MOTIVATION, STRUCTURE OF PAPER, TITLE, ABSTRACT AND INTRODUCTION

Prof. Dr. Zainal Salam,
Centre of Electrical Energy Systems,
School of Electrical Engineering,
UTM Johor Bahru, Malaysia.

WORKSHOP ON PUBLISHING IN HIGH IMPACT JOURNAL

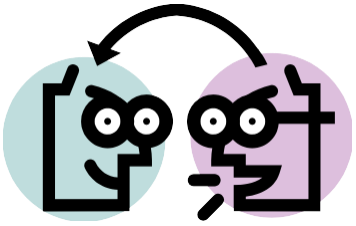
Session1 and 2

August 10th 2020

1

Writing scientific articles is a skill that can be acquired by knowing the techniques and by doing some practice!

2



The greatest ideas are (literally) worthless if you keep them to yourself

If your work is good, why keep it secret?

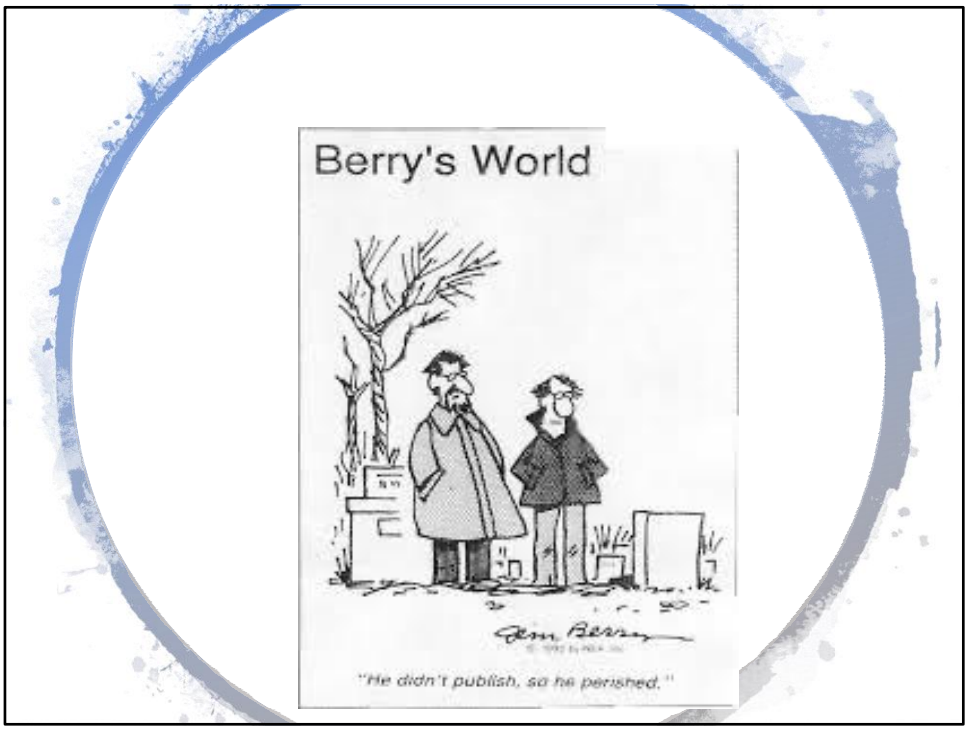
If is was not published, the work is not complete

3

Why publish in High Impact Journal?

- For your PhD!
- For higher citation
- Personal satisfaction/esteem
  - Recognition as "expert"
  - Promotion, scholarship, appraisal exercises
  - "Ticket" for mobility
- Institutional
  - Visibility, University Ranking.

4



5



kashif Ishaque

Associate Professor & Director ORIC, Mohammad Ali Jinnah University

Solar PV System Power Electronics Co…

GET MY OWNPROFILE

	All	Since 2015
Citations	5518	4430
h-index	26	25
i10-index	34	32

TITLE	CITED BY	YEAR
An improved particle swarm optimization (PSO)–based MPPT for PV with reduced steady-state oscillation K Ishaque, Z Salam, M Amjad, S Mekhilef IEEE transactions on Power Electronics 27 (8), 3627-3638	731	2012
Simple, fast and accurate two-diode model for photovoltaic modules K Ishaque, Z Salam, H Taheri Solar energy materials and solar cells 95 (2), 586-594	536	2011
A review of maximum power point tracking techniques of PV system for uniform insolation and partial shading condition K Ishaque, Z Salam Renewable and Sustainable Energy Reviews 19, 475-488	485	2013
A deterministic particle swarm optimization maximum power point tracker for photovoltaic system under partial shading condition K Ishaque, Z Salam IEEE transactions on industrial electronics 60 (8), 3195-3206	457	2012

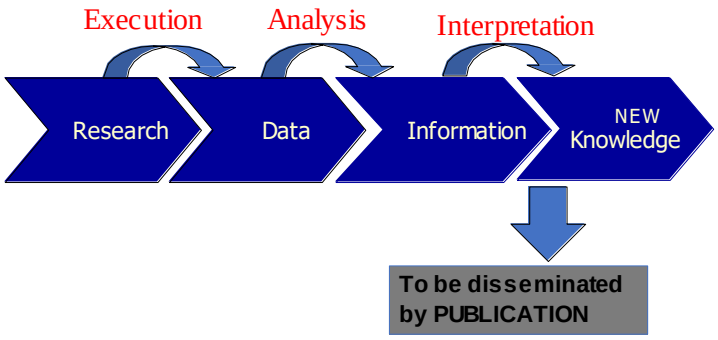
12 Q1 papers During his PhD (3 Years)

Postdoc at NUS

Top Scientistin Pakistan 2018

6

Steps of obtaining research output



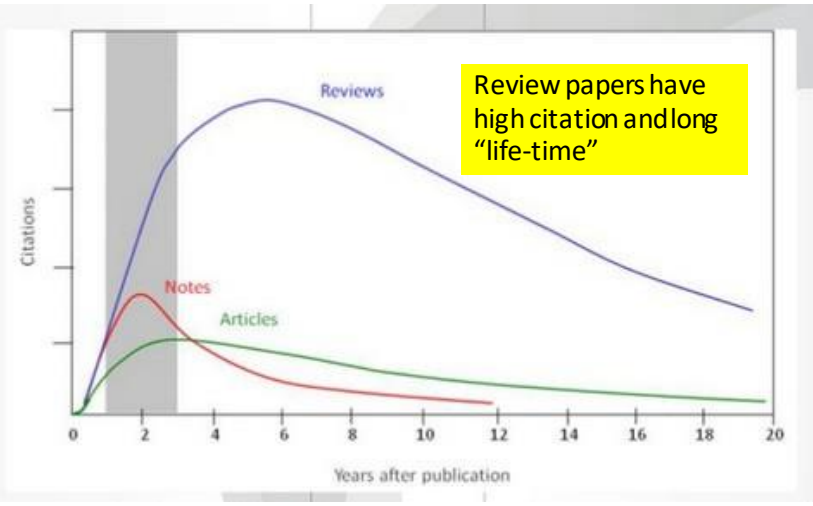
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Types of Manuscript

- **Original Research Article**
  - Content based on primary data from author's experiments, own work
  - Very Specific; Audience can be limited
- **Literature Review Article**
  - Compilation of others work on the same topic/area
  - Quite broad; Lots of reference
- **Letter/Notes**
  - One to four pages, short communication
  - Original idea, but yet to be developed fully
  - Fast reviewing process

8

Citations



Review papers have high citation and long "life-time"

9

Before starting, ask these questions:

Is my work publishable?

1. Have I done **something new** and interesting?
2. Is there **anything challenging** in my work?
3. Is my work related to a current **hot topic**?
4. Have I **provided solutions** to difficult problems?

If yes to one of those, then you can start writing. If not, do some **rethinking**

Consider submitting manuscript to **lower impact factor journal**?

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Structure of Scientific Paper: IMRAD

(Introduction, Methods, Results, and Discussion)

- Introduction: **What did you/others do? Why did you do it?**
- Methods: **How did you do it**?
- Results: **What did you find**?
- **A**nd
- Discussion: **What does it all mean?**

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Article begins with

Title

Abstract

Keywords

Ends with

Conclusion

Acknowledgement

References

Appendix (if any)

12

Storyline and Take-home Message

- The paper must have a **clear storyline.**
  - It should have one or two central issues that you want to address.
  - The selected issues become the theme/direction of the paper
  - Build the storyline around the issue.
- At the end, there must be a **take home message**

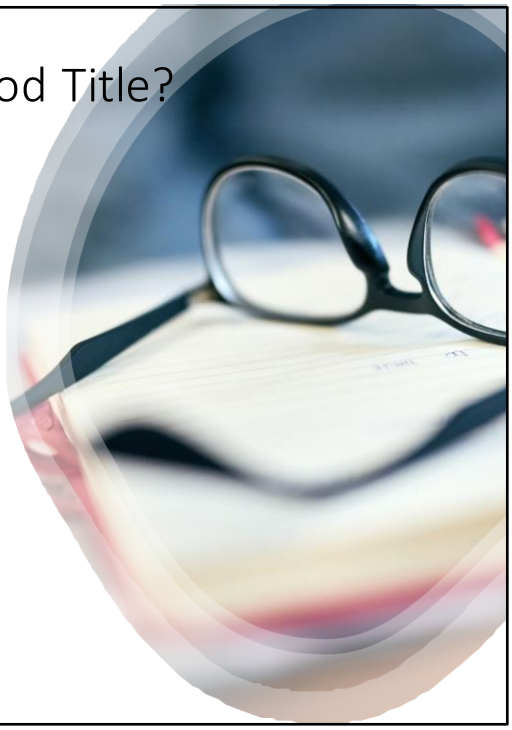
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What Makes a Good Title?

- **Condenses** the paper's content in a few words
- **Captures** the readers' attention: show your specialty and strength
- **Differentiates** the paper from other papers of the same subject area



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Title: Basic Tips

- ✓Easy to understand and precise statement.
- ✓Use simple non-bombastic words.
- ✓List down key (important) words that are central to the paper (use Word Count).
- ✓Use Thesaurus to get alternative or similar meaning.

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What to avoid?

- **Redundancies.**
  - "On the design of…" Can be simplified to "Design of…"
  - "Building and constructing of an…" Can be simplified to "Development of an…"
- **Acronym** (depends on journal)
- **Self glorification**
  - Avoid words such as: "novel", "new", "original", "ground-breaking" *unless they really are.*
  - Be modest: Use "improved", "extended", instead

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Example 1

POOR

Design of Particle Swarm Optimization (PSO)-Based MPPT

(>>nothing special)

GOOD

An **Improved** Particle Swarm Optimization (PSO)-Based MPPT for PV with **Reduced Steady-State Oscillation**

(>> shows strength, specialty)

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Example 2

POOR

Modelling of photovoltaic modules

(>>too general, nothing special)

GOOD

Simple and highly efficient two-diode model for photovoltaic modules".

(>> highlights strength)

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Example 3

Poor

Feature Selection for Classification of Power Quality Disturbances

(General, no differentiation)

Good

High Accuracy and Fast Feature Selection Using **Modified Cuckoo Search** for Classification of Power Quality Disturbances

(>>show your specialty, mention the technique to differentiate it from others)

20



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What is an Abstract?

In approximately 150–250 words, you tell the reader what is your work, what contribution it makes, what is the idea, how do you do it, what are the findings, and what are the implications of the findings.

A “microcosm” of the full article.

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Why Abstract is Important?

- The **"first impression"** of the article.
- The entry point into the review system.
- It creates interests in the readers (to download/view)

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Abstract Features

- Single paragraph
- Self-contained (independent)
  - Without footnotes or references.
  - Without mathematical equations, diagram or table.
- Contain several keywords or phrases, to help readers to find it.
- Grammatically correct (zero tolerance).

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Elements of Abstract

1. State the ***primary objective*** of the paper.
2. Highlight the merits (or ***contribution***).
3. Give a conceptual ***idea*** on the method
4. Describe the research design and ***procedures/processes*** employed (is it simulation, experimental, survey etc.)
5. Give the ***main outcomes or results***, and the ***conclusions*** that might be drawn.
6. Include any ***implications*** for further research or application/practice, if any.

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Example 1

"This paper proposes an improved maximum power point tracking (MPPT) method for Photovoltaic (PV) system using a modified particle swarm optimization (PSO) algorithm. The main advantage of the method is the simplicity and speed of the algorithm such that it can be computed rapidly using a low-cost microcontroller. The speed of convergence is achieved by forcing the PSO into a non-random mode, thus avoiding the need to deal with the uncertainty of random numbers. To test the effectiveness of the proposed method, MATLAB simulations are carried out under very challenging conditions, namely step changes in irradiance, step changes in load and partial shading of PV array. In addition, an experimental rig that comprises of a buck-boost converter fed by a custom-designed solar array simulator is set-up to emulate the simulation. The superiority of the proposed method over the conventional Hill Climbing (HC) is confirmed by a 30% increase in the convergence speed and a 50% decrease in the steady state oscillations. It is envisaged that the method can be very useful in the design of a practical high performance, low cost inverter with MPPT." **(180 words)**

ADOPTED FROM:
K. Ishaque, **Z. Salam**, M. Amjad, and S. Mekhilef, "An Improved Particle Swarm Optimization (PSO)-Based MPPT for PV With Reduced Steady-State Oscillation", *IEEE Transactions on Power Electronics*, vol. 27, pp. 3627-3638, 2012.

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Good Abstract? Let's check

1. State the ***primary objective*** of the paper

"This paper proposes an improved maximum power point tracking (MPPT) method for Photovoltaic (PV) system using a modified particle swarm optimization (PSO) algorithm."

2. Highlight the **merits** (or contribution)

The main advantage of the method is the simplicity and speed of the algorithm such that it can be computed rapidly using a low-cost microcontroller.

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3. Give a conceptual idea (method) on how the contribution is achieved.

The speed of convergence is achieved by forcing the PSO into a non-random mode, thus avoiding the need to deal with the uncertainty of random numbers.

4. Describe briefly the research design and ***procedure*** employed

To test the effectiveness of the proposed method, MATLAB simulations are carried out under very challenging conditions, namely step changes in irradiance, step changes in load and partial shading of PV array. In addition, an experimental rig that comprises of a buck-boost converter fed by a custom-designed solar array simulator is set-up to emulate the simulation.

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5.Give the ***main outcomes or results***, and the ***conclusions*** that might be drawn from these data and results.

The superiority of the proposed method over the conventional Hill Climbing (HC) is confirmed by a 30% increase in the convergence speed and a 50% decrease in the steady state oscillations.

6. Include **implications** or application/practice, if any.

It is envisaged that the method can be very useful in the design of a practical high performance, low cost inverter with MPPT.

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Example No. 2

ADOPTED FROM:
Kashif Ishaque, **Zainal Salam**, Hamed Taheri, "Simple, fast and accurate two-diode model for photovoltaic modules", *Solar Energy Materials & Solar Cells*,95 (2011) 586–594.

This paper proposes an improved modelling approach for the two-diode model of photovoltaic (PV) module. The main contribution of this work is the simplification of the current equation, in which only four parameters are required—compared to six or more in the previously developed two-diode models. This is achieved by equating the values of the series and parallel resistances, and subsequently computing them using fast iterative method. To validate the accuracy of the proposed model, six PV modules of different types (multi-crystalline, mono-crystalline and thin-film) from various manufacturers are tested. The performance of the model is evaluated against the popular single diode models. It is found that the proposed model is superior when subjected to irradiance and temperature variations. In particular the model matches very accurately for all important points of the I-V, i.e. by less than 1%. The modelling method is useful for PV power converter designers and circuit simulator developers who require simple, fast yet accurate model for the PV module.

Objective

Merit

Idea

Procedures

Results

Implications

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Common Mistakes

- Writing "**historical**" information (which is not a contribution of the author)
- The use of **generic words**: high, low, small, big.
- Abbreviations not defined
- Storyline not sequential
- Abstract is not **proofread**

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Example of Poor Abstract

Large and small scale PV power systems have been commercialized in many countries. One of the important approach for system design is to use simulators to predict the output of PV systems under varying environmental conditions. This paper proposes a MATLAB Simulink simulator for photovoltaic (PV) system using two-diode model. This model has better accuracy at low irradiance level, thus allowing for a more accurate prediction of PV system performance. To reduce computational time, values of R_p and R_s are estimated by an efficient iteration method. Furthermore, all the inputs to the simulator are information available on standard PV module datasheet. The results are found to be very accurate for five PV modules of different types (multi-crystalline, mono-crystalline, and thin-film) from various manufacturers.

