## Supporting Material of Workshop on



# How to publish in scholarly journals: From research to publication in social science field



Ari Warokka, PhD, MSc, MDEM, MCEUE, DEA
Senior Research Fellow – Centro Internacional "Carlos V" – UAM (Spain)



#### Main sections

#### Abstracts

- Structure
- Variations
- Exercises

Introduction

Methods

Results

Discussion

#### **ABSTRACTS**

Abstracts can be divided into two types: **Informative** or **Descriptive** abstracts. *Informative* abstracts focus on providing the results of the research and describing the conclusions that can be drawn from these results. In contrast, *descriptive* abstracts do not supply specific results but rather aim to provide the reader with brief summaries (1-2 sentences) of each of the four sections of the research report (i.e., *Introduction, Methods, Results, Discussion*).

#### **Informative Abstract**

Hypertext is an effective way of organizing and presenting data or text for information retrieval. Computer-based hypermedia tools have been successfully employed for training purposes. However, the manufacturing industry still continues to rely heavily on paper versions of technical manuals for trouble shooting, maintenance, and calibration tasks. This thesis compares the effectiveness of a computer-based hypermedia tool against a paper version of the same manual to assist operators in a local manufacturing industry to perform complex maintenance and calibration tasks. [AIMS] The results of the study indicate that I) the performance of the subjects were superior while using the hypertext based manual [RESULTS]; 2) the hypertext system can be used for training even those subjects with minimal computer knowledge [RESULTS]; and 3) hypertext systems can be considered an effective training delivery system [CONCLUSIONS].

Although most abstracts, should aim to be *informative* (i.e., express the main results), this is often not possible in research reports concentrating on theoretical topics. In such cases, writers are more likely to take a *descriptive* approach.

#### **Descriptive Abstract**

Various studies in inspection have demonstrated the usefulness of feedforward and feedback in improving performance. However, these studies have looked at the search and decision making components separately. Hence, it is difficult to draw generalized conclusions on the effects of feedforward and feedback for inspection tasks that have both search and decision making components. In response to this need, this study evaluates the individual and collective effect of feedforward and feedback on an inspection task that has both the search and decision-making components [AIMS]. For this purpose, the study used a computer simulated inspection task generated by the Vislns program. Twenty-four subjects, randomly assigned to various conditions, performed an inspection task wherein the feedforward and the feedback conditions were manipulated between subjects. Defect probability and the number of defects were also manipulated within subjects. Subsequently, the search and decision-making performances were analyzed and interpreted [PROCEDURES].



1



#### STRUCTURING YOUR ABSTRACT

Main sections

**Abstracts** 

Structure

Variations

Exercises

Introduction

Methods

Results

Discussion

The linguist Ken Hyland (2000) has identified the following five "moves" to describe the structure of research abstracts. Although all five moves rarely occur in a single abstract, the combination of moves and their ordering depends on the exact field of study and type of research.

MOVE	FUNCTION
Introduction	Establishes context of the paper and motivates the research
Purpose	Indicates purpose, thesis or hypothesis, outlines the intention behind the paper.
Methods	Provides information on design, procedures, assumptions, approach, data, etc.
Product	States main findings or results, the argument, or what was accomplished.
Conclusion	Interprets or extends results beyond the scope of the paper, draws inferences, points to applications, or wider applications.

#### INTRODUCTION

By including a brief introduction in their abstract, you can provide readers with enough background information and context to enable them to follow your description of your research. This introductory move can be divided into at least three types of content: Arguing for topic prominence, Making topic generalizations, Defining terms, objects, or processes, and Identifying a gap in current knowledge (Feltrim, 2003).

#### 1. Arguing for topic prominence

This type of introductory information is similar to centrality claims in research article introductions. Writers can choose to introduce their topic by emphasizing the **relevance**, **significance**, or **importance** of their topic area to their audience and the real world.

Coverage is a **very important issue** in wireless sensor networks. Current literature defines a point to be covered if it is within the sensing radius of at least one sensor. In this paper, we argue that this is a conservative definition of coverage. This definition implicitly assumes that each sensor makes a decision independent of other sensors in the field. However, sensors can cooperate to make an accurate estimation, even if any single sensor is unable to do so. We then propose a new notion of information coverage and investigate its implications for sensor deployment. Numerical and simulation results show that significant savings in terms of sensor density for complete coverage can be achieved by using our definition of information coverage compared to that by using the existing definition.

