industry. *Journal of Cleaner Production* 168: 833–45.
- Manu Vasudevan Unni & Rudresh, Crypto-Currencies: Can Investors Relay on them as Investment Avenue? *Management Journal for advanced Research* Vol no: 2, Issue- 2, ISSN-2583-1747, April, 2022, 6-14.
- Heredia-Mercado, Reddy, Shaly Flores-Piñas, Pedro Chavez, and Carlos Raymundo. 2021. Lean Manufacturing Production Management Model Under a Change Management Approach to Enhance Production Efficiency of Textile and Clothing SMEs. In *International Conference on Intelligent Human Systems Integration*. Cham: Springer, pp. 766–72.
- Ceptureanu, Eduard Gabriel, Sebastian Ion Ceptureanu, Razvan Bologa, and Ramona Bologa. 2018. Impact of competitive capabilities on sustainable manufacturing applications in Romanian SMEs from the textile industry. *Sustainability* 10: 942.
- Saloni Sunil Kumar Doshi, A Study of Opinions on Future of Crypto Currency in India, *International Journal of Research in all Subjects in Multi Languages*, Vol no: 8, Issue: 11, ISSN:2321-2853, Nov-2020, 1-4
- Manjunath Managuli, A. Deshpande and S. H. Ayatti, "Emergent vehicle tracking system using IR sensor," 2017 International Conference on Electrical, Electronics, Communication, Computer, and Optimization Techniques (ICEECCOT), Mysuru, India, 2017, pp. 71-74, doi: 10.1109/ICEECCOT.2017.8284579.
- Dheeraj Sai Ram Raju, A Study on Emergence of crypto currency in the modern world, *Journal Ekonomi Dan Bisnis Digital [MINISTAL]* vol.2, No. 1, 2023: 135- 142.
- Manjunath Managuli, and Abhay Deshpande. "Portrayal and Identification of Soil Quality Measuring Development utilizing Uav's and E-Nose System." *International Journal of Recent Technology and Engineering*. Vol. 8. No. 3. Elsevier Scopus Index, 2019.
- K. T. Krishnamurthy, M. Managuli, R. S. K. R. Niranjan, D. Kumar and S. B. Malipatil, "Development of Overflow Prediction And Wall Supervision System for Flood Forecasting," 2022 International Interdisciplinary Humanitarian Conference for Sustainability (IIHC), Bengaluru, India, 2022, pp. 121-125, doi: 10.1109/IIHC55949.2022.10060205.
- Manjunath Managuli, A. Deshpande and S. H. Ayatti, "Emergent vehicle tracking system using IR sensor," 2017 International Conference on Electrical, Electronics, Communication, Computer, and Optimization Techniques (ICEECCOT), Mysuru, India, 2017, pp. 71-74, doi: 10.1109/ICEECCOT.2017.8284579.
- Manjunath Managuli, Abhay Deshpande., "Description and Identification of Soil Quality Measuring Development using Uav's and E-Nose System" *International Journal of Recent Technology and Engineering*, Elsevier Scopus Index, Volume-8, Issue-3 September 2019. DOI: 10.35940/ijrte.C5276.098319.
- Manjunath Managuli, Deshpande, A., Salake, S. H. ., & Kanchur, P. (2021). A Development of Sensor Based Electronic Nose For Food Application: Development of Sensor Based Electronic Nose For Food Application. *SpastAbstracts*, 1(01). <https://Spast.Org/Techrep/Article/View/83>
- Manjunath Managuli, Abhay Deshpande., "A role of Electronic nose system Information gathering with smart phone" *Materials Today*, Elsevier, Volume-43, Part-6, Page No. 3404- 3408, April-2021. DOI: 10.1016/j.matpr.2020.09.069.
- V. J. Pandurangi, Manjunath Managuli, S. Salakhe, S. Bangarshetti and P. N. Kunchur, "Detection & Classification of Electronic Nose System," 2021 5th International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2021, pp. 1-4, doi: 10.1109/ICICCS51141.2021.9432248.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of the Lattice Science Publication (LSP)/ journal and/ or the editor(s). The Lattice Science Publication (LSP)/ journal and/ or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.