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What's wrong?

Large and small scale PV power systems have been commercialized in many countries. One of the important approach for system design is to use simulators to predict the output of PV systems under varying environmental conditions. This paper proposes a MATLAB Simulink simulator for photovoltaic (PV) system using two-diode model. This model has better accuracy at low irradiance level, thus allowing for a more accurate prediction of PV system performance. To reduce computational time, values of R_p and R_s are estimated by an efficient iteration method. Furthermore, all the inputs to the simulator are information available on standard PV module datasheet. The results are found to be very accurate for five PV modules of different types (multi-crystalline, mono-crystalline, and thin-film) from various manufacturers.

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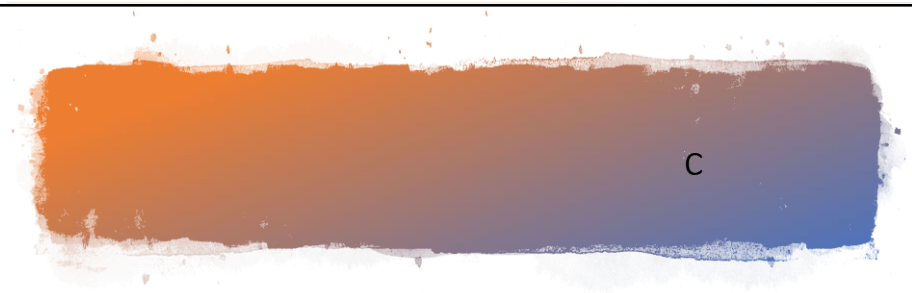
Writing a Structured Abstract



Guidelines to simplify and speed-up the writing of Abstract

Technique to write consistent and meaningful Abstract

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1. ***Objective***
2. ***Contribution***
3. ***Idea***
4. ***Procedures/processes***
5. ***Results***
6. ***Implications***

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Choose the best word to describe the objective

- ✓Propose a method
- ✓Evaluate
- ✓Design
- ✓Assess
- ✓Establish
- ✓Predict
- ✓Determine
- ✓Develop

- Improve the understanding
- Review (normally for review papers)
- Compare, critically compare
- Comprehensively summarize

- ➢ Navigate
- ➢ Examine
- ➢ Constructs
- ➢ Investigate
- ➢ Provide (something)

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Writing the Objective

This paper (work)

- proposes a method (technique, solution)…
- improves the technique…
- is carried out to gain a better understanding of…
- is performed to objectively measure and assess…
- examines the relationship between…
- reviews the details the available information on…
- critically examines the ways in which…
- compares the two ways of treating…

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Writing Contribution

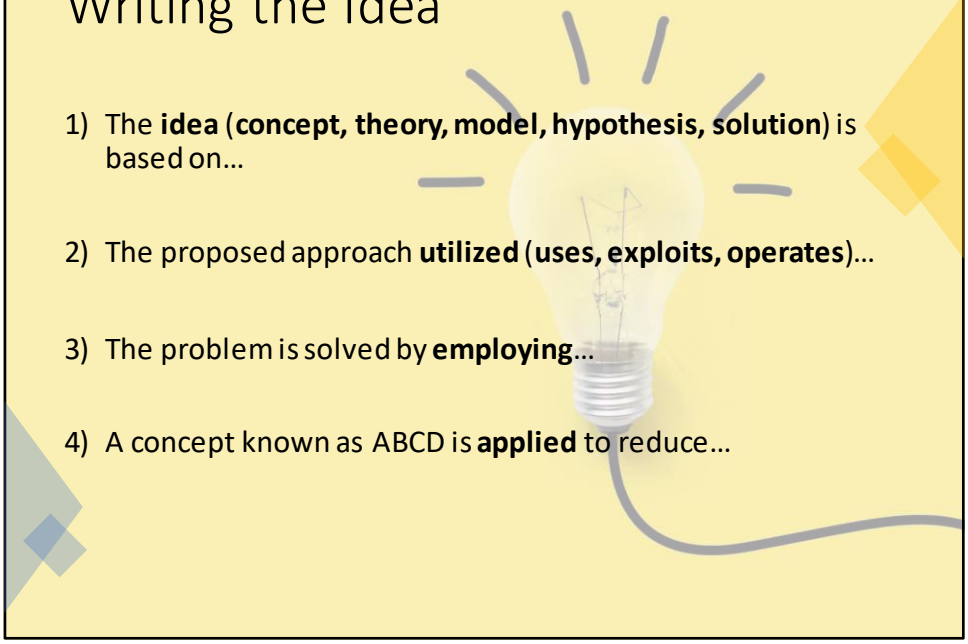
1) Unlike the normal approach, this method **improves**…
2) The proposed method **solves** the problems associated with…
3) There are two distinct **differences** between this work and the previous…
4) Despite the difficulties imposed by the authorities, the proposed method **is able to**…
5) Although the proposed approach faces numerous challenges, it **successfully overcomes**…



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Writing the Idea

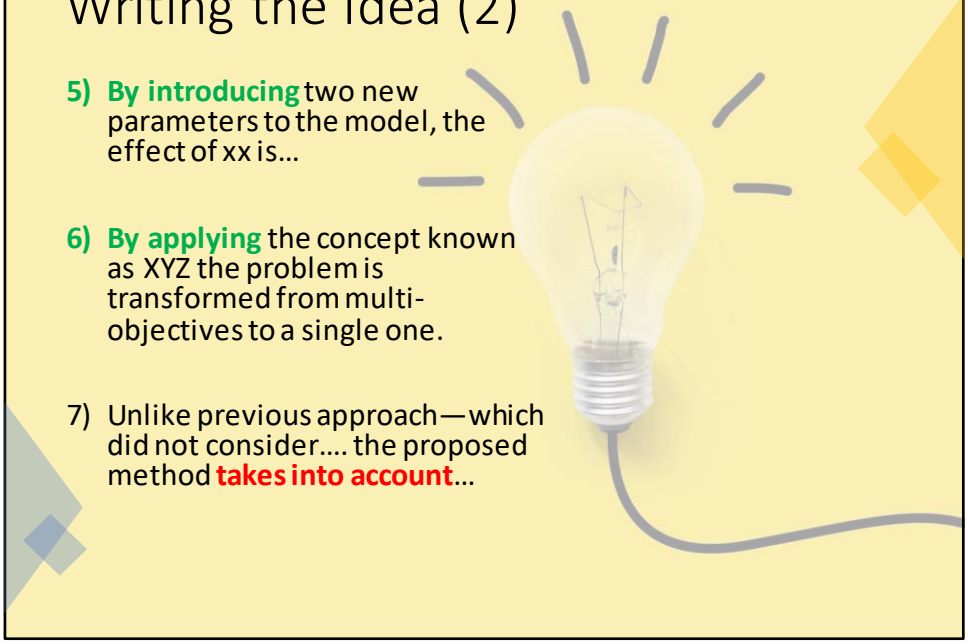
1) The **idea** (**concept, theory, model, hypothesis, solution**) is based on…
2) The proposed approach **utilized** (**uses, exploits, operates**)…
3) The problem is solved by **employing**…
4) A concept known as ABCD is **applied** to reduce…



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Writing the Idea (2)

5) **By introducing** two new parameters to the model, the effect of xx is…
6) **By applying** the concept known as XYZ the problem is transformed from multi-objectives to a single one.
7) Unlike previous approach—which did not consider…. the proposed method **takes into account**…



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Writing Procedures

1) The idea is **proven** in three ways: analytically, simulation and experimental prototype.
2) A comprehensive **verification** using MATLAB is carried out to determine…
3) The performance of the proposed method is **evaluated** using the standard procedures…
4) The viability of the concept is **assessed** based on…
5) The errors are **quantified** using a special equipment…

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Writing Procedures (2)

5) To **validate** the hypothesis, the standard statistical analysis is…
6) The tests are **carried out** using …
7) The software codes are **benchmarked** against the…
8) **Verification** using numerical method is chosen because…
9) To ensure that the results are acceptable to the practitioner in this field, a strict procedures **are applied**, namely…

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Writing Results

1) From the experimental (simulation) work, it was found (discovered) that…
2) The result indicates (shows, reveals, confirms) that…
3) There is a xx% increase in the value of…
4) Despite the xx% increased in cost in, the data show that the efficiency is improved by yy%.

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Writing Results (2)

5) The promising part of the method is the **improvement** shown in the…
6) The xx% error between the simulation and results from the hardware prototype suggests that…
7) The **superiority** of the proposed method over the conventional approach is confirmed by a xx% increase in the computational speed

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Writing Implications

1) It is **envisaged (expected)** that this work will benefit a large number of professionals…

2) The method proposed in this paper **is predicted to be** the main driver…

3) The conclusion of the study **suggests** that the of research in this area **could be directed** toward…

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Writing Implications

4) The work can be **considered significant** due to the fact that..

5) Looking into the future, this work **will lead to**…

6) The results published in this paper **opened up** several important possibilities…

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Example of Structured Abstract: Write the Skeleton

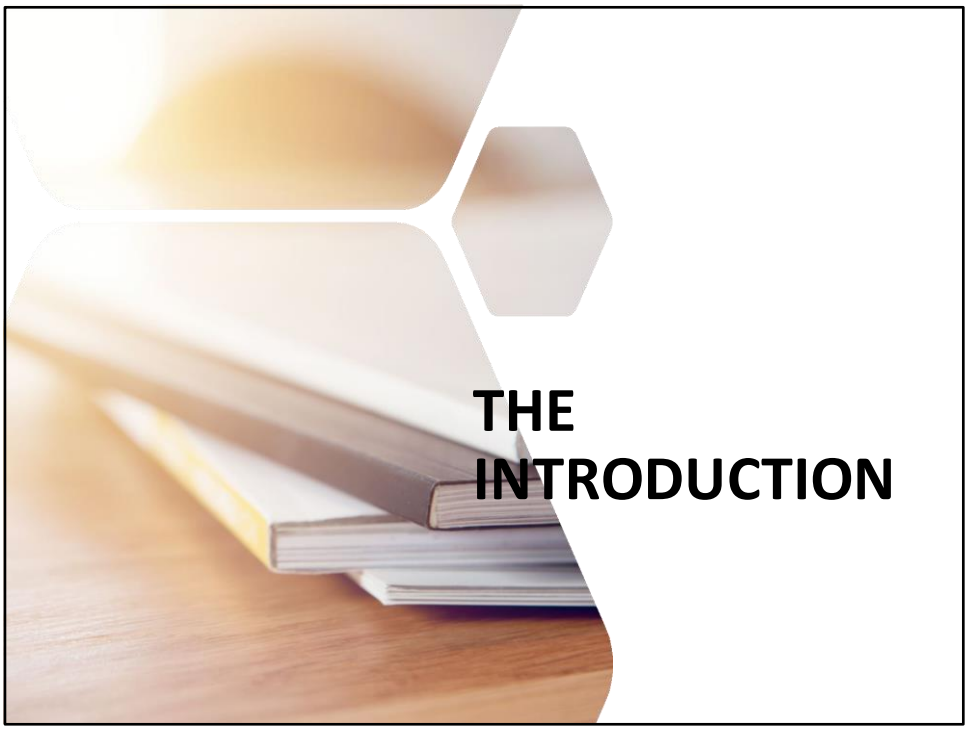
- This paper proposes… (objective)
- The approach has several notable merits, namely… (contribution)
- The solution is based on… (idea)
- A comprehensive verification using MATLAB is carried out to determine… (procedures)
- From the simulation work, it was found that…(results)
- The result confirms that the method… (results)
- The method proposed in this paper can be used… (implication)

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Write it Out!

This paper proposes an improved method to reduce the high voltage spikes during switch turn-off for a buck dc-dc converter. The approach has several notable merits, namely low cost, reduced components and higher safety. The solution is based on the idea that the slower gate signal can improve the turn-off at transient. A comprehensive verification using MATLAB is carried out to determine the effectiveness of the concept. From the simulation work, it was found that the spikes was reduced by 75% for switching frequency between 500-800 kHz. The result confirms that the method is superior to the alternative snubber network, which exhibits 50% reduction for the same frequency range. The method proposed in this paper can be used for all types of dc-dc converter because it can be readily retrofitted to the existing system.

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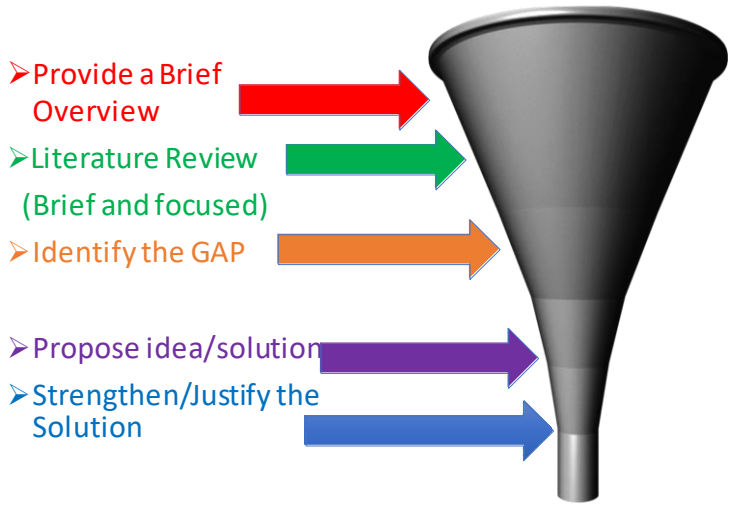
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Aims of the Introduction Section

- ✓To define the **problem/issue**
- ✓To **connect** the issue to previous relevant research
- ✓To identify the **research gap**
- ✓To state your **idea, solution**, objective, hypothesis
- ✓To justify the **significance (importance)** of your work

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The Logical Funnel



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Example of Introduction

ADOPTED FROM

Muhammad Amjad, **Zainal Salam**, "Analysis, Design and Implementation of Multiple Parallel Ozone Chambers for High Flow Rate", *IEEE Transactions Industrial Electronics*, Vol. 61, No. 2, Feb 2014, pp. 753-765.

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Overview

"Ozone is a powerful oxidizing agent that has been increasingly used in industrial, pharmaceutical and agriculture applications [1]-[3]. Unlike other oxidizing chemicals such as chlorine, it leaves no harmful residue to the environment."

General statements:
motivational in nature, easy to understand.
General reference are cited

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Literature Review

"The most viable method to generate ozone by using the dielectric barrier discharge (DBD) that is powered by resonant converter [4]."

"Among the resonant inverters, the full-bridge [5], push-pull [6], and class E resonant circuits [7] are widely employed. In majority of the cases [5]-[10], high frequency transformer is utilized to boost the voltage to a sufficiently high level to initiate ozone formation."

Literature review :
Linking to the IMPORTANT previous work.
Trying to establish GAP (inadequacy)

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Identifying the Gap

"Despite the simplicity of resonant inverter, its transformer exhibits several disadvantages: 1) decreased efficiency, 2) high voltage spikes and (3) introduction of electromagnetic interference [8]."

- ❖See how the inadequacy of the previous work is exposed by literature review?
- ❖A gap (or hole) MUST BE identified.
- ❖Thus, there is a need for SOLUTION!

If you cannot identify the gap CLEARLY, readers will assume there is nothing new in the paper

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Identifying the Gap: Transition words

Use transition word/phrase to expose the gap smoothly

- ✓ Despite the fact…
- ✓ On the contrary…
- ✓ On the other hand…
- ✓ However,…
- ✓ Conversely…
- ✓ Having said that…
- ✓ But then…
- ✓ Alternatively,
- ✓ Another possibility would be…
- ✓ In comparison…
- ✓ Even though…

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Proposing your idea!

"In view of these shortcomings, an improved transformer-less resonant inverter is proposed in this paper."

- Once the "gap" or "inadequacy" is established, propose your idea (or solution).
- This is expected to be the main contribution of your paper

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Proposing your idea: Linking words

These "linking phrases" may help to smooth

- ✓ Based on these findings…
- ✓ In light of these conclusions…
- ✓ From the above discussions, it is clear that…
- ✓ Regardless of the points made by…
- ✓ In view of these evidences…

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Strengthening/Justifying the idea

"The key benefits of the proposed resonant inverter topology are simplicity and lower cost. Another advantage of the proposed technique"

- ✓ Give a couple of merits of your proposed idea
- ✓ Try to make the idea more convincing.

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A bit of detail on the idea

The idea is based on the of current sharing of two switches. Unlike other approaches thus far—which rely on voltage division, the resonant current is force to flow into the power switches.