#### 2. Making topic generalizations

Another possible strategy for beginning an abstract is to outline what is currently **known** or is **common/standard practice** within the field of study. This information can also include **definitions** of terms, objects, or processes. This strategy mirrors that of the same name used in in research article introductions.

IEEE 802.11 MAC based Mobile Ad-hoc Networks (MANETs) are known to experience serious unfairness problems, particularly for TCP connections. The unfairness is caused by a number of factors and to date, no solution has completely addressed all the factors, so that the unfairness is never completely solved. The work presented here identifies the common factors that lead to the unfairness, and from a consideration of these, a novel solution based on carrier sensing is developed, that can completely solve the serious unfairness problem in MANETs. Simulation results are presented which show the effectiveness of our solution.

#### 3. Identifying a gap in current knowledge

Writers often try to justify the relevance of their research by demonstrating that a "gap", problems, or deficiencies exist in current applications, methods or knowledge. This strategy is identical to that used in MOVE 2: Establishing a Niche in research article introductions.

In the following introduction, the blue text describes current models, and red text the deficiencies in these models that have motivated the current study.

The modeling of TCP transfer latency has received significant attention in the last decade. Several models have been proposed for TCP performance under various conditions. All the available models predict TCP performance for a single link. Furthermore, all models relate timeouts to packet drops either due to congestion or due to transmission errors. However, TCP connections may be running over a multilink connection that aggregates the bandwidth of multiple links into a single logical pipe using the multilink point-to-point protocol (MLPPP). In such aggregate links, packet drops occur if any of the individual links experience a call drop. None of the available models account for call drops as a possible source of performance degradation. In this paper, we study the call drop phenomenon under MLPPP and incorporate our results into a method that predicts TCP latency for a long transfer. The performance model is experimentally evaluated by running TCP over MLPPP over multiple Iridium satellite links.

#### 4. Defining terms, objects, or processes

When reporting research that focuses on the development of a new **device** or **software** application, writers may often begin their abstracts by first announcing by name and defining their new creation in terms of its function, purpose, and other important features. This strategy, though more common in computer science, can also be found in other fields of science and technology. (See also Product).

A new project management tool, Logistix, has been developed to support project analysts and planners. Logistix is a decision support tool that is used to assess and compare alternative configurations for a collection of projects. The tool provides detailed financial features and multiple delivery strategies for each project in the portfolio, while freeing planners to focus upon other factors during the development of preferred configurations of the entire project. This new software has been tested using the London Highway and Transportation Authority as an example. The Authority is responsible of the construction of highways and mass transit systems in London, including construction of a new rail system. Logistix was applied to model the historic financial data of the Agency, including revenues and expenses. The model was found to improve sensitivity analysis of the capital programming variables in a range of municipal projects.

Frequently, the verbs "present" and "introduce" are used to incorporate the definition into a purpose statement. Notice also how this startegy typically precedes and anticipates an evaluation of the value of the new application (shown below in black).

This paper **proposes** a new algorithm for error-correcting isomorphism detection from a set of model graphs to an unknown input graph. The algorithm, based on a compact representation of the model graphs, uses an off-line preprocessing step to derive an image from the set of model graphs. The main advantage of the proposed image is that common subgraphs of different model graphs need only be represented once, thus reducing the computational effort of matching the common subgraphs for each model graph onto the input graph. Consequently, the new algorithm is only sublinearly dependent on the number of model graphs. Furthermore, the new algorithm can be combined with a future cost estimation method to enhance its run-time performance.

#### **PURPOSE**

The purpose is the most common function included in abstracts. See "Describing aims" for more information on the language forms used to describe your research purpose. The four example abstracts above include *purpose statements*:

The work presented here <u>identifies</u> the common factors that lead to the unfairness, and from a consideration of these, a novel solution based on carrier sensing is developed, that can completely solve the serious unfairness problem in MANETs. Simulation results <u>are presented</u> which show the effectiveness of our solution.

In this paper, we argue that this is a conservative definition of coverage.

**In this paper, we study** the call drop phenomenon under MLPPP and incorporate our results into a method that predicts TCP latency for a long transfer. The performance model is experimentally evaluated by running TCP over MLPPP over multiple Iridium satellite links.

**This paper proposes** a new algorithm for error-correcting isomorphism detection from a set of model graphs to an unknown input graph.

#### **METHODS**

Most abstracts also contain at least a brief mention of the main **procedures**, **criteria or conditions**, or the **materials and equipment** used to create the final 'product' or outcome of the research. (See also Expressing "Means").

