

Guidelines for Preparing Research Paper Contents

Title Page

- **Title of the Paper** (Concise, Specific, Reflective of Research Content)
- **Author(s) Name(s)** (With affiliations and contact information)
- **Institutional Affiliation**
- **Corresponding Author** (Email)
- **Keywords** (4–6 relevant keywords)

Abstract (150–250 words)

- **Purpose/Objective** of the study
- **Methodology/Approach** (Briefly highlight methods)
- **Key Results/Findings**
- **Conclusion and Implications**
- Avoid citations, abbreviations, and references in the abstract.

Keywords

- 4 to 6 keywords reflecting core topics of the research for indexing and search optimization.

Introduction

- **Background and Context** of the study
- **Problem Statement**
- **Research Gap** (What is missing in current literature)
- **Objectives/Purpose** of the research
- **Research Questions/Hypotheses** (if applicable)
- **Significance and Contribution** of the study
- **Structure of the Paper** (Optional but recommended for longer papers)

Literature Review

- **Theoretical Framework** (Foundational theories/models)
- **Critical Review of Previous Studies**
- **Identification of Research Gap**
- **Development of Hypotheses/Research Questions** (if applicable)

- Use **recent, relevant, and high-quality references**
- **Can use tabular format as shown**

Sl no	Year	Author	Title	Methodology	Key findings
1	2023	Naigong Yu et al.	Wafer Map Defect Patterns Classification Based on a Lightweight Network and Data Augmentation	Proposed WM-PeleeNet, a lightweight network, and used a convolutional autoencoder for data augmentation.	Achieved 95.4% accuracy with low computational costs but struggled with visually similar patterns, on large datasets, and deployment in dynamic manufacturing settings.

Methodology

- **Research Design** (Qualitative, Quantitative, Mixed Methods)
- **Population and Sample** (Sampling methods, sample size)
- **Data Collection Methods** (Tools, instruments, procedures)
- **Variables and Measures** (Operational definitions)
- **Data Analysis Techniques** (Software, statistical methods, models used)
- **Ethical Considerations** (Consent, confidentiality, approvals)

Results/Findings

- **Presentation of Data** (Tables, graphs, figures)
- **Descriptive and Inferential Statistics** (Where applicable)
- **Analysis and Interpretation** of major findings
- **No discussion or interpretation beyond data presentation** (Save this for the Discussion section)

Discussion(optional)

- **Interpretation of Results** in the context of objectives
- **Comparison with Previous Studies**
- **Implications of Findings** (Theoretical, Practical, and Policy Implications)

- **Limitations of the Study**
- **Future Research Directions**

Conclusion

- **Summary of Major Findings**
- **Answer to Research Questions / Validation of Hypotheses**
- **Key Contributions**
- **Policy/Practical Recommendations** (if any)
- **Final Remarks**

References/Bibliography

- **List all cited sources following appropriate citation style (APA, MLA, Chicago, IEEE, etc.)**
- **Ensure consistency and accuracy in formatting**
- **Use recent and relevant scholarly works**

Appendices

Supplementary Materials (Questionnaires, raw data, detailed tables, additional figures)

General guidelines in next page

General Writing Guidelines

- **Clarity and Precision** in language
- **Logical flow** between sections
- Use **academic and formal tone**
- **Proper citation** of all sources to avoid plagiarism
- **Proofreading and Editing** for grammar, spelling, and formatting consistency
- **Follow Journal/Conference Formatting Guidelines** (Fonts, margins, line spacing, etc.)

Formatting Guidelines

- **Margins:** Typically 1 inch (2.54 cm) on all sides
- **Title:** Bold, centered, and typically in a larger font (e.g., 14-16 pt).
- **Author Names:** Full names with affiliations indicated via superscripts if needed.
- **Affiliations:** Institution name, city, country, and email address.
- **Headings/Subheadings:** Times New Roman, 11-12pt , bold

➤ Sections and Headings

- **Main Headings:** Numbered or unnumbered, bold (e.g., 1. Introduction).
- **Subheadings:** Numbered as per hierarchy (e.g., 2.1 Methodology).
- **Alignment:** Left-aligned or centered (varies)

➤ Figures and Tables

- **Placement:** Centered on the page, close to where referenced.
- **Captions:** Numbered (e.g., "Figure 1: System Architecture"), below figures, above tables.
- **Fonts:** Readable (e.g., minimum 8 pt within figures).

➤ Equations

- **Numbering:** Right-aligned numbers in parentheses (e.g., (1)).
- **Format:** Centered on the line.
- **Tools:** Equation editors or LaTeX math mode.