- ✓ Just reveal a bit, perhaps the main principles that may catch the interest of reader.
- ✓ Something like a summary of the idea
- ✓ Give some insight why it would work

60

Paper outline

"The remaining of the paper is organized as follows. In section II, the ozone chamber parameter determination is explained. In section III, the complete ozone generation system is presented. Finally, the conclusions and future recommendation are given section IV."

- ✓ Not necessary, but its nice to put in, if you have extra pages.
- ✓ However, if the paper is long, the outline may help the navigation

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Bottom line

You need to write the Introduction in such a way that the *reviewer is convinced* that the paper is good, exciting, important and he *could not refuse* to read the paper further.



If you achieve that goal, your Introduction can be considered excellent!

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Suggested writing style

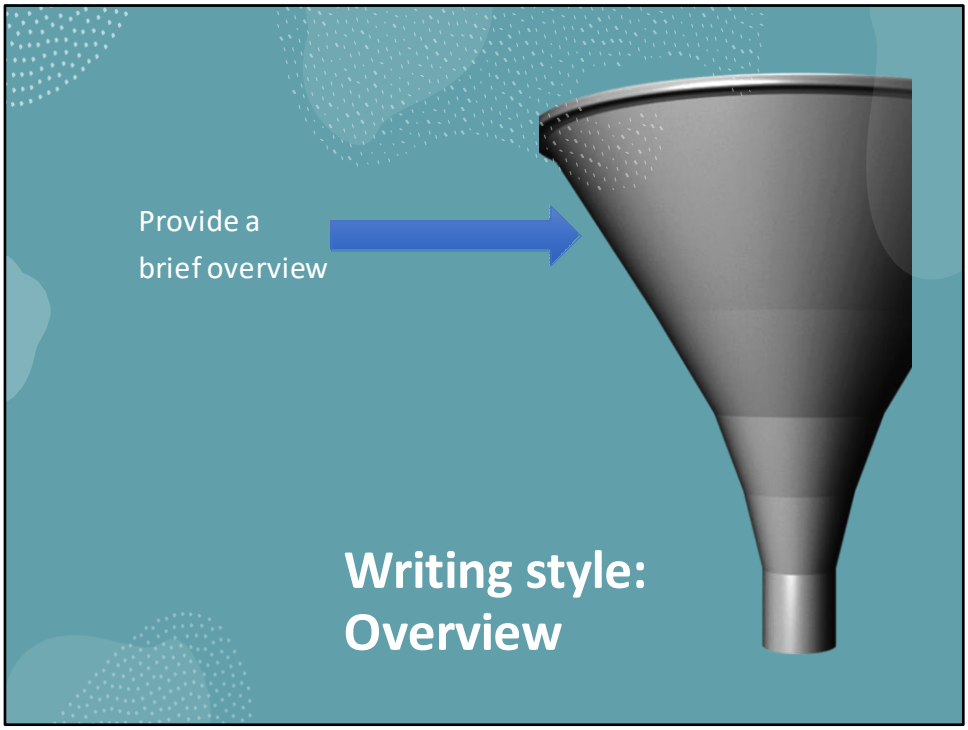
DISCLAIMER:

1)Since we are not **native English speaker**, I'm suggesting certain writing style to assist in rapid writing

2)The **recommended phrases** are only **guidelines** to generate ideas.

3)You are not compelled to follow…

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Overview:
Recommended Phrases (1)

1) During the past twenty years, much more information has become available on…

2) A considerable amount of literature has been published on the issue. These studies…

3) In recent years, there has been an increasing amount of literature on…



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Overview:
Recommended Phrases (2)

4) The first serious discussions and analyses of the issue emerged during the early 1980s with…

5) Historically, research investigating the factors associated with this issue has focused on…

6) What we know about the issue is largely based upon empirical studies that investigate how…



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Overview:
Recommended Phrases (3)

7) For many years, this phenomenon was surprisingly neglected by …

8) There is a large volume of published studies describing the role of …

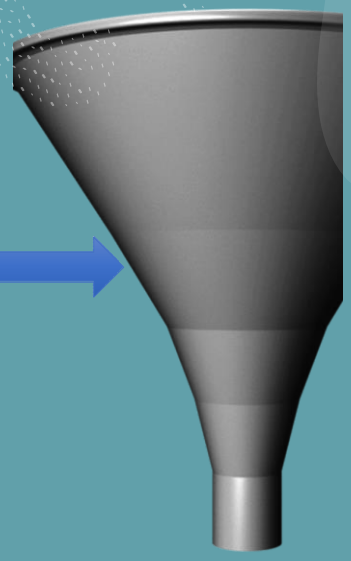
9) Over the past decade, most research in the issue has emphasized the use of …



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Writing style: Literature

Brief and focused literature review



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Highlighting similar findings (1)

1) **Similarly,** Author in [1] found that …

2) Authors in [1] **added that** the …

3) The idea is **supported by** study in [1], which reveal that …

4) Authors in [1] also provided… and **found similar** results to those obtained in [2]…

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Highlighting similar findings (2)

5) The above findings is **consistent with** the study by Author…

6) **Similar methodology** is used by [1], which concluded that …

7) Finding by Author A **also points towards** the results work in [4]…

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Highlighting Contradictions (1)

1) Author in [1] found certain **differences, suggesting that**…

2) **In contrast**, the study by [1] indicated that…

3) The above findings **contradict** the study by [1]…

4) A number of studies show that significant differences do exist, albeit findings are somewhat **contradictory**…

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Highlighting Contradictions (2)

5) This finding is **non-conformance** to a study conducted by [1], which concluded…

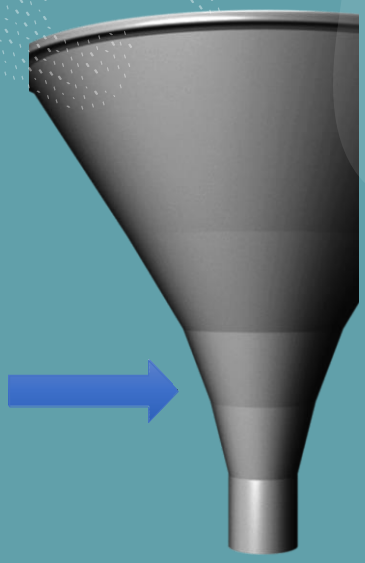
6) Despite the extensive evidence provided by [2], there appears to be a wide **difference**…

7) These results **inconsistent with** [1] which were considered as the de-facto procedures…

8) However, it was later shown by [1] that the results **did not agree** to the…

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Writing the GAP and IDEA



- Identify the gap
- Propose the idea (solution)

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Gap and Idea (1)

1) From the overview, it can be deduced that there is little (scant, inadequate, lack of) published data on this field…To resolve this problem…
2) Despite the numerous work carried out on similar subject, no previous study (work, research, investigation) has thoroughly investigate… Hence this work is carried out…
3) As highlighted in [1], the application of X has not been systematically (methodologically, scientifically) investigated… Clearly there is a need for…

74

Gap and Idea (2)

4) Even though there has been quantitative analysis of…, no detailed investigation of … **By performing this unique experiment**…

5) In contrast to popular assumptions, the data about the efficacy… **There is a need to validate**…

6) On the contrary, few studies have investigated X in any systematic way … Thus, **this work proposes**…

75

Gap and Idea (3)

7) Up to now (so far, until recently), little (scant, limited) attention has been paid to … It is high time to provide a comprehensive…

8) On the other hand, a search of the literature revealed that limited studies have focused on…

9) It appears that the impact of X on Y is grossly understudied… , there is a **need to benchmark**…

76

Gap and Idea (4)

10) Despite these shortcomings, there have been lack of studies which compares … Hence this work…

11) There are inadequate evidence… Further delay will… Therefore, there is an urgent need…

12) Notwithstanding the importance of the issue, it appears to be given little attention… Obviously, there is a requirement to investigate…

77

Gap and Idea (5)

13) Although studies have recognized X as the source of the problems, research has yet to systematically investigate the effect of…

14) Since the publication of X forty years ago, there has only been a limited amount of original research into the history of…

15) Only recently, large-scale studies are performed to investigate the prevalence of … . However, it appears that they are inadequate to characterize…

78

Gap for Review paper (1)

1) So far, there has been very few work that review the….

2) In addition, no paper has comprehensively review…

3) Surprisingly, the review of the subject has not been thoroughly carried out…

4) Despite the large proliferation of literature on this subject, there appears to be an absence of a review…

79

Gap for Review paper (2)

5) Although these exist a number of review papers in this field, **they are not comprehensive**…

6) The review undertaken by [1] is rather superficial, and it is unclear to what extent … A **more critical evaluation** is required to assess…

7) In contrast to the previous review paper, this work will focus on aspects which are not considered…

80

Gap for Review paper (3)

8) Despite the importance of the subject, there appears to be a **lack of a comprehensive review** of…

9) Although there exists several excellent review papers on the subject, **the focus is not on**…

10) Due to the importance of the work, and the lack of a critical evaluation on the state-of-the art technologies, it is **commendable for a comprehensive review**…

81

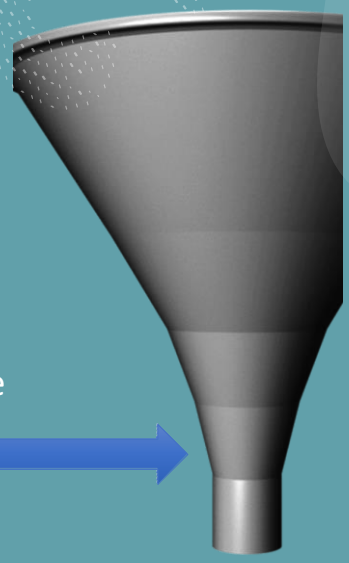
Gap for Review paper (4)

11) The last review on this subject was twenty years ago. Since then, there has been tremendous development… Therefore, **it is high time for an update…**

12) Since the information on the subject is scattered in various journals, conference proceedings and patents, **it is convenient to gather them in a single document**. Hence this review.

82

Strengthen your Idea!



- Strengthen/Justifythe idea
- Outline of paper

83

Strengthening the Idea (1)

1) This work is very **important** (crucial, significant, vital), considering the fact that…

2) Since there is an absence of experimental validation, this work **will pave the way** for…

3) The findings of this study **is expected to benefit** a large number of…

84

Strengthening the Idea (2)

5) The importance of the work can be attributed to the fact that…

6) The contribution of this study is obvious; the **resulting outcomes can be capitalized** as guidelines to…

7) The current study contributes to the expansion of the knowledge in this field by addressing four important issues. First, …

85

Let's recap…

- We have gone through several important steps in writing articles:
  - IMRAD
  - Formulating Title
  - Elements of Abstract
  - Writing Structured Abstract
  - Guidelines to write Introduction
  - Suggestions of phrases for rapid writing.
  - And more to come!…

86

zainals@utm.my



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Methods, Results, Discussions and Conclusion (plus issues on publication ethics)

Prof. Dr. Zainal Salam,
Centre of Electrical Energy Systems,
School of Electrical Engineering,
UTM Johor Bahru, Malaysia.

WORKSHOP ON PUBLISHING IN HIGH IMPACT JOURNAL
Session 3 and 4: August 11th 2020

1

Quick recap



2

What are the elements of Abstract?

1. ***Objective***
2. ***Contribution***
3. ***Idea***
4. ***Procedures/processes***
5. ***Results***
6. ***Implications***

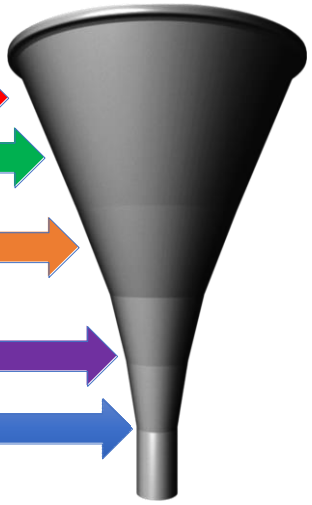
3

What's inside the Introduction Logical Funnels?

4

The Logical Funnel

- Provide a Brief Overview
- Literature Review (Brief and focused)
- Identify the GAP
- Propose idea/solution
- Strengthen/Justify the Solution



5

Most likely, the reviewer is looking for these key sentences!

case studies according to the non-parametric Wilcoxon-Mann-Whitney and Friedman statistical significance tests (Coelho, 2018). Notwithstanding the promising potentials, a comprehensive search of the literature reveals that the COA has yet to be applied for the parameter extraction of solar cell models.

In light of the preceding discussions, this study presents a seminal effort to apply the COA to the field of PV cell modelling. To this end, the COA is applied to extract the model parameters of PVcells and modules

Coyote optimization algorithm forthe parameter extraction of photovoltaic cells

Vun Jack Chin[a,b,c,*], Zainal Salam[b,c,*]

[a] School of Electronics and Computer Science, University of Southampton Malaysia, 79200 Iskandar Puteri, Malaysia
[b] Centre of Electrical Energy Systems, School of Electrical Engineering, UniversitiTeknologi Malaysia, Johor Bahru, Malaysia
[c] Institute of Future Energy, UniversitiTeknologi Malaysia, Johor Bahru, Malaysia

6

Another example

Despite its increasing popularity, scientific publications related to IDCCM are very limited. The ones available are mainly focused on laboratory verification of the device characteristics [23–25]. To date, there is an absence of a comprehensive analytical work to characterise the IDCCM performance under different shading conditions. Such analysis is particularly useful during the design stage, as it improves the understanding of the system behaviour prior to installation. Acknowledging this literature gap, this work proposes an analytical method to predict and characterise the performance of the PV system with IDCCM. The analysis is based

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doi: 10.1049/iet-rpg.2019.0188
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Analysis and experimental validation of partial shading mitigation in photovoltaic system using integrated dc–dc converter with maximum power point tracker

Mohd Zulkifli Ramli[1], Zainal Salam[2]

[1]*Faculty of Electrical Engineering, Universiti Teknikal Malaysia Melaka, 76100 Durian Tunggal, Melaka, Malaysia*

7

What will be Covered in this Session?

1) Important content of Method section
2) Presentation of results
3) Writing convincing discussions
4) Writing structured conclusions
5) Brief discussions on Acknowledgment and Referencing
6) Publication Ethics

8

METHODS

9



Purpose of Method Section

1) To describe the IDEA (novelty) of the paper

2) To describe the processes to achieve the outcomes (based on the idea).

10

Describing the idea (Novelty)

- What is the idea?
- Explain how the desired outcome can be achieved.
  - The fundamental **concept/idea** behind the proposed solution/hypothesis
  - The approach: mathematical (analytical), experimental, simulation, survey, interviews, questionnaires, statistical analysis?
- Preliminary proof that the idea works
  - Show analysis, derivation, design or simulation

11

Describing the Processes

- Materials and tools
  - Materials, components, software, equipment used
- Procedures
  - How experiment is carried out?
  - How data is collected?
  - Step-by step

WHAT?

HOW?

Think about recipe for cooking!

12

An excellent Method content

Include sufficient details such that the experiment can be **reproduced**.

Enables an interested reader to replicate your work and obtain same (similar) results.

13

Tips

✓Do not repeat the details of (previously) established methods.

- Use References and Supporting Materials, instead.
- If needed, summary of key ideas is sufficient

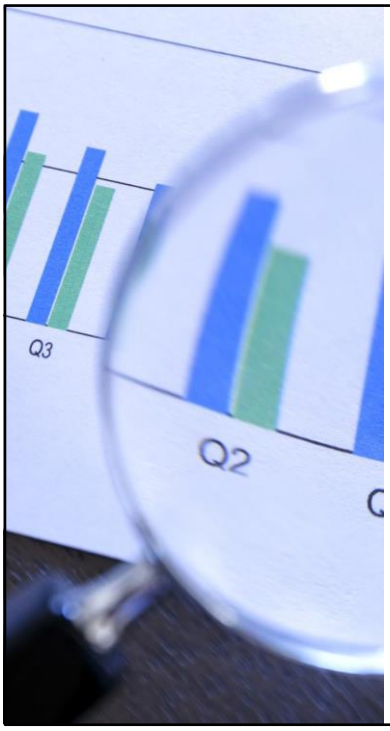


14

Language and Writing Style

- ✓Use SIMPLE **past tense**.
  - was found, was put, were added, etc.
- ✓Use **passive voice**.
  - "The circuit was constructed using…"
- ✓Use **standard** systems for numbers, quantities and nomenclatures.
  - International System of Units (SI)
  - Standard conventions
  - Accepted nomenclatures
  - Try not to introduce your own conventions, nomenclatures etc.