In this paper, we study the call drop phenomenon under MLPPP and incorporate our results into a method that predicts TCP latency for a long transfer. The performance model **is** experimentally **evaluated by** runn**ing** TCP over MLPPP over multiple Iridium satellite links.

We investigate the variation of measured multiple-input multiple-output (MIMO) channel capacity for line-of-sight (LOS) Ricean scenarios inside a typical indoor environment for various transmitter-receiver positions at a center frequency of 2.45 GHz. In order to quantify the effect of LOS component on indoor MIMO performance, an absorber-loaded metal panel was utilized to artificially obstruct the LOS path between the transmit and receive antennas. Our results confirm that MIMO capacity decreases with the increase in the values of Ricean factor. We have also observed that the variation in channel capacity closely follows the corresponding deviations in root mean square (rms) delay spread of the

#### **PRODUCT**

In engineering, the most important function in the abstract is the results or outcome of the research—its "product". This move often also includes a description of the main **features** or **properties** of the solution or product.

A compact 100-GHz corrugated platelet array <u>antenna</u> has been developed based on a corrugated feed design for the background emission anisotropy scanning telescope (BEAST). The <u>antenna</u> **results in** a gain of 20 dB, and a bandwidth across the full range of W-band 75 110 GHz. The sidelobes are down by about -25 dB, a requirement comparable to feed horns used for observation of the cosmic microwave background. The design and fabrication presented in this paper is straightforward and inexpensive. A feature is that because the plates are not permanently bonded, the horn can be disassembled and modified to change its properties.

The development of dual-frequency (14 and 35 GHz), dual-polarization microstrip antenna arrays **is presented** for the first time on <u>liquid crystal polymer</u> (LCP) multilayer technology. Some of the properties of LCP, such as multilayer (three-dimensional) vertical integration capability, good electrical and mechanical properties, and near-hermetic nature, make this substrate a practical choice for the design of low-cost antenna arrays that can be integrated with remote sensing applications operating in the Ku and millimeter-wave frequency bands. This work illustrates the potential of LCP as a low-cost, **\Pi**all-package \Pi solution for developing compact, flexible, antenna arrays that can be used in future communication and remote sensing systems.

#### **CONCLUSION**

Less common to engineering research abstracts is the need to draw conclusions from their findings. When conclusions do occur, they tend to extend the results beyond the scope of the paper. This concluding move can be divided into at least three types of content: Deducing conclusions from results, Evaluating value of the research, and Presenting recommendations (Feltrim, 2003).

#### 1. Deducing conclusions from results

Writers can conclude by **commenting on** and **interpreting** the results, or **deducing** claims from the results.

Analyses of the results **showed** the negative influence of defect standard complexity on both visual search and decision making.

The simulation models **indicate that** the innovations, with the exception of the GFX system, can significantly reduce the time and direct labor costs associated with plumbing or fire protection installation while simultaneously improving worker safety.

Our results **confirm that** MIMO capacity decreases with the increase in the values of the Ricean factor.

#### 2. Evaluating value of the research

Writers in engineering often conclude the abstract by evaluating the **suitability** or **efficiency** of the "product", or wider potential applications of the studied technology. Important to such evaluation is the use of adjectives expressing a positive **evaluation** of the study's product.

The simulation results show that our hybrid method approximates the throughput performance of an arbitrary-sized TCP connection with wireless losses **much better** than other proposed models.

This **significantly increases the flexibility** of such FFT-based algorithms for computational electromagnetics.

These results will be **useful** in designing more robust SSA templates through switch redundancy near the feed.

This work illustrates the potential of LCP as a low-cost solution for developing compact, flexible, antenna arrays that can be used in future communication and remote sensing systems.

#### 3. Presenting recommendations

In addition to evaluating the outcome/product, the conclusion can also present **recommendations** derived from the study results.

**Several strategies are** recommended for particular building types, and for three individual case study buildings.

Based on our analysis results, **we make some <u>suggestions</u> for** TCP performance enhancement for overcoming the serious effect from wireless losses.