15



RESULTS

16

Purpose of Results

Results are **proof or evidence** of your idea (or solution, or hypothesis)

Thus, the Results Section can be considered as the "**fulfilment" of the promises** made in the Introduction Section

17

Reviewer's Expectation (for high impact journal)



- ✓Findings MUST SHOW **certain amount of improvement** in the field of research.
- ✓Not sufficient to say: "this is an alternative approach/solution" to the problem.
- ✓Note that improvement not necessary in technical terms.
  - It can be in other aspects of the problem, e.g. economics, ergonomics, simplicity, etc. (but select the appropriate journal).

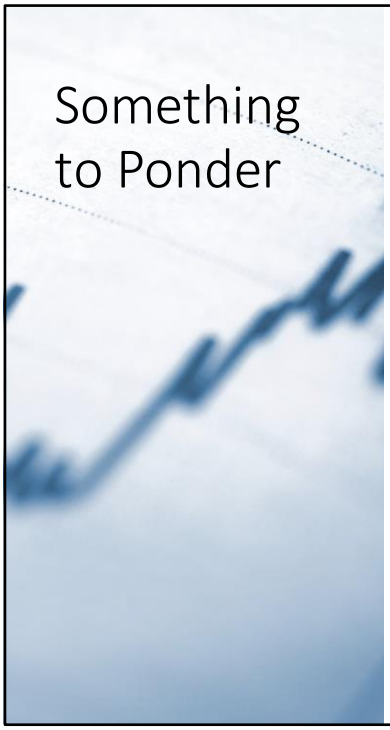
18

Benchmarking

- Some kind of Benchmarking (comparing your result to others) is **expected**.
  - To show you are aware of the competitors
  - To avoid "self-proclamation!"
- If similar work from others is not available, benchmarking, your own data can be used:
  - experimental vs. simulation,
  - simulation vs. analytical
- Its best if comparative work can be shown together (side by-side)

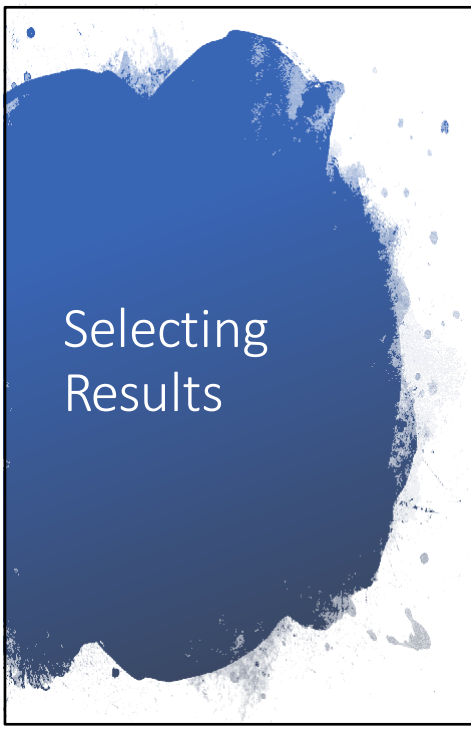
19

Something to Ponder



- The best way to begin writing: look into results available from your research work.
- Compare them with results from other papers
- Study the competitiveness: Identify **rivals**.
- If yours are superior, start the writing
- If inferior, look for different aspects where yours is better.
- Otherwise, back to research.
- Or send manuscript to lower ranked journal/conference

20



Selecting Results

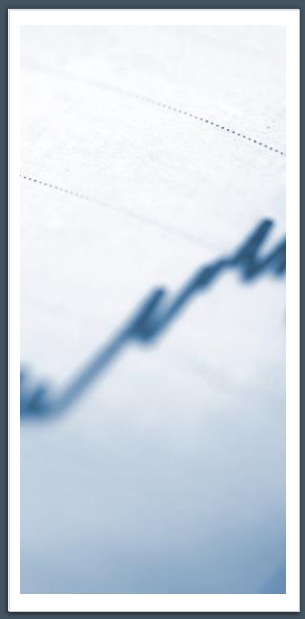
- Select the best results available.
  - Highlight the improvement in strongest possible way
  - Relate that the improvement is due to the proposed idea.
- In-line with the story line
- Results should support idea/hypothesis

21

If there are limitations?

- Do not hide.
- But do not excessively highlight them, either.
- Find excuses for the limitations, if you can.
- Do not be too apologetic or self-degrading

22



Presentation of Results

For effective presentation, raw data (results) need to be transformed into these **forms**:

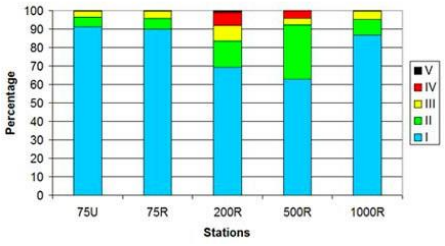
- ✓ Text (Explanation)
- ✓ Graphs
- ✓ Pictures, photographs
- ✓ Oscilogram/Waveforms
- ✓ Tables

✓ Use variety of forms, but do not present same information

23

Table or Chart?

	ECOLOGICAL GROUP				
Station	I	II	III	IV	V
75U	91.3	5.3	3.2	0.2	0.0
75R	89.8	6.1	3.6	0.5	0.0
200R	69.3	14.2	8.6	6.8	1.1
500R	63.0	29.5	3.4	4.2	0.0
1000R	86.7	8.5	4.5	0.2	0.0



Use Table if you wish to stress numbers accurately

Use Figure if you wish to compare gradients, trends, highlight differences.

Note:
Never include vertical lines in a table.

Source: https://www.elsevier.com/connect/11-steps-to-structuring-a-science-paper-editors-will-take-seriously

24

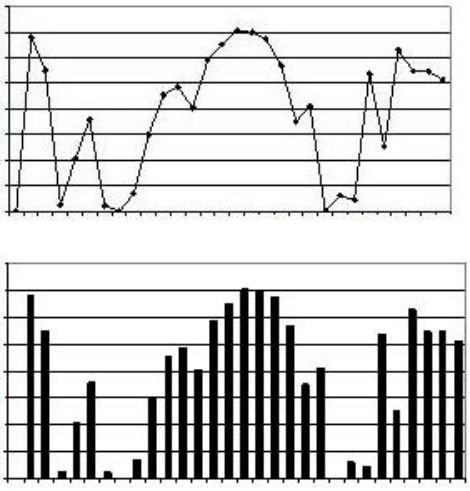
Attention to details

Depth	Gravel	Sand	Mud
5 m	3,42%	81.41%	15,17%
50 m	2,5%	58.42%	39.08%
100 m	0,0%	32.5%	67.5%

Water depth (m)	Gravel (%)	Sand (%)	Mud (%)
5	3.4	81.4	15.2
50	2.5	58.4	39.1
100	0.0	32.5	67.5

25

Common mistake: lines and histograms

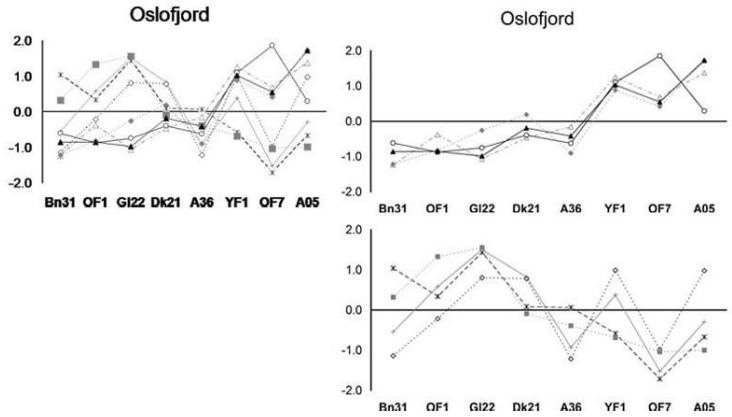


Lines
Joining data only can be used when presenting time series or consecutive samples data. Shows gradient.

Histograms:
When there is no connection between samples. No gradient.

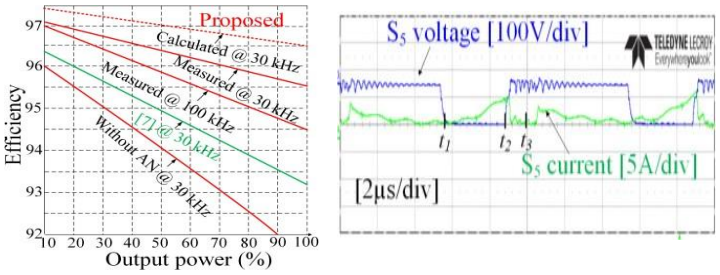
26

Avoid Cluttering



27

Adding Information in Figure



Information can be added in the figure to improve readability and understanding.

Capitalize on the figure CAPTION to clarify important issues related to the figure

28

Other Tips



- **Legends**: must be self-explanatory.
- Don't use common names: x, y etc.
- **Tables**: Never include long boring tables.
- Put them in supplementary material.
- **Photograph**: scale marker, or scale bar, good resolution
  Color figures: For print publication: only when necessary (costly).

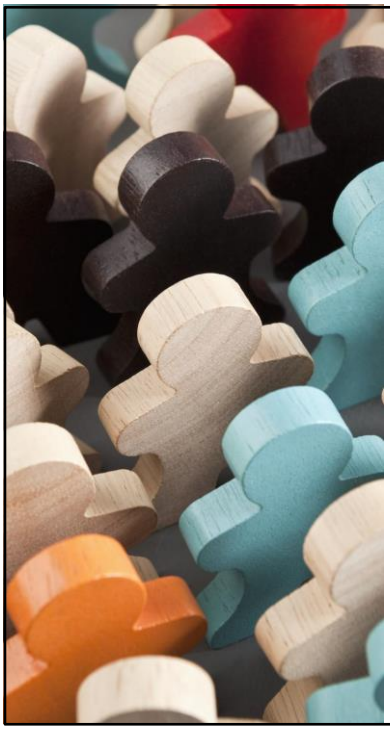
Always check with Guide for Authors(GFA)

29

Notes on Figures and Tables

- Figures must be redone using software such as VISIO.
- Copy-paste does not have the required **quality**.
- Figures, pictures that are taken from other sources: **must be cited**.
- Large portion of materials form other sources: Need **permission** from publisher

30



DISCUSSIONS

31

Purpose of Discussion

- ✓ To **interpret** meaning of results
  - ❖ Giving some sense to to the data.
- ✓ To **compare** or **benchmark** findings with similar work
  - ❖ **Evaluate** performance
  - ❖ Justifying superiority of your work
- ✓ To **relate** the finding with bigger picture (avoiding silo)

32

Steps in Writing Discussions (in order)

1) Begin by **stating the finding**
   - ❖direct, declarative proclamation of the results.
2) Explain the **meaning of the finding**
   - ❖ Describe significance of the data
3) **Relate** to those of similar studies
4) Consider **alternative explanations** of the findings
5) Acknowledge **limitation** and offer excuses, (if any)

33

The results and their importance seem obvious to you, but not for others.

You need to explain them!

34

Example

Fig. 1 indicates that by using a smaller control step-size, the steady-state oscillation is reduced by 50%. This is a significant improvement, because to date, the best achievable results is only 20% [Roland et. al, 2015]. In a practical system, this translates to a lower mechanical vibration that leads to longer shaft life-time. This large reduction is not unexpected, considering the fact that the the system is designed based on optimization of the poles and zeros. Despite the improved steady state oscillation, there is an increase in the overshoot of about 2%. However, this value has no significant effect on the overall transient performance of the system, as concluded by [Walker, 2016].

35

Check, how good is this Discussion?

Begin by stating the finding

Fig. 1 indicates that by using a smaller control step-size, the steady-state oscillation is reduced by 50%.

Relate the findings to those of similar studies

This is a significant improvement, because to date, the best achievable results is only 20% [Roland et. al, 2015].

Explain the meaning of the findings

In a practical system, this translates to a lower mechanical vibration that leads to longer shaft life-time.

36

Consider alternative explanations of the findings

This large reduction is not unexpected, considering the fact that the the system is designed based on optimization of the poles and zeros.

Acknowledge limitation (and offer excuses), if any

Despite the improved steady state oscillation, there is an increase in the overshoot of about 2%. However, this value has no significant effect on the overall transient performance of the system, as concluded by [Walker, 2016].

Excellent discussion!

37

A well-written discussion piece gives an impression that the writer is a 'scholar". Knowledgeable, insightful, and thoughtful.

(in comparison to shallow writing of undergraduate? he he…)

38

What to avoid?

- Statement that goes beyond what the results can support (over-exaggerating, spinning)
- Subjective statements
  - Example: "higher temperature", "lower rate", "highly significant".
  - Quantitative descriptions are preferred: 35°C, error is 0.5%, $p < 0.001$.
- Sudden introduction of new terms or ideas
  - Stick to main ideas presented in introduction
- Speculation?
  - Allowed, but must be based on fact, rather than imagination.
  - Need extra caution, not to violate principles

39



Suggested Writings Styles (for discussion)

40

Explaning the finding

1) The discussions of the results begin with…
2) The data highlights the need for…
3) The finding of the present study suggest (indicates, reveals) that…
4) The results from the study provide the evidence…
5) The single-most surprising result can be seen in Fig. A …
6) Among the plausible (logical, possible) explanation for the variation in the results are …

41

Referring to previous work to support findings

Watch out the keywords in color!!

- The results…
  - ➢ **are consistent** with [1] and suggest that…
  - ➢ **are in agreement** with the data given in [2]…
  - ➢ **are in accord** with the conclusions…
  - ➢ **are in line** with past research work…
  - ➢ of this study **are in keeping (is in agreement)** with the previous observation, which…
  - ➢ further **support** the idea proposed in [3]…

42

Supporting the findings

The findings…

- **agree** with the conclusion of other studies…
- **confirm** the relationship between…
- **match** those observed in earlier studies…
- **corroborate** the outcomes of others…
- **mirror** the previous decisions…
- **support (justify, acknowledge) the** foregoing verdict…

43

When results are contradicting

1) The results are found to be non-compliance to the standard…
2) In contrary, the results turn out to be not as expected…
3) This finding is unexpected, considering that…
4) The results are somewhat surprising, despite the fact that…
5) The results is not as anticipated…

44

More contradictions

6) However, the observed difference between the two samples are not very significant…
7) The discrepancies within the data can be attributed to…
8) The most striking results to emerge from the data is that…
9) Interestingly, the correlation between A and B is not as expected…
10) The non-conformance between the two sets of data requires more in-depth explanation of the experiment procedures…

45

CONCLUSION (the take home message)

46

Conclusions: Important Elements

1) Restate the **aims** of the paper
   - Make sure they are consistent with objectives/hypothesis.
2) Highlight the **findings**
   - Re-enforce the originality
3) Summarize the **achievements**
   - Enhance its significance/importance
4) Suggest **future work** (if any)

47

Restate-ment of aims

(suggested writing)

- This paper has argued that …
- This essay has discussed the reasons for …
- In this investigation, the aim was to assess …
- The main goal of the study was to determine …
- The purpose of the current analysis was to define …

48

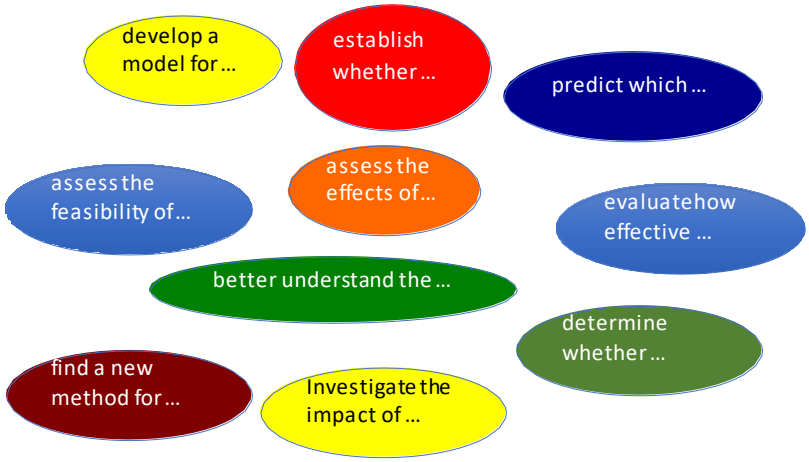
Restate-ment of aims

(suggested writing)

- This project was undertaken to design and evaluate …
- The present enquiry was designed to quantify the effect of …
- The aim of this examination was to investigate the effects of …
- Returning to the question posed at the beginning of this study, it is now possible to state/say/conclude that …

49

Key words to be used



50

Summarizing finding

- This study **has identified** that …
- This research **has found** that …
- This work **indicated** that generally …
- The investigation **has concluded** that …
- The enquiry **has shown** that …
- The analysis **revealed** that the …
- These experiments **confirmed** that …
- The second major findings was that …

51

Summarizing finding

1) The most critical finding from this study is that …
2) The relevance of the work is clearly supported by the current review…
3) The main extracts from the research can be summarized as follows…:
4) From the work, the following conclusions can be made: 1)…, 2)…
5) In summary, the study unveils the followings:…
6) To sum-up the findings….
7) It can be concluded that…

52

Significance of finding

1) The evidences (results, data, observations) from this study suggests (indicate, imply) that…
2) These findings enhance (improve, assist) our understanding (believe, hypothesis) that…
3) This research is envisaged to serve as a base for future studies and …
4) The current findings add to a growing body of literature on…
5) The study has gone some way towards enhancing our understanding of…
6) The present study, however, makes several noteworthy contributions to the field of…

53

Recommendations for further work

1) This work has opened-up up work needs to be done to establish whether …
2) A number of questions that need of additional investigation include…
3) It is recommended that more research to be undertaken in the following areas:
4) Further experimental investigations are needed to estimate …
5) What is now needed is a study involving …
6) Further research might explore/investigate..