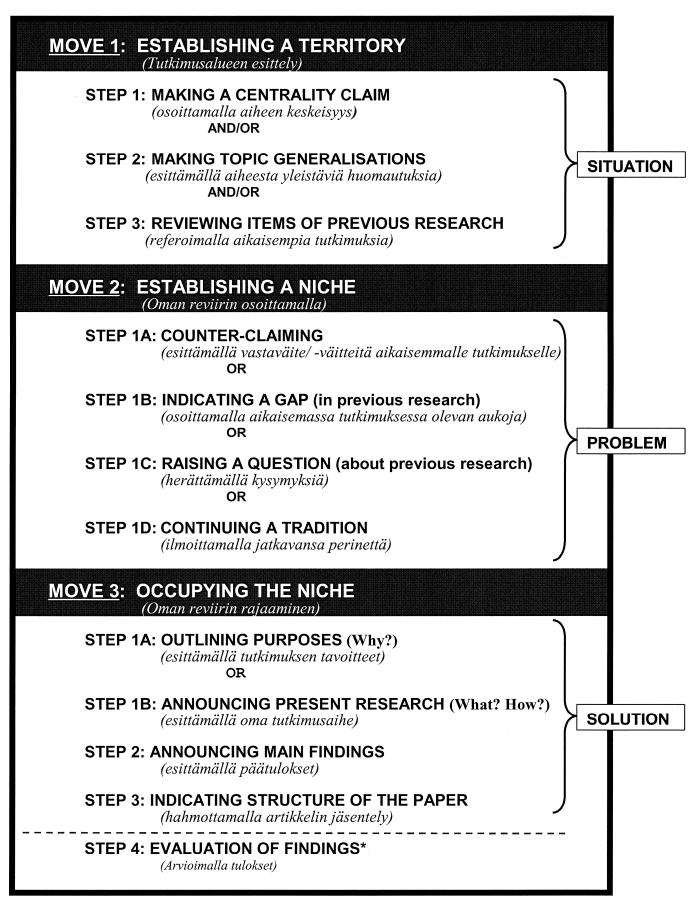
**The study helps** recommend design guidelines for the most appropriate type of multimedia to be used in designing web-based asynchronous learning system for different levels of procedural tasks.



Finnish Virtual University / © 2005 McAnsh, Pitk nen, Miraftabi & Pennington

#### THE INTRODUCTION SECTION

"Creating A Research Space" CARS model (John Swales, Genre Analysis, CUP, 1990)



#### **MOVE 1: ESTABLISHING A TERRITORY**

Introduction generally start by describing the general "terrain" or "layout" of their research area using one or more of the following strategies.

#### **STEP 1: CLAIMING CENTRALITY**

The writer states that the topic of research is *useful*, *relevant*, *important*, or *worth* investigating since it forms part of a *lively*, *significant* or *well-established* research area. Centrality claims frequently serve as *topic sentences* and are therefore usually followed by evidence to support this statement.

The effect of...has been studied extensively in recent years.

Of the many..., ....have been the most extensively studied.

The effects of... have received considerable attention

Many investigators have recently turned to ...

A large body of data concerning...has been reported.

In recent years, there have been many papers describing...

Recently, there has been wide interest in...

In recent years, researchers have become increasingly interested in...

The possibility of...has generated interest in...

Knowledge of...has great importance for ...

The study of...has become an important aspect of...

...are believed to play an important role in...

The explication of the relationship between... and ...is a classic problem in fluid mechanics.

A long-standing problem has been to obtain more information on...

The well-known...phenomena...have been favorite topics for analysis both in...

A <u>central</u> issue in...is the validity of...

#### **STEP 2: MAKING TOPIC GENERALISATIONS**

These consist of statements concerning the current state of either *knowledge, consensus*, *practice* or description of *phenomena*.

The general features of... are well known.

Plumage coloration is known to influence mate selection in mallards.

An increase of Mallards in eastern North America has been well documented.

Trout are believed to be relatively immobile.

It is generally accepted that...

There is now much evidence to support the hypothesis that...

A <u>standard procedure</u> for assessing...has been...

Such...methods are often criticized for...

it is commonly suggested that...

Comparisons of spatially separated populations <u>tend to</u> consist of...

#### STEP 3: REVIEWING ITEMS OF PREVIOUS RESEARCH

Here, the writer needs to relate <u>what</u> has been found (or claimed) with <u>who</u> has found it (or claimed it).

Smith (1989) found...

It has been suggested that...(Smith 1989)

Belovsky (1981) concluded that...

Data have been presented in the literature [1], [5] which suggest that...

Peterson (1988) argued that...

Observations by Smith (1989) suggest that...