54

Recommendations for further work

4) Further research in this field regarding the role of X would be of great help in…
5) Extended investigation into the issue need to be carried out…
8) A number of possible future studies using the same experimental set up are apparent.
9) As an extension to the work, It would be interesting to assess the effects of …

55

Recommendations for further work

10) More information on the issue might reveal greater degree of accuracy on this matter…

11) If the debate is to be moved forward, a better understanding of the issue needs to be developed…

12) These findings provide the following insights for future research …

56

Structured Conclusion: Example

Element	Phrase selected
Restating the aim	The objective of this study was to understand the effects of…
Summarizing the finding	The investigation has concluded that…
Significance of finding	The observations from this study suggests that…
Recommendation for future work	This work has opened-up up several questions that require additional investigation. Additional work must be done to establish whether…

57

Building the Conclusion

The objective of this study was to understand the effects of ozone gas to sanitize the (growth) medium for mushroom cultivation. The investigation has concluded that there is a linear relationship of the amount of ozone (in g/m3) to the time taken for mushroom harvesting. The observations from this study suggests that it is possible to increase the yield of mushroom output by installing an ozone generator to clean the medium before replanting. This work has opened-up up several questions that require further investigation. Additional work must be done to establish whether there is a need for a precise injection of ozone gas in order to reduce its side effects on the farm operator.

58

Do not underestimate the importance of a good conclusion piece!

It's the final message you want to send to the reader!

59

Writing Acknowledgements

- ✓Thanking the people who have contributed to the manuscript but not to the extent where that would justify authorship.
  E.g. people who provide technical technical assistance, editing, proofreading.
- ✓ Funding agencies, grant or fellowship.
  Do not forget to include the grant number or reference.

60

Some Notes on References

- In the text, you must cite all publications on which your work is based.
- Avoid excessive self-citations.
- Avoid excessive citations of publications from same country/region (?).
- Minimize personal communications.
- Do not include:
  - unpublished observations, manuscripts submitted but not yet accepted for publication, publications that are not peer reviewed, articles not published in English.

61



62

Research Misconduct

As defined by Office of Research Integrity, US Dept. of Health and Human Services

- Research misconduct means fabrication, falsification and plagiarism in proposing, performing, or reviewing or reporting research results
- However, honest error or difference in opinion is not included in this definition

Known as FFP

63

Fabrication

- Making up data/results which does not exist and recording them.
- Known also as "*Forging or fraud*"

64

Falsification

- Manipulating research material, processes, result to achieve pre-planned outcomes
- Omitting data such that the results are not accurately represented.

❖ *"Trimming"*: altering data

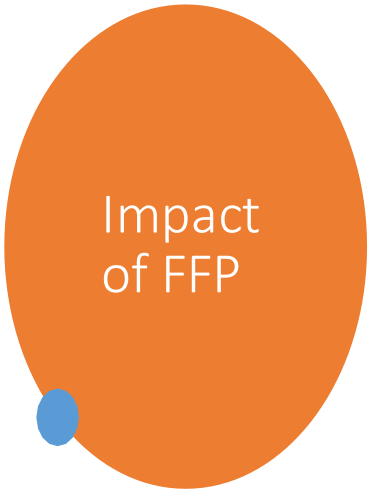
❖ "*Cooking*" : selective reporting of data

65

Plagiarism

Using other person(s) material, ideas, sentences, paragraph, pictures etc. without appropriately acknowledging them.

66



- Manipulate data with intention to that deceive others (cheating). Mislead their colleagues
- Failure to honestly fulfil scientific obligations. Potentially impeding research progress.
- Undermine their own authority and trustworthiness as researchers (lose credibility).

67

Direct Consequences

- Papers **retracted** from journal
- Authors **banned** from publication in the journal (and possibly other journals too).
- Authors are placed on a "**watch list**". Future submissions will be subjected to careful examination

68

Examples of retracted papers

RETRACTED: Fluorescence lifetime increase by introduction of F^- ions in ytterbium-doped TeO_2-based glasses

Journal of Alloys and Compounds, Volume 393, Issues 1-2, 3 May 2005, Pages 279-282

Guonian Wang, Shixun Dai, Junjie Zhang, Shiqing Xu and Zhonghong Jiang

RETRACTED

RETRACTED: Effect of F— ions on spectroscopic properties of Yb^{3+}-doped zinc–tellurite glasses •

Journal of Physics and Chemistry of Solids, Volume 66, Issue 6, June 2005, Pages 1107-1111

Guonian Wang, Junjie Zhang, Shixun Dai, Jianhu Yang and Zhonghong Jiang

From Science@Direct (Elsevier)

69

High Profile Case: Fraud

Disgraced South Korean scientist guilty of fraud over faked stem cell research

A South Korean scientist who falsely claimed to have achieved major breakthroughs in stem cell research has been found guilty of fraud.



Prof Hwang Woo-suk

6:27AM GMT 26 Oct 2009

Hwang Woo-suk, 56, once a scientist with rock-star like status for bringing South Korea to the forefront of stem cell studies, had also been on trial on charges of misusing state funds and violating bioethics laws.

"He was guilty of fabrication," the Seoul court said in a verdict in the trial that stretched more than three years and included painstaking details about the scientific work Hwang and his team had performed at Seoul National University.

70

High profile Case: Plagiarism

Science AAAS

ScienceInsider

Breaking news and analysis from the world of science policy

July 28, 2009

Journal Editor Retracts Paper on Sperm Made From Stem Cells

The paper, published online by ***Stem Cells and Development*** **on 8 July with Karim Nayernia of Newcastle University in the United Kingdom** as the corresponding author, had already received some criticism from other experts; Dr Allan Pacey of the University of Sheffield in the United Kingdom, for example, was quoted by *The Independent* as saying: "As a sperm biologist of 20 years' experience, I am unconvinced from the data presented in this paper that the cells produced ... can be accurately called 'Spermatozoa.' "

The paper's problems soon got much worse. Graham Parker, editor-in-chief of *Stem Cells and Development*, told *Science*Insider that he received an email on 10 July from the editors of another journal, *Biology of Reproduction*, claiming that **two paragraphs from Nayernia paper's introduction were copied without attribution from a 2007 review article** by Makoto Nagano of McGill University in Montreal, Canada, that was published in their journal.

Parker says Nayernia told him the offending text was inserted by a postdoctoral fellow. But Parker says the explanation he received was not consistent with an innocent mistake. "Once I had established that the suggested reason for the text's inclusion was not being substantiated I decided to retract the paper" on 21 July, Parker says.

71

Not worth to gamble your potential for quick fame!

72

Authorhips

73

Who shall qualify as author?

Authorship credit should be based only on

1) Substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;

2) Drafting the article or revising it critically for important intellectual content; and

3) Final approval of the version to be published.

Conditions 1, 2, and 3 must all be met.

74

Authorship Sequence

IEEE TRANSACTIONS ON POWER ELECTRONICS, VOL. 27, NO. 8, AUGUST 2012 3627

An Improved Particle Swarm Optimization (PSO)–Based MPPT for PV With Reduced Steady-State Oscillation

Kashif Ishaque, Zainal Salam, *Member, IEEE*, Muhammad Amjad, and Saad Mekhilef, *Member, IEEE*

First Author: Doing most of the writing/work

Second Author: Supervisor/Second most contributor

Manuscript received September 14, 2011; revised September 21, 2011; accepted January 8, 2012. Date of current version April 20, 2012. Recommended for publication by Associate Editor M. Liserre.

K. Ishaque was with the Universiti Teknologi Malaysia, Johor Bahru 81310, Malaysia. He is now with the Department of Electronics Engineering, Karachi Institute of Economics and Technology, Karachi 75190, Pakistan (e-mail: kashif.ishaque@pafkiet.edu.pk).

Z. Salam (corresponding author) and M. Amjad are with the Universiti Teknologi Malaysia, Johor Bahru 81310, Malaysia (e-mail: zainals@fke.utm.my; Muhammad.Amjad@iub.edu.pk).

S. Mekhilef is with the University of Malaya, Kuala Lumpur 50603, Malaysia (e-mail: saad@um.edu.my).

Color versions of one or more of the figures in this paper are available online at http://ieeexplore.ieee.org.

Digital Object Identifier 10.1109/TPEL.2012.2185713

75

Number of authors?



A physics paper with 5,154 authors has — as far as anyone knows — broken the record for the largest number of contributors to a single research article.

Only the first nine pages in the 33-page article, published on 14 May in *Physical Review Letters*[1], describe the research itself — including references. The other 24 pages list the authors and their institutions.

76



77

Not acceptable

May cause disagreement over rights to publish (among publishers).

Unnecessary duplication of peer review and editing

The paper need to be withdrawn first, then submit to a new journal

Duplicate Submissions

78

In Summary

We have gone in lengthy discussion issues related to **IMRAD** :

1) Writing the Method Section
2) Writing Results Section
3) Writing Discussion
4) Writing Conclusion (Including Structured Conclusion)
5) Some issue related to publication ethics.

79



- zainals@utm.my

80

Introduction to Writing Review Papers

Prof. Dr. Zainal Salam,
Centre of Electrical Energy Systems,
School of Electrical Engineering,
UTM Johor Bahru, Malaysia.

WORKSHOP ON PUBLISHING IN HIGH IMPACT JOURNAL
Session 5: August 12th 2020

1

What will be Covered in this Session?

1) Functions of review paper article (RP)
2) Why write RP?
3) Ingredients of RP
4) Types of RP
5) RP Journals
6) Mechanics of writing RP
7) Example of RP project

2

What is a review paper (RP)?

- A critical and constructive analysis of the literature in a specific field through summary, classification, analysis and comparison
- A scientific text relying on previously published literature or data.
- Normally new data from the author's experiments are not presented.

3



Literature (in context) Peer-reviewed sources in your narrow, selected field of research.

Review means extracting the major content (snapshots) of these sources and try to establish some sort of relationships between them

4

What is the function of a RP?

- A service to the academic community by providing an up-to-date information on a specialized topic.
- Think about scenario of meeting a friend, whom you have not meet for a long time. What is the first thing you do?
- Update what had happened in-between the absence!

5

Benefits of RP

- Improve understanding, build expertise.
- Up-to-date (aware) with development in the respective research field
- Capitalize on information obtain from the extensive literature study.

6

Why should researcher produce RP?

- to identify **patterns and trends**
- to recognize the **research gaps**
- to look for new **research direction**

7

Why should PhD candidate write RP?

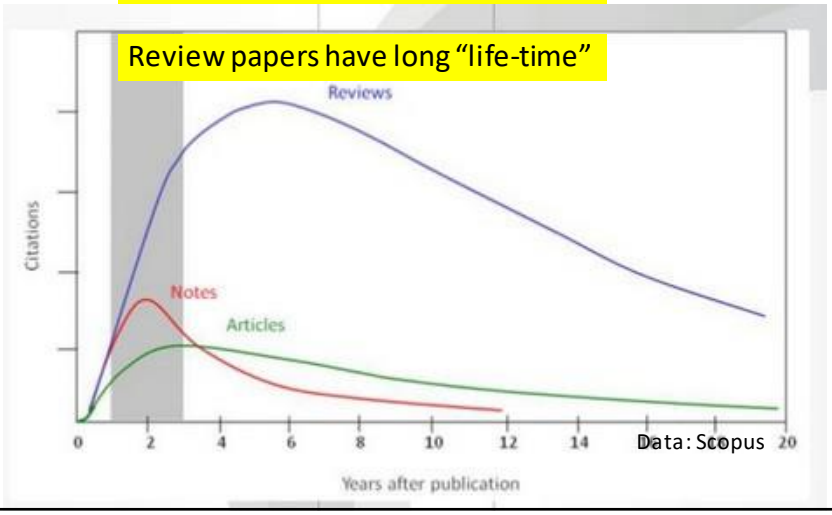
- To instill discipline in organizing and evaluating information
- To formulate hypotheses early
- To improve critical thinking
- The written material form a large part of of the literature chapter of the thesis.

8

Bonus!

Review papers are highly cited!

Review papers have long "life-time"



9

But do not be a review paper specialist and forget about producing original research article!

strike some balance,
remember the latter is your bread and butter

10

What can be be inside RP?

1. Update, summary of literature.
2. Critic, opinion, interpretations.
3. Performance evaluation/comparison.
4. Alternative view which might not be apparent just by reading original research papers (insight).
5. Recommendations, guidelines for future research direction.
6. Verdicts.
7. Conclusions.

11

Important Skills

- Since the review involves large number of sources, only snapshots of the content is possible. Thus, author must acquire two important **skills**:
  - summarizing: giving an overview of the main points of the source.
  - synthesizing: combining number of sources to make an overall point (mainly by utilizing the agreement and contradiction phrases).

12

Types of RP

- Narrative (telling stories)
- Critical Review (providing new evidence on the reviewed work)

13

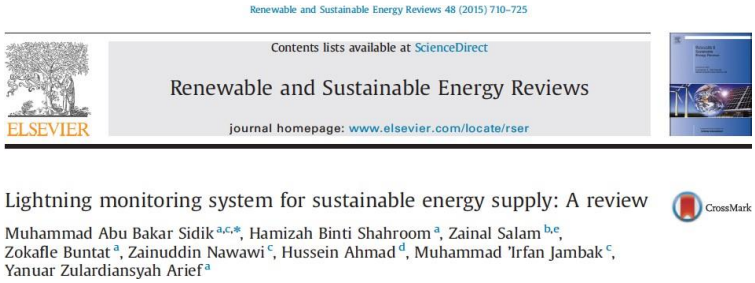
Organization of contents in narrative RP

- ✓ Chronological: timeline, event-based.
- ✓ Advancements of ideas (technologies, techniques).
- ✓ Major authors.
- ✓ Major questions.
- ✓ Geographical.

14

Narrative RP: Chronological

Timeline: Tracking the progress of a field of research over time.



Contents are sequentially arranged based on historical occurrence of event

15

Example of timeline

Year	Authors	Ref	Event
2010	ABCD	[1], [2]	Establish XYZ Theory to solve PQ problem
	DEFG	[3], [4]	Extension of XYZ Theory
2012	HIJK	[5]	improved XYZ Theory
2013	LMNO	[6], [7], [8]	New ideas on PQ solution

Typical titles:

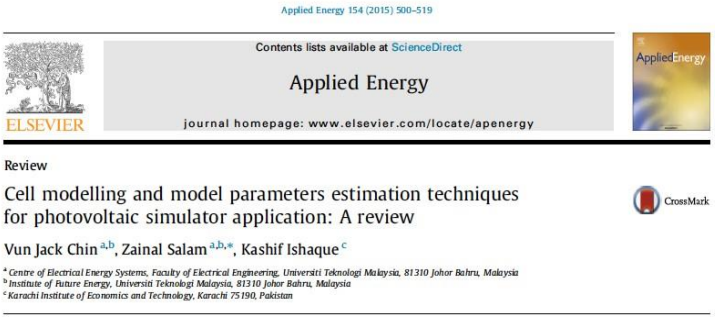
"Recent development on digital control for motor drives: A review"

"Review on the trends of Space Vector Modulation for power converters applications"

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Narrative RP: Advancement in ideas

Advancement in Technology: Review based on the introduction of new technology, up until the present state-of-the art.



Applied Energy 154 (2015) 500–519

Contents lists available at ScienceDirect

Applied Energy

journal homepage: www.elsevier.com/locate/apenergy

Review

Cell modelling and model parameters estimation techniques for photovoltaic simulator application: A review

Vun Jack Chin [a,b], Zainal Salam [a,b,*], Kashif Ishaque [c]

[a] Centre of Electrical Energy Systems, Faculty of Electrical Engineering, Universiti Teknologi Malaysia, 81310 Johor Bahru, Malaysia
[b] Institute of Future Energy, Universiti Teknologi Malaysia, 81310 Johor Bahru, Malaysia
[c] Karachi Institute of Economics and Technology, Karachi 75190, Pakistan

- Investigation is based the advancement in techniques
- normally limited to certain time frame, say last five years

17

Critical Review RP

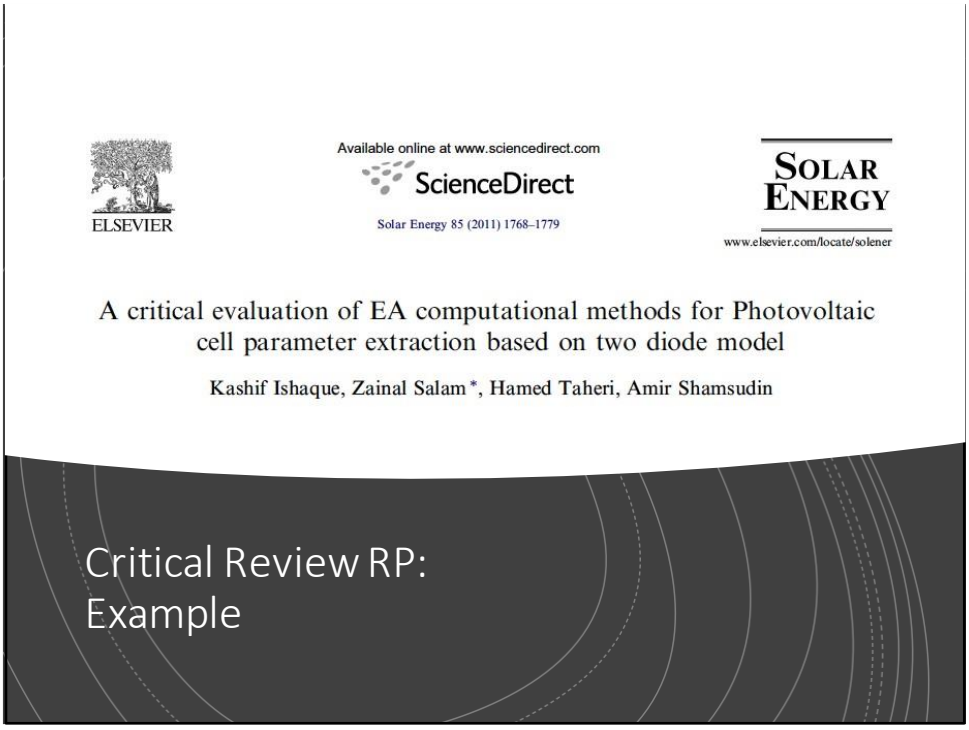
What's the idea?

- Many times, there is a NEED to evaluate the performance of certain methods published in literature.
- However, they are reported using different platforms, scenarios, operational, constraints etc.
- Thus, "apple-to-apple" comparison cannot be made.

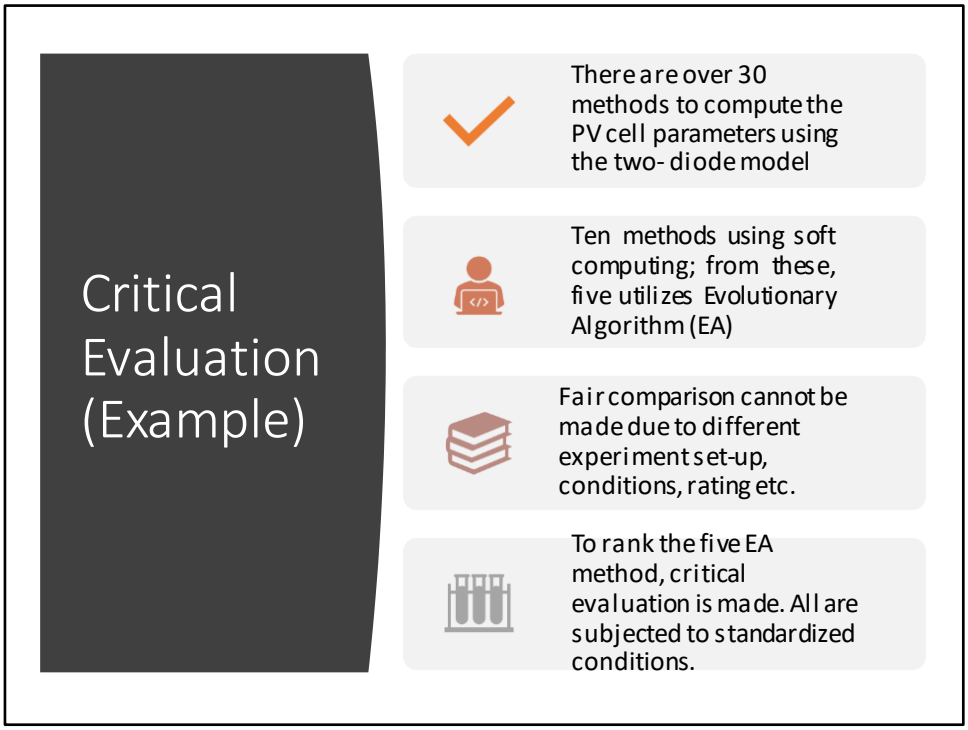
What to be done?

The SELECTED methods are **"re-done"** under standardized conditions.
Thus, make way for a "fair" comparisons/evaluation.

18


ELSEVIER
Available online at www.sciencedirect.com
ScienceDirect
Solar Energy 85 (2011) 1768–1779
SOLAR ENERGY
www.elsevier.com/locate/solener
A critical evaluation of EA computational methods for Photovoltaic cell parameter extraction based on two diode model
Kashif Ishaque, Zainal Salam*, Hamed Taheri, Amir Shamsudin
Critical Review RP: Example

19


Critical Evaluation (Example)
There are over 30 methods to compute the PV cell parameters using the two-diode model
Ten methods using soft computing; from these, five utilizes Evolutionary Algorithm (EA)
Fair comparison cannot be made due to different experiment set-up, conditions, rating etc.
To rank the five EA method, critical evaluation is made. All are subjected to standardized conditions.

20



Critical Review is (somewhat) not a pure RP

Its a mix of review an original research.

This is because the methods that are evaluate are not yours.

However, the data from the "re-do" are original.

21

Expectation of reader/reviewer of High Impact Journal:

Authors of review papers are supposed to be experts in the field.

So, they are expecting a knowledgeable discourse on the issues being discussed

22

Journal selection

- Specialized journals for review papers only
- General Journal
  - Most titles accept RP
  - But, IEEE Transactions normally "reluctant" to accept RP (genuine experts are sought).

23

Nowadays, journals are getting tough on RP!



and those challenges that remain unresolved . We particularly appreciate reviews that provide insights about where the current research is heading and those issues that attract significant research and development in the near and far future. Intending authors must consult the editor Pietro Campana by sending an email to the address pietro.campana@mdh.se including an extended summary (300-400 words) and an outline of the review paper (300-400 words), together with the CV of the corresponding author, which should include a list of publications. The Review Panel of the Editorial Board will evaluate the suitability of the proposal on the review article.

Proposal: extended summary (300-400 words). Will be evaluated.

Corresponding author need to send in CV that includes list of publications

24

Specialized: by invitation only



Impact Factor 2019: 52.758
Citations 2019: 200,014

Journal Scope

Chemical Reviews is one of the most highly regarded and highest-ranked journals covering the general topic of chemistry.

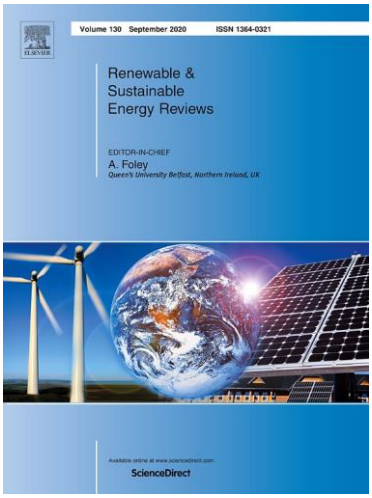
The mission of *Chemical Reviews* is to provide comprehensive, authoritative, critical, and readable reviews of important recent research in organic, inorganic, physical, analytical, theoretical, and biological chemistry.

Very strict selection criteria

- Authors must be well-known in the field.
- Have written extensively on the subject matter
- Proposal (summary of article) is first reviewed.

25

Specialized Review Journal



2019 Impact Factor: 12.10

Anyone can submit manuscript!

26

Mechanics of Writing RP

27

Checklist Before Writing

Perform a comprehensive search.
Questions to be asked.

- ✓How **old** is the latest review paper?
- ✓If recent, any significant progress since then?
- ✓Are there enough **new** material since the last review?.

28

Checklist 2

✓Are there any **similar** review papers?

✓Is exist, is it possible to suggest different aspect (dimension) of the topic?

Example:

Existing:

"A review of MPPT methods for PV systems"

Revised:

"MPPT for PV system: A review on the **economic impact** of the solutions".

29

Checklist (3)

Define your goals.

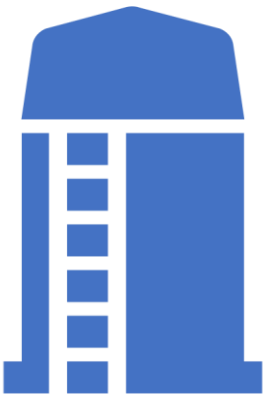
- Set the **boundary** of the paper. Try to **focus.**
- Starting from a wide topic, **narrow it** until 50-100 important papers are reviewed. That should be a good starting point.
- It is too easy to **sprawl** as you cover more and more tangentially related materials.

Example:

Original: "A review of digital control for dc-dc power converter"

Revised: "A review of artificial intelligence digital control for dc-dc power converter" (somewhat more focused)

30



Structure of RP

- Title
- Abstract
- Keywords
- Introduction
- **The review material itself**
- **Discussion**
- Conclusion
- References

31

Title

Must contain the word review (or similar)

32

Title: Example

Renewable and Sustainable Energy Reviews 69 (2017) 1243–1257

Contents lists available at ScienceDirect

Renewable and Sustainable Energy Reviews

journal homepage: www.elsevier.com/locate/rser

Integrated photovoltaic-grid dc fast charging system for electric vehicle: A review of the architecture and control

Ratil H. Ashique[a,b], Zainal Salam[a,b,c,*], Mohd Junaidi Bin Abdul Aziz[b,d], Abdul Rauf Bhatti[a,b,e]

IET Renewable Power Generation

Recent Developments of MPPT Techniques for PV Systems under Partial Shading Conditions: ACritical Review and Performance Evaluation

Mostefa Kermadi[1*], Zainal Salam[2], Ali M. Eltamaly[3,4], Jubaer Ahmed[5], Saad Mekhilef[1,6*], Cherif Larbes[7], El Madjid Berkouk[8].

33

Abstract

Not as structured as original research article, but these elements can be included

- State what is the review all about (This paper reviews…)
- What are the main scopes/areas it covers within the review subject
- Why the review is needed? What's special (originality, uniqueness) about this review? (compared to others)
- What is YOUR contribution in relation the the review materials.
- Who will be benefit from this review?

34

Example



Contents lists available at ScienceDirect

Applied Energy

journal homepage: www.elsevier.com/locate/apenerg

Review

Cell modelling and model parameters estimation techniques for photovoltaic simulator application: A review

Vun Jack Chin [a,b], Zainal Salam [a,b,⇑], Kashif Ishaque [c]

35

What the review is all about?

What's special?

What's your contribution?

Who benefits?

This review paper compiles, summarizes and deliberates about thirty important works on the modelling and parameters estimation of photovoltaic (PV) cells that are used for PV simulation. It provides the broad concepts, features, governing equations, as well as highlights the advantages and drawbacks of three main PV cell models, namely the single diode R_S, R_P and the two diode. Since the literature on PV simulation is very large and dispersed, an effort to systematically gather, review and manage all these information into a single cohesive and comprehensive document is crucial. New entrants in this research field may find it difficult to piece the information together and to understand the bigger picture; this paper should become a convenient one-stop reference to guide them to achieve that goal. It is envisaged that this work will be also useful for more experienced researchers and practitioners to update their knowledge in the latest development in the area of PV modelling and simulation.

36

Contents lists available at ScienceDirect

Renewable and Sustainable Energy Reviews

journal homepage: www.elsevier.com/locate/rser

Electric vehicles charging using photovoltaic: Status and technological review

Abdul Rauf Bhatti [a,d], Zainal Salam [a,c,*], Mohd Junaidi Bin Abdul Aziz [b], Kong Pui Yee [b], Ratil H. Ashique [a]

What's special?

What's your contribution?

Who benefits?

Despite the numerous review articles published on EV charging using the utility (grid) electrical supply, so far, none has given sufficient emphasis on the PV charger. With the growing interest in this subject, this review paper summarizes and update all the related aspects on PV–EV charging, which include the power converter topologies, charging mechanisms and control for both PV–grid and PV-standalone/hybrid systems. In addition, the future outlook and the challenges that face this technology are highlighted. It is envisaged that the information gathered in this paper will be a valuable one-stop source of information for researchers working in this topic.

37

energies

MDPI

Review

Hardware Approach to Mitigate the Effects of Module Mismatch in a Grid-connected Photovoltaic System: A Review

Hussain Bassi [1,2], Zainal Salam [3,*], Mohd Zulkifli Ramli [4], Hatem Sindi [1,5] and Muhyaddin Rawa [1,5]

Why the review is needed? What's special (originality, uniqueness) about this review? (compared to others)

Notwithstanding the growing interest in this topic, review papers that provide updates on the technological developments of the three main hardware solutions, namely micro inverter, DC power optimizer, and energy recovery circuits, are lacking. This is in contrast to software solutions, which have had a considerable number of reputable reviews.

38

Renewable and Sustainable Energy Reviews 69 (2017) 1243–1257

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journal homepage: www.elsevier.com/locate/rser

Integrated photovoltaic-grid dc fast charging system for electric vehicle: A review of the architecture and control

Ratil H. Ashique[a,b], Zainal Salam[a,b,c,*], Mohd Junaidi Bin Abdul Aziz[b,d], Abdul Rauf Bhatti[a,b,e]

What's special (originality, uniqueness) about this review? (compared to others)

This review paper presents important aspects of a PV-grid integrated dc fast charger—with a special focus on the charging system components, architecture, operational modes, and control. These include the interaction between the PV power source, grid electricity, energy storage unit (ESU) and power electronics for the chargers.

39

Introduction

- A bit of background.
- Try to convince, why this review is needed.
- Contribution of review
- Benefits/Benefactors

40

Why the review is needed.

~~Examples~~



41

IET Renewable Power Generation

Recent Developments of MPPT Techniques for PV Systems under Partial Shading Conditions: A Critical Review and Performance Evaluation

Mostefa Kermadi[1*], Zainal Salam[2], Ali M. Eltamaly[3,4], Jubaer Ahmed[5], Saad Mekhilef[1,6*], Cherif Larbes[7], El Madjid Berkouk[8].

Table I summarizes the latest and comprehensive GMPPT review papers published in the last five years. As can be observed, the focus of previous work is on soft computing and hybrid MPPT approaches. Clearly, less attention is given to developments in conventional GMPPT methods, i.e., 0.8Voc and the skipping mechanisms. Furthermore, a thorough study of the literature reveals that none has provided a fair evaluation to determine the comparative performances of various GMPPT approaches. On the basis of these discussions, this work is conducted to fulfill two main research gaps. First…

42

Contents lists available at ScienceDirect

Renewable and Sustainable Energy Reviews

journal homepage: www.elsevier.com/locate/rser

Electric vehicles charging using photovoltaic: Status and technological review

Abdul Rauf Bhatti [a,d], Zainal Salam [a,c,n], Mohd Junaidi Bin Abdul Aziz [b], Kong Pui Yee [b], Ratil H. Ashique [a]

Numerous works have been published on the EV charging using grid, including several excellent review papers, for example [12, 13]. However, so far there is no review that compiles and updates the works related to charging using solar energy—despite the growing interest in this topic. From the survey, it is found that the number of papers on this issue has risen significantly over the last decade, hence the impetus for this review.