#### **MOVE 2: ESTABLISHING A NICHE**

After describing important features of their research territory (**Move 1**), academic writers typically try to claim a **"niche"** for their research. They can do this by showing that the previous research (or solutions) are not complete, or that there are aspects of the research field still needing further investigation. This is often signalled by words expressing a **contrast** or **negative evaluation** such as the following.

CONTRAST	QUANTITY	<u>VERBS</u>		<u>ADJ</u> I	ECTIVES
however	few	fail	neglect	scarce	ineffective
but	less	ignore	overlook	elusive	inconclusive
yet	little	lack	question	limited	uncertain
nevertheless	no	prevent	challenge	restricted	unclear
unfortunately	none	hinder	deter	difficult	unreliable
although	not	obviate	limit	inefficient	unsatisfactory

#### STEP 1A: COUNTER-CLAIMING

This step frequently follows **Move 1-Step 3** (**Reviewing Items Of Previous Research**) and is used to introduce an opposing viewpoint or pinpoint weaknesses in previous research (or solutions).

However, this view is challenged by recent data showing...

However, these studies have failed to recognize the...

However, recent work in our laboratory suggests that...

....., but the experiments were performed on...and are therefore suspect.

...these approaches become increasingly unreliable when...

#### STEP 1B: INDICATING A GAP (in previous research)

Frequently follows Move 1-Step 2 (Making Topic Generalisations)

A considerable amount of research has been... but little research...

...has been extensively studied. However, less attention has been paid to...

As a result, **no** comprehensive theory appears to exist.

**Despite** the importance of..., **few** researchers have studied...

Research has tended to focus on... rather than...

The **only** reported study to date of...covered a **limited range** of...

...studies have appeared previously in the literature, but measurements were restricted to...

The properties of...are still <u>not</u> completely understood.

Evidence on this question is presently inconclusive.

#### **STEP 1C: RAISING A QUESTION (about previous research)**

However, it is not clear whether the use of...can be modified to...

*In spite of these early observations, the mechanism...has remained unclear.* 

The **question** remains...?

How much has the seal population actually decreased?

#### STEP 1D: CONTINUING A TRADITION

Frequently signalled by logical connectors, such as therefore, Hence, Consequently, or thus.

These differences **need to** be analyzed...

**Hence**, additional studies of...are needed.

It is desirable to carry out surveys of...

It is of interest to compare...

#### **MOVE 3: OCCUPYING THE NICHE**

Here, writers reveal their solution to help *fill the gap*, *answer the specific question* or *continue a research tradition* that has been presented in <u>Move 2</u>:

#### STEP 1A: OUTLINING PURPOSES (Why?)

The writer introduces his/her solution to the problem described in <u>Move 2</u> by stating the main *purpose* or *aim* of the study. Note in the examples below how the *verb tense* used depends on whether the writer is referring to a **physical** or **abstract** concept.

#### PRESENT TENSE:

The present tense tends to be used when the aims are described in terms of **the written product** held physically in the reader's hands.

(paper, article, thesis → PRESENT)

The **aim** of this **paper** <u>is</u> to...
The purpose **here** is to document...

#### **PAST TENSE:**

The past tense tends to be used when the aims are described in terms of abstract concepts such as **mental enquiry**.

(study, investigation, experiment  $\rightarrow$  PAST)

The aim of the present **study** <u>was</u> to elucidate... The objective of this **research** <u>was</u> to quantify... **Our purpose** <u>was</u> to describe...

#### STEP 1B: ANNOUNCING PRESENT RESEARCH (What? Who? How? Where? When?)

This step represents an alternative strategy to that used in <u>Step 1A</u>. Here, the writer describes the aims in terms of what the research sets out to "do" or accomplish. Notice how the same information can be expressed using either **human** or **inanimate agents** as the subject:

#### **HUMAN AGENT:**

In this study, we suggest a 3-step process...
In this letter, we propose a ...algorithm.
In this paper, we attempt to develop a...
In this letter, we provide a novel approach to...
In this paper, we describe novel algorithms for...
In this paper, we present a system for...

#### **INANIMATE AGENT:**

This paper evaluates the effect on...
This research presents data on...
This study focuses on a strategy for...
The present study tested...
This thesis proposes a formal procedure for...
This paper introduces a novel architecture for...

#### **STEP 2: ANNOUNCING MAIN FINDINGS**

In this step, the writer considers the results to be the most important aspect of the research and therefore reports these as part of the introduction. Beware, not all disciplines allow this in the Introduction Section!