43

Contents lists available at ScienceDirect

Applied Energy

journal homepage: www.elsevier.com/locate/apenergy

Review

Cell modelling and model parameters estimation techniques for photovoltaic simulator application: A review

Vun Jack Chin [a,b], Zainal Salam [a,b,†], Kashif Ishaque [c]

The number of scholarly publications related to PV modelling are dispersed in numerous journals, conference proceedings, standards and other classified/non-classified documents. **So far, there is no effort to systematically gather and to manage all these information into a cohesive and comprehensive manner, such that it may become a one-stop reference point for researchers.** Thus, an effort to conduct a comprehensive as well as broad review seems to be overdue.

Hence this work is carried out to compile, review and discuss the works on PV modelling and parameters estimation methods. It gathers approximately seventy important papers—particularly the ones published within the last decade or so, by providing the broad concepts, features, governing equations, as well as highlights their respective advantages and drawbacks.

44

Kashif Ishaque, **Zainal Salam**, "A Review of Maximum Power Point Tracking Techniques for PV System for Uniform Insolation and Partial Shadings Conditions", *Renewable & Sustainable Energy Review*, 19 (2013), pp. 475-488.

In a short span of time, the body of knowledge related to this subject has grown tremendously. Clearly, it is difficult to keep track with the literatures unless a single reference with concise and accurate summaries of the various MPPT schemes is made available. The most recent reviews [4,5] are carried out over five years ago, and obviously progress since then has been considerable. Therefore, it seems appropriate at this juncture to provide a comprehensive and up to date review of the subject.

45

Suggested writing style

1. So far (thus far), there has been very few work that review the….
2. In addition, no paper has comprehensively review…
3. Despite its obvious importance, unexpectedly, there is an absence of a thorough review on the…
4. Surprisingly, the previous reviews have considered such factors and it is unclear to what extent …
5. In contrast to the previous reviews, there is much less information about effects of …

46

Suggested writing style (2)

6. A systematic review of the subject is crucial in understanding the…
7. Notwithstanding the importance of the subject, there appears to be a lack of a comprehensive review of…
8. Although there exists several excellent review papers on the subject, the focus is not on…
9. Due to the importance of the work, and the lack of a critical review on it, it is high time for a comprehensive…

47

Suggested writing style (3)

5) Although these exist a number of review papers in this field, **they are not comprehensive**…

6) The review undertaken by [1] is rather superficial, and it is unclear to what extent … A **more critical evaluation** is required to assess…

10) In contrast to the previous review paper, this work will focus on aspects which are not considered…

48

Suggested writing style (4)

11) The last review on this subject was twenty years ago. Since then, there has been tremendous development… Therefore, **it is high time for an update…**

12) Since the information on the subject is scattered in various journals, conference proceedings and patents, **it is convenient to gather them in a single document**. Hence this review.

49

Discussions

- RP is **not only presenting a summary** of the review material.
- You must go **beyond that**
- Need to **analyze, synthesize, and interpret** the information in some meaningful way.

50

Something from your own pocket! (as an expert)

- Able to use your own expert judgment on "controversial" points.
- Provides insights, opinions, viewpoints, elaboration based on experience and wide-ranging knowledge.
- Offers healthy suggestions.
- Provides due criticism.
- Able to carry out independent performance evaluation

51

Something from your own pocket! (beyond the sources)

- Explains phenomena which are not obvious (not said in the sources).
- Shows relevance and significance of issues in different context and perspective
- Offers new or fresh explanations for discrepancies

52

Something from your own pocket (predictor)

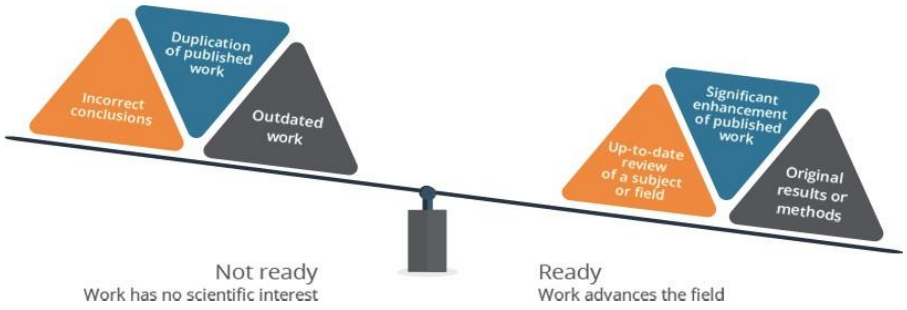
- Future outlook
- Prospects
- Ways forward
- Recommendations
- Directions.
- Opportunities
- Stumbling blocks
- Challenges

53

Example of a review paper project

54

Ready to Write?



55

Invite additional co-authors?

- My believe: YES.
- Benefit: new data, "insider info", fresh views, alternative opinions, professional relationships, new opportunities (later).
- Be open to share. Remember, this is a review. You are not giving anything original to others.
- But, make sure contributor/contributions are identified.

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My latest RP

IET Renewable Power Generation

Recent Developments of MPPT Techniques for PV Systems under Partial Shading Conditions: ACritical Review and Performance Evaluation

Mostefa Kermadi[1*], Zainal Salam[2], Ali M. Eltamaly[3,4], Jubaer Ahmed[5], Saad Mekhilef[1,6*], Cherif Larbes[7], El Madjid Berkouk[8].

[1] Power Electronics and Renewable Energy Research Laboratory (PEARL), University of Malaya, Kuala Lumpur, Malaysia.
[2] Center of Electrical Energy System (CEES), School of Electrical Engineering, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
[3] Sustainable Energy Technologies Centre, College of Engineering, King Saud University, Riyadh, Saudi Arabia.
[4] Electrical Engineering Department, College of Engineering, Mansoura University, Mansoura, Egypt.
[5] Faculty of Engineering, Computing and Science, Swinburne University of Technology Sarawak, Kuching, Malaysia.
[6] School of Software and Electrical Engineering, Swinburne University of Technology, Victoria, Australia.
[7] Laboratory of communication devices and photovoltaic conversion (LDCCP), National Polytechnic School (ENP), Algiers, Algeria.
[8] Laboratory of Process Control (LCP), National Polytechnic School (ENP), Algiers, Algeria.

Main author is Postdoc, but he pulled-in six authors from four countries.
Four of the are professor!

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Consider writing RP as a "Project"

- Organize materials (sources), team.
- Synergize.
- Plan a time-frame. Work around it

"If You Fail to Plan, You Plan to Fail"

58

Planning the paper

- ❑ Conduct brain-storming session with all authors
- ❑ Put the ideas in power point form (not full sentences).
- ❑ Once agreed, build a framework of the article
- ❑ Decide **who does what!**

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Paper framework (compre-hensive ToC/outlines)

- ✓ What is the **main theme** of the review.
- ✓ Why the review is needed.
- ✓ What is the contribution of the review (compared to previous)
- ✓ What are the important points for each section
- ✓ Determine what diagrams, equations, tables, pictures, graphs to include
- ✓ Estimate how much space needed for each section

60

Example

Title: Electric Vehicles Charging using Photovoltaic: Status and technological review
Authors: Rauf Bhatti (RB), Zainal Salam (ZS), Junaidi Aziz (JA) , Pui Yee Kong (YK)
Target date of submission: October 2014.

Article type: Review Paper
Target journal:
Primary: Renewable Sustainable Energy Review (Q1; 5.6 IF)
Secondary: Applied Energy, Q1 (5.4 IF)
Estimated length:
10 pages (final format, without reference),12 Diagrams,
6 Tables, 120 references

61

1.0 Introduction (ZS)
Future direction of auto industry; Environmental damage due to ICE (internal combustion engine); Development of EV by major auto companies; Ideas of charging; prospects of PV charging.

Focus: to review the technology of charging, with emphasis on solar PV.
Novelty: So far, no recent review paper on similar topic; latest was ten years ago with limited coverage on PV; many developments have taken place since then.
Diagram: None
Estimated length: 1 page

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2.0 General PV system (ZS)
Structure of PV system in general, MPPT, I-V curve to show relationship P, I, V, G
Table: Example picture, I-V, P-V curve, model of cell;
Diagram: None
Estimated length: 1.5 page

3.0 Background on EV (JA)
General concept; Three main types of EV: (1) directly powered from external power sources, (2) powered by stored electricity originally from external power source, (3) powered by an on-board electrical generator (ICE).
Diagram: Example picture of (1)-(3).
Table: Types and ratings of commercial EV
Estimated length: 2 pages

63

4.0 Electric Vehicle (EV)/Hybrid plug-in EV (HPEV) (JA)
Definition of EV/HEV/PHEV, Categorization, Block diagram of EV components and system, Explain functionality of each type;
Diagram: 1. Example of PV car structure;
Table: 1. List of the current manufactures, power range, battery capacity, voltage, charging methods
Estimated length: 2 pages

5.0 EV Charging Methods (YK)
Definition of EV charging; Three phase AC-DC, Single phase AC-DC, On board, Off board, Fast charger, Opportunity charging, Standards.
Diagram: 1. Off-board, 2. on-board charging block diagram
Table: 1. Charging power levels for different car.
Table: 2. International Charging Codes and Standards for Ev
Estimated length: 3 pages.

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6.0 PV charging of EV (RB)
Different PV charging methods; Direct DC-DC charging using PV only; Grid + PV charging; Charging of EV using PV; controlled system to charge EV from hybrid RE sources (PV, wind, Grid); Optimization techniques, energy management;
Diagram: 1. Charging modes (5 sets),
Diagram: 2. Control structure PV station, Battery-wind hybrid
Table: Power ratings of available PV charging station
Estimated length: 3 pages

7.0 Discussions (RB)
Other new concepts: Embedded cells on EV body for PV (futuristic); Battery swapping; Chassis swapping - batteries, electric motor and wheels.
Diagram: None
Table: Comparison table for all types of PV charging
Estimated length: 1 page

65

- Conclusion (ZS)
- Abstract (ZS)
- References (RB)
  - 100-120
  - At least 10-15 from RSER or APEN
  - At least 5-10% from our previous paper
- Initial proof-reading: ZS
- Final proof-reading: external

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Outcome

Renewable and Sustainable Energy Reviews 54 (2016) 34–47

Contents lists available at ScienceDirect

Renewable and Sustainable Energy Reviews

journal homepage: www.elsevier.com/locate/rser



Electric vehicles charging using photovoltaic: Status and technological review

Abdul Rauf Bhatti [a,d], Zainal Salam [a,c,*], Mohd Junaidi Bin Abdul Aziz [b], Kong Pui Yee [b], Ratil H. Ashique [a]

[a] Centre of Electrical Energy Systems (CEES), Universiti Teknologi Malaysia (UTM), 81310 Johor Bahru, Johor, Malaysia
[b] Power Electronics and Drives Research Group, Universiti Teknologi Malaysia (UTM), 81310 Johor Bahru, Johor, Malaysia
[c] Insitute of Future Energy, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia
[d] Department of Electrical Engineering, Government College University Faisalabad, Pakistan

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• zainals@utm.my

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EDITORIAL PROCESSES, HANDLING REVIEWERS' COMMENTS AND WHY PAPERS ARE REJECTED

Prof. Dr. Zainal Salam,
Centre of Electrical Energy Systems,
School of Electrical Engineering,
UTM Johor Bahru, Malaysia.

WORKSHOP ON PUBLISHING IN HIGH IMPACT JOURNAL

Session 6: August 12th 2020

1

EDITORIAL PROCESSES

2

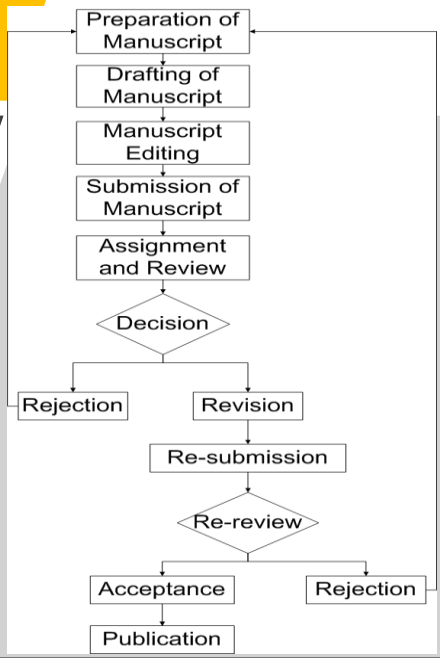
What is "Peer Review"?

- ✓ An evaluation of the manuscript for competence, significance and originality by qualified expert in the same field
- ✓ All GOOD journals are peer-reviewed by at least two or more expert.
- ✓ Normally IEEE has three or more

Peer review is a process

3

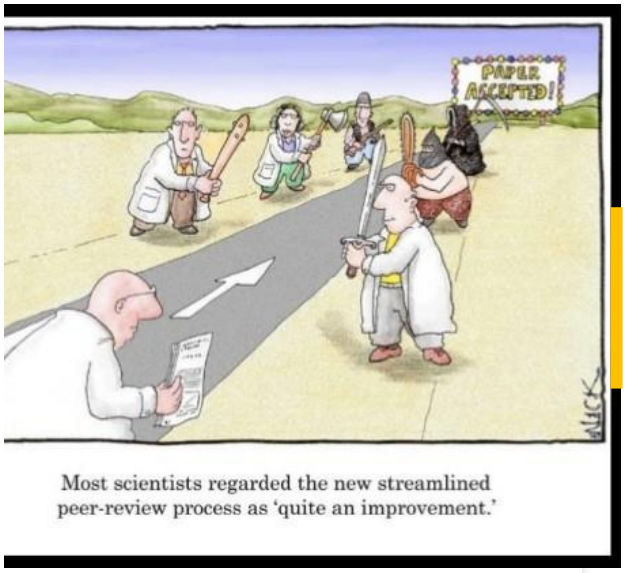
Process Flow



Nowadays, most journal practice "pre-editorial" process (screening:

Letter to Editor is now mandatory for many journal:
Main question: Why your paper should be considered for review?

4



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

Review Aim?

5

From the mouth of the expert himself

What is expected from top journals?

1. Papers that report original and significant finding that are likely to be of interest to a broad spectrum of its readers
2. Papers that are well-organized and well-written, with clear statements regarding how the findings relate to and advance the understanding/development of the subject.
3. Papers that are concise, yet complete in their presentation of findings.

Leonard V. Interrante,
Editor-in-Chief,
Chemistry of Materials.
Presented at the Symposium on Scientific Publishing,
ACS National Meeting, Atlanta, GA March 2006

6

What the Reviewer is looking for?

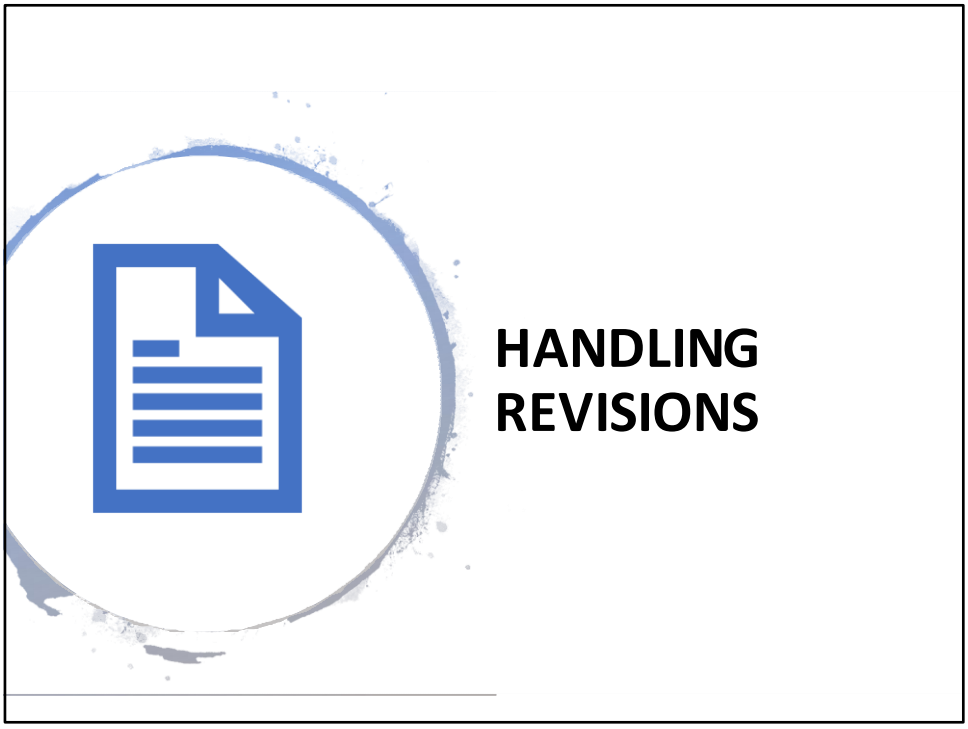
- ✓ **Originality**
- ✓ **Contribution**
- ✓ Well-organized
- ✓ Demonstrate the finding advances knowledge
- ✓ Concise
- ✓ Complete
- ✓ Well-written

7

Well-organized and well-written mean

- ✓ Methods: can it be replicated?
- ✓ Results: Adequate, correct, accurate?
- ✓ Discussion: relevant, in-depth, has insight?
- ✓ Figures, tables: quality ok?
- ✓ Conclusions: supported by the data?
- ✓ References: New, important, Relevant?

8



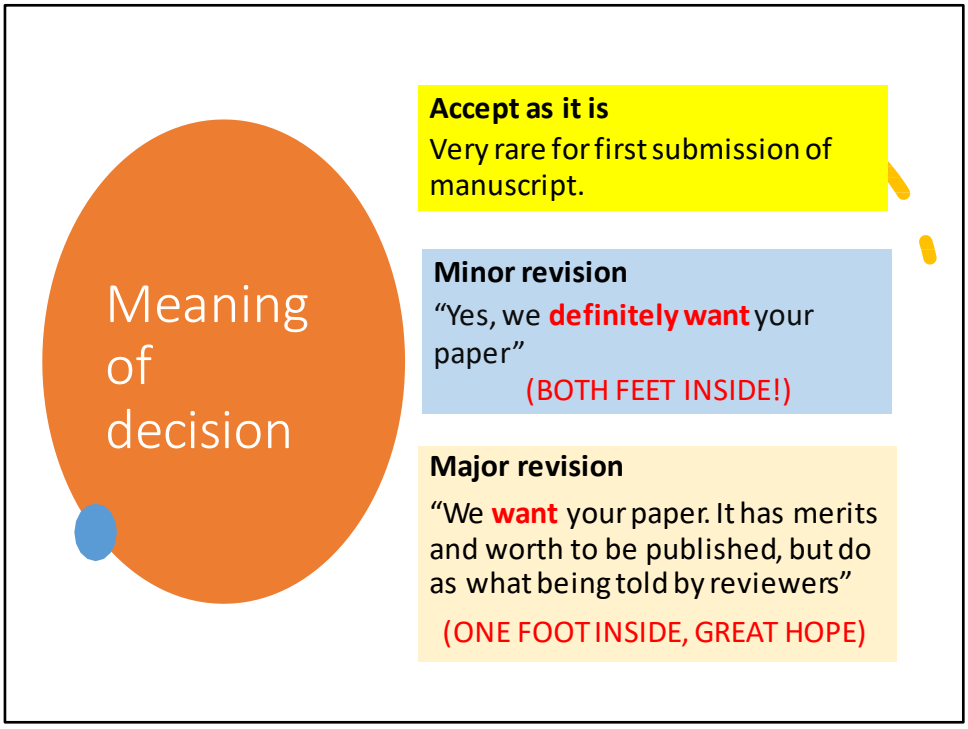
9

Recommendations and Decision

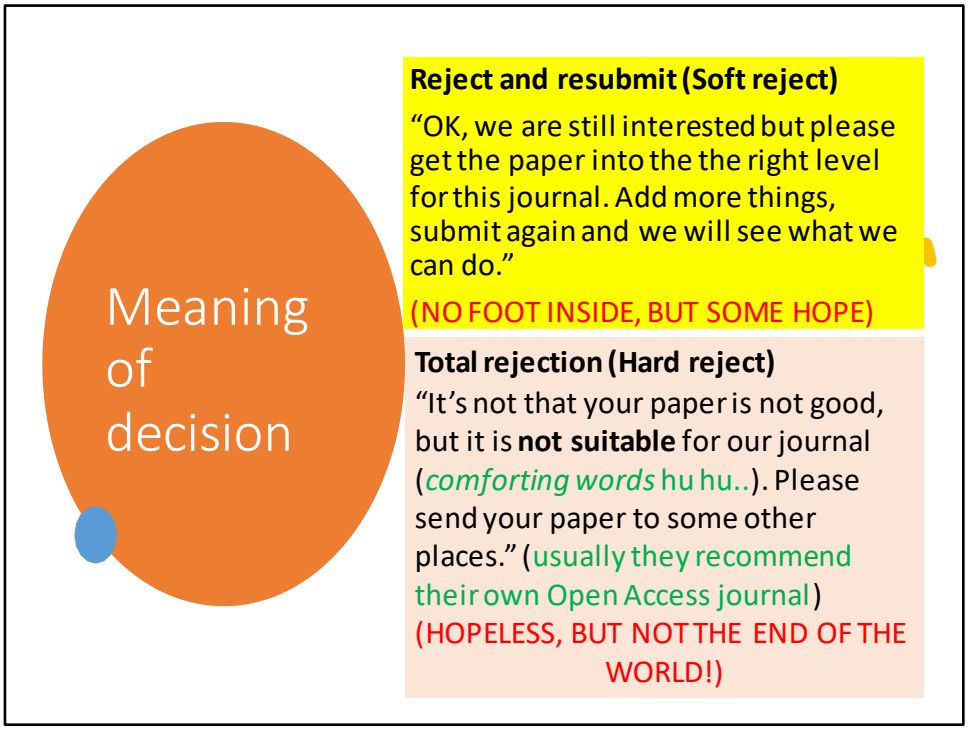


- Once sufficient reviews are returned, Editor will write **recommendations** to the Editor-in-Chief (weighted based on the reviewers' **comments)**.
- The Editor-in-Chief communicates **decision** directly to authors (via e-mail)
- The decision can be:
  - Accept, Minor Correction, Major Correction, Reject and Resubmit, Total Reject.

10


Meaning of decision
Accept as it is
Very rare for first submission of manuscript.
Minor revision
"Yes, we definitely want your paper"
(BOTH FEET INSIDE!)
Major revision
"We want your paper. It has merits and worth to be published, but do as what being told by reviewers"
(ONE FOOT INSIDE, GREAT HOPE)

11


Meaning of decision
Reject and resubmit (Soft reject)
"OK, we are still interested but please get the paper into the the right level for this journal. Add more things, submit again and we will see what we can do."
(NO FOOT INSIDE, BUT SOME HOPE)
Total rejection (Hard reject)
"It's not that your paper is not good, but it is not suitable for our journal (comforting words hu hu..). Please send your paper to some other places." (usually they recommend their own Open Access journal)
(HOPELESS, BUT NOT THE END OF THE WORLD!)

12

SO, NO MANUSCRIPT SHOULD BE WASTED.

THERE IS A JOURNAL OUT THERE THAT MAY BE WILLING TO ACCEPT IT (ONE DAY)!



13

What to do when receiving decision for revisions

- Don't be too emotional!
- Read the comments carefully.
- Try to understand what are the issues/comments raised.
- Think what the reviewer really want you to do.
- Sometimes they are not as difficult as you first thought
- But at times, they can be confusing.
- Speak to your co-authors.

14

Responding to Comments

- Acknowledge that the comment is VALID
- Provide a point-to-point response
  - Give clear answer
  - Indicate changes made in the manuscript article (highlight).
- If you decide to rebut (challenge):
  - Justify your arguments.
  - Cite established reference to support your case.

***To do nothing* is NOT an option**

15

Be diplomatic when responding (to harsh criticism)

- Don't start argument
- Debate will prolong revisions (Rev 2, 3 etc.)
- Just state the facts as best as you can
- Never question the reviewer's integrity
  - "We are of the opinion that the reviewer is not thorough in reading our paper…"
  - " The reviewer does not seem to understand the subject…"

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Give some respect ..lah

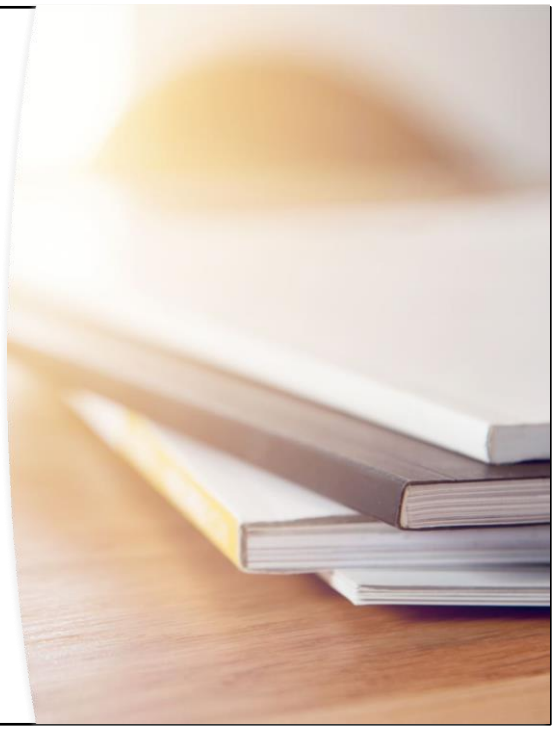
- Consider the reviewer did a favor to read your manuscript for FREE.
  - "First, we would like to thank the reviewers for their meticulous effort in reading our paper to improve its readability…"
  - "We appreciate the comments made by the reviewer…"
- **But don't OVERDO the praises!**
- Be polite in your answers even if you disagree. Hide your arrogance.

17

REMEMBER THIS (UNFORTUNATE) GOLDEN RULE:
EDITOR BELIEVES THE REVIEWER MORE THAN YOU !
(no matter how correct you are)

18

WHY PAPERS ARE REJECTED?



19

Don't worry about rejection…

Nobel Prize Winners had their papers rejected too!



20

Main Reason: Novelty not clearly mentioned

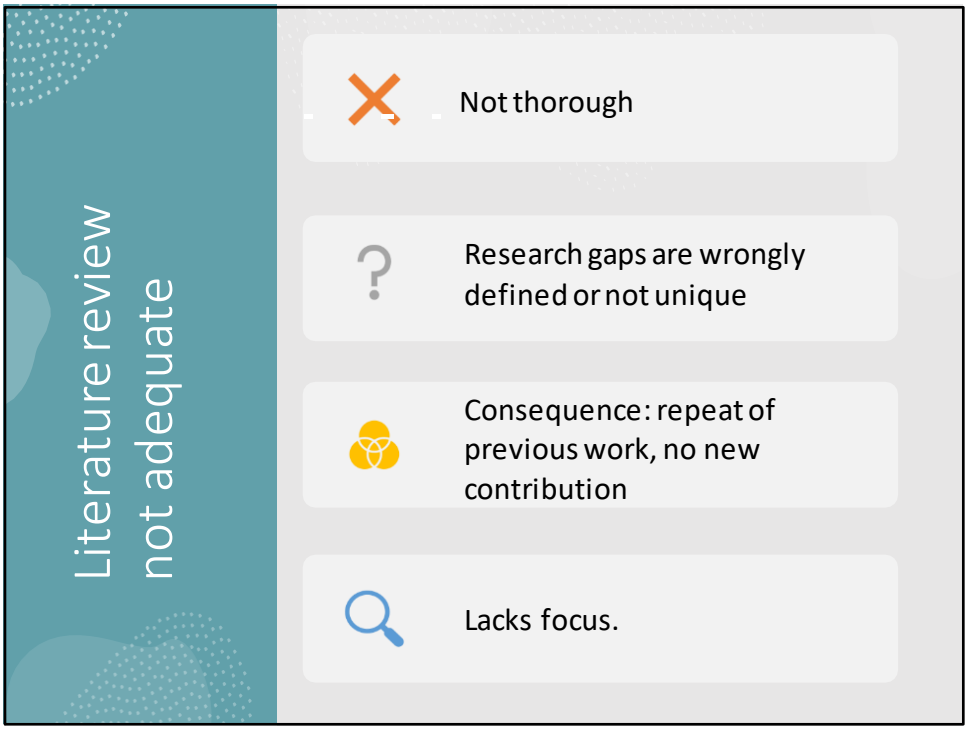
- Statement of novelty **(idea)** is unclear (vague).
- The specialty **(merit)** is not mentioned.
- The principle **(how)** is not explained.
- The difference **(uniqueness)** to other work is not shown.

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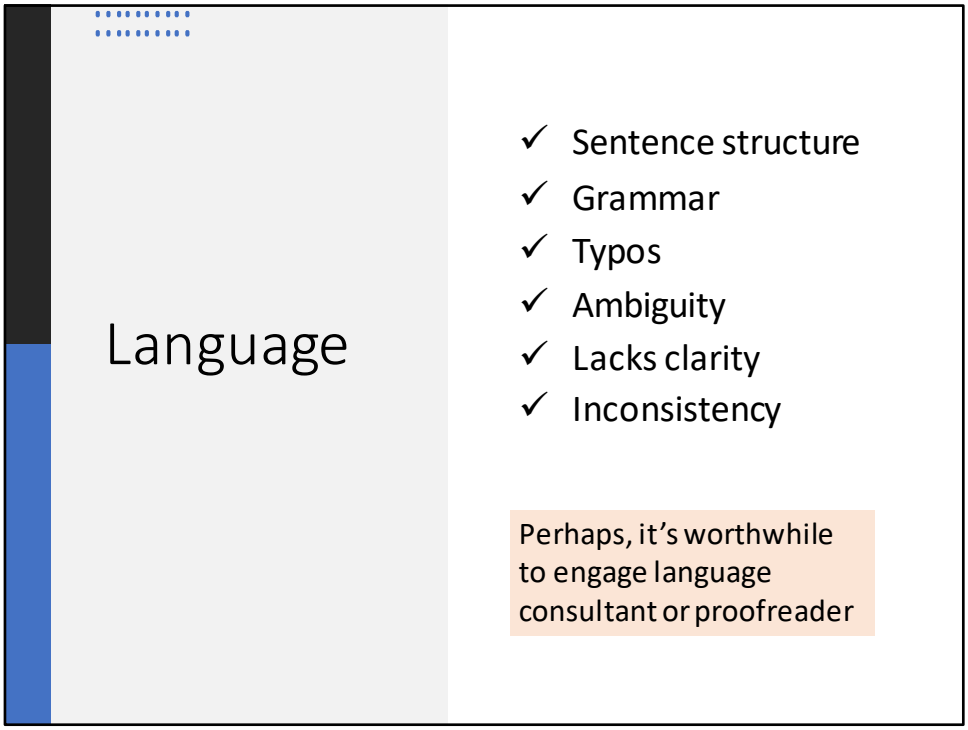
Second main reason: contribution is not sufficient (very incremental)



22


Literature review not adequate
Not thorough
Research gaps are wrongly defined or not unique
Consequence: repeat of previous work, no new contribution
Lacks focus.

23


Language
✓ Sentence structure
✓ Grammar
✓ Typos
✓ Ambiguity
✓ Lacks clarity
✓ Inconsistency
Perhaps, it's worthwhile to engage language consultant or proofreader

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Other reasons

- ✓ Plagiarism (easily caught)
- ✓ Insufficient evidence for the claims made.
- ✓ Too many subjective statements.
- ✓ Figures, graph, tables not clear.
- ✓ Dismissive statement (harsh criticism).
- ✓ Improper citing.
- ✓ Excessive self glorification.
- ✓ Over criticizing (putting down) others.
- ✓ Arrogance

25

Unfortunate reasons

- Reviewer's incompetency or lack of understanding in the subject (can complain, but good luck!)
- Reviewer from rival (competing) group.

26

Clarity in writing

- The material is already difficult enough to understand. Don't let reviewers scratch their head to figure out what you're trying to say!
- They are not engaged to correct your manuscript.
- Remember, reviewers cannot read your mind. They can only read what you have written.
- Editors and reviewers are all busy scientists, just like you. Make things easy for them.

Revise, revise, revise 10 X

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My final two cents advice

Cherish (value) your own work!

Others will value it too.

Best wishes in your next journal writing project!

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zainals@utm.my

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