In this paper, we argue that ...

This approach provides effective...

Our results indicate that this method is effective in...

#### STEP 3: INDICATING STRUCTURE OF THE PAPER

We have <u>organized</u> the rest of this paper in the following way...

This paper is structured as follows...

The remainder of this paper is <u>divided</u> into five sections...

#### **STEP 4: EVALUATION OF FINDINGS**

Numerical results show that **the proposed algorithm** not only enjoys <u>advantages</u> of <u>low</u> <u>complexity</u> and <u>ease</u> <u>of implementation</u> but is also able to achieve performance <u>very close to the optimum</u> <u>achievable bound</u>.



#### **Describing Aims**

#### What is style?

#### Reporting research

#### Research functions

- Metatext
- Describing aims
- Explaining procedures
- Referring to figures
- Comparing results
- Citing other work
- Exercises

#### Sentence style

Vocabulary choice

In technical fields, the aims in reports, research articles, and theses are typically expressed with only a limited number of structures and verbs. In addition, a good thesis statement should be clear and not very long. The essence of any article, report or thesis should be compressed into just one sentence.

#### **STRUCTURES**

In academic English, there are four structures that you can use to formulate your aims. All of these are listed below along with other synonymous forms.

#### 1. Passive Verb

In this \*thesis, a system-level simulation concept is developed to facilitate analysis of key guidance system design issues and evaluation of integrated system requirements.

\*work, research, study

#### 2. Aim (subject)

The \*aim of this thesis is to <u>develop</u> to a system-level simulation concept in order to facilitate analysis of key guidance system design issues and evaluation of integrated system requirements.

\*goal, objective, purpose

#### 3. Aim (verb)

**This thesis** \*\*aims to <u>develop</u> a system-level simulation concept in order to facilitate analysis of key guidance system design issues and evaluation of integrated system requirements.

\*\*attempts, seeks, tries

#### 4. Inanimate subject

**This thesis** focuses on **the <u>development</u> of** a system-level simulation concept to facilitate analysis of key guidance system design issues and evaluation of integrated system requirements.

**This thesis** <u>develops</u> a system-level simulation concept to facilitate analysis of key guidance system design issues and evaluation of integrated system requirements.

#### **VERBS**

The verbs typically used in statements of aims can be divided into four groups according to their function. Although the verbs in each group are similar in meaning, their usage differs slightly. For example, the verb **address** usually co-occurs with the word **problem**, while **focus** has a more neutral meaning.

1. INTENTION	2. TOPIC	3. RESEARCH	4. ACTIONS
Aims Attempts Seeks Tries	Focuses Addresses Introduces Describes Presents Proposes	Examines Analyzes Evaluates Investigates Explores Reviews	Design Determine Develop Implement Provide

Finnish Virtual University / © 2004 Tikka & Pennington

#### Academic writing: Reporting - paraphrase, summary & synthesis

Introduction | Paraphrase | Summary | Synthesis | Exercises | Test

#### Reporting - paraphrase, summary & synthesis



#### **Paraphrase**

Paraphrasing is writing the ideas of another person in your own words. Paraphrasing is useful when you are using the work of others to support your own view. See Rhetorical functions in academic writing: Providing support

When paraphrasing, you need to change the words and the structure but keep the meaning the same. Please remember, though, that even when you paraphrase someone's work, you must acknowledge it. See Citation.

Look at this example:

#### Source

It has long been known that Cairo is the most populous city on earth, but no-one knew exactly how populous it was until last month.

#### **Paraphrase**

Although Cairo has been the world's most heavily populated city for many years, the precise population was not known until four weeks ago.

The following stages may be useful:

- 1. Read and understand the text.
- 2. Make a list of the main ideas.
  - a. Find the important ideas the important words/phrases. In some way mark them write them down, underline or highlight them.
  - b. Find alternative words/synonyms for these words/phrases do not change specialised vocabulary and common words.
- 3. Change the structure of the text.
  - a. Identify the meaning relationships between the words/ideas e.g. cause/effect, generalisation, contrast. Look at Paragraphs: Signalling for more information.
  - b. Express these relationships in a different way.
  - c. Change the grammar of the text: change nouns to verbs, adjectives to adverbs, etc., break up long sentences, combine short sentences.
- 4. Rewrite the main ideas in complete sentences. Combine your notes into a piece of continuous writing.
- 5. Check your work.

- a. Make sure the meaning is the same.
- b. Make sure the length is the same.
- c. Make sure the style is your own.
- d. Remember to acknowledge other people's work.
- 1. Read and understand the text. See Reading: Strategies for help here.
- 2. Find the important ideas, write down the important words/phrases and find alternative words, or synonyms. Keep specialised vocabulary and common words.

#### Examples:

- a. Paul Ekman from the University of California has conducted a long series of experiments on how nonverbal behaviour may reveal real inner states.
  - Paul Ekman who works at the University of California has performed a sequence of investigations on the way nonverbal behaviour may disclose real internal conditions.
- b. There are reckoned to be over 4,000 plant species used by forest dwellers as food and medicine alone.
  - There are calculated to be more than 4,000 plant species utilised by forest inhabitants just as foodstuffs and drugs.
- c. Memory is the capacity for storing and retrieving information.
  - Memory is the facility for keeping and recovering data.
- d. Research and publications are accumulating in each of the four fields of anthropology at an exponential rate.
  - Studies and books are gathering in all of the four areas of anthropology at a very fast speed.
- e. It is worth looking at one or two aspects of the way a mother behaves towards her baby. It is useful to observe several features of how a mother acts when she is with her small child.

Note: This is not enough by itself. You also need to change the words and the structure of the text.

3a/b. Identify the meaning relationships in the text and express them in a different way.

#### Examples:

- a. Many invertebrates, on the other hand, such as snails and worms and crustacea, have a spiral pattern of cleavage.
  - In contrast, many invertebrates, such as snails and worms and crustacea, have a spiral pattern of cleavage.
- b. Similarly, the muscles will not grow in length unless they are attached to tendons and bones so that as the bones lengthen, they are stretched.
  - Likewise, if the muscles are not attached to tendons and bones so that as the bones lengthen, they are stretched, they will not grow in length.
- c. Besides being a theory about the basis and origin of knowledge and the contents of our minds in general, empiricism is also sometimes a methodology.
  - Not only is empiricism a theory about the basis and origin of knowledge and the contents of our minds in general, it also sometimes a methodology.
- d. As opposed to this, Locke is often supposed to be saying that, in addition to properties, things have a "substratum" which "supports" their properties.
  - Locke is often supposed to be saying, on the other hand, that, in addition to properties, things

have a "substratum" which "supports" their properties.

e. Consequently in a sense one may speak of the Common Law as unwritten law in contrast with Statute Law, which is written law.

In a sense, therefore, one may speak of the Common Law as unwritten law in contrast with Statute Law, which is written law.

Note: This is not enough by itself. You also need to change the structure of the text.

3b/c. Change the grammar of the text:

#### For example:

#### i. change nouns to verbs

a. This rewriting of history was not so much a matter of a new start.

This rewriting of history was not so much a matter of starting again.

b. Here he lives with the labourers in one of the barrack rooms, and out of his small earnings makes a start at having a house built.

Here he lives with the labourers in one of the barrack rooms, and out of his small earnings starts to have a house built.

#### ii. change verbs to nouns

a. The Normans invaded in 1066.

The Norman invasion took place in 1066.

b. The bomb exploded and caused many casualties.

The explosion caused many casualties.

#### iii. change adverbs to adjectives

a. He wrote frequently.

He wrote on frequent occasions.

b. Politically, it was a bad decision.

From a political point of view, it was a bad decision.

#### iv. change active verbs to passive

a. We can relate a study of this kind to texts in other media too

A study of this kind can be related to texts in other media too.

b. In this treatment the teacher can use a variety of techniques to elicit the language learners already know.

In this treatment a variety of techniques is used to elicit the language learners already know.

#### v. break up sentences

- a. Given the extent to which deforestation increased markedly in the four southern states during 1987 and 1988, it is heartening news that during the early part of the 1989 dry season the burning seemed to have been curtailed somewhat, due to a combination of policy changes, better controls on burning, and most important of all an exceptionally wet "dry" season. Deforestation increased markedly in the four southern states during 1987 and 1988. On account of this, it is heartening news that during the early part of the 1989 dry season the burning seemed to have been curtailed somewhat. The reason for this is a combination of policy changes, better controls on burning, and most important of all an exceptionally wet "dry" season.
- b. In 1851 the average family size was 4.7, roughly the same as it had been in the seventeenth century, but the 1½ million couples who married during the 1860s, which the historian G. M. Young described as the best decade in English history to have been brought up in, raised the

figure to 6.2.

In 1851 the average family size was 4.7, roughly the same as it had been in the seventeenth century. However, the 1½ million couples who married during the 1860s, which the historian G. M. Young described as the best decade in English history to have been brought up in, raised the figure to 6.2.

#### vi. combine sentences

- a. Tropical forests are defined here as evergreen or partly evergreen forests. They grow in areas receiving not less than 100 mm of precipitation in any month for two out of three years. The mean annual temperature is 24-plus degrees Celsius. The area is essentially frost-free. Tropical forests are defined here as evergreen or partly evergreen forests, in areas receiving not less than 100 mm of precipitation in any month for two out of three years, with mean annual temperature of 24-plus degrees Celsius, and essentially frost-free.
- b. The third National Government followed upon the resignation of the Liberal ministers and of the free trader, Snowden. This happened in September 1932. After this it became little more than a Conservative government. A few ex-Labour and Liberal politicians were added. They all owed their seats to an electoral pact with the Conservatives.

  The third National Government followed upon the resignation of the Liberal ministers and of the free trader, Snowden, in September 1932, after which it became little more than a Conservative government, with the addition of a few ex-Labour and Liberal politicians, all owing their seats to an electoral pact with the Conservatives.

Note: This is not enough by itself. You also need to change the words and the structure of the text.



#### Academic writing: Reporting - paraphrase, summary & synthesis

Introduction | Paraphrase | Summary | Synthesis | Exercises | Test

#### Reporting - paraphrase, summary & synthesis



#### **Summary**

A summary is a shortened version of a text. It contains the main points in the text and is written in your own words. It is a mixture of reducing a long text to a short text and selecting relevant information. Summarising is useful when you are using the work of others to support your own view. See Rhetorical functions in academic writing: Providing support

A good summary shows that you have understood the text. Please remember, though, that even when you summarise someone's work, you must acknowledge it. See Citation.

Look at this example:

#### Source

The amphibia, which is the animal class to which our frogs and toads belong, were the first animals to crawl from the sea and inhabit the earth.

#### Summary

The first animals to leave the sea and live on dry land were the amphibia.

The phrase "which is the animal class to which our frogs and toads belong" is an example, not a main point, and can be deleted. The rest of the text is rewritten in your own words.

Try this exercise.

The following stages may be useful:

- 1. Read and understand the text carefully.
- 2. Think about the purpose of the text.
  - a. Ask what the author's purpose is in writing the text?
  - b. What is your purpose in writing your summary?
  - c. Are you summarising to support your poins?
  - d. Or are you summarising so you can criticise the work before you introduce your main points?
- 3. Select the relevant information. This depends on your purpose.
- 4. Find the main ideas what is important.
  - a. They may be found in topic sentences.
  - b. Distinguish between main and subsidiary information.
  - c. Delete most details and examples, unimportant information, anecdotes, examples, illustrations, data etc.

- d. Find alternative words/synonyms for these words/phrases do not change specialised vocabulary and common words.
- 5. Change the structure of the text.
  - a. Identify the meaning relationships between the words/ideas e.g. cause/effect, generalisation, contrast. Look at Paragraphs: Signalling for more information. Express these relationships in a different way.
  - b. Change the grammar of the text: rearrange words and sentences. Change nouns to verbs, adjectives to adverbs, etc., break up long sentences, combine short sentences.
  - c. Simplify the text. Reduce complex sentences to simple sentences, simple sentences to phrases, phrases to single words.
- 6. Rewrite the main ideas in complete sentences. Combine your notes into a piece of continuous writing. Use conjunctions and adverbs such as 'therefore', 'however', 'although', 'since', to show the connections between the ideas.
- 7. Check your work.
  - a. Make sure your purpose is clear.
  - b. Make sure the meaning is the same.
  - c. Make sure the style is your own.
  - d. Remember to acknowledge other people's work.

4b/c. Distinguish between main and subsidiary information. Delete most details and examples, unimportant information, anecdotes, examples, illustrations, data etc. Simplify the text. Reduce complex sentences to simple sentences, simple sentences to phrases, phrases to single words.

#### Examples:

- a. People whose professional activity lies in the field of politics are not, on the whole, conspicuous for their respect for factual accuracy.
  - Politicians often lie.
- b. Failure to assimilate an adequate quantity of solid food over an extended period of time is absolutely certain to lead, in due course, to a fatal conclusion.
  - Lack of food causes death.
- c. The climatic conditions prevailing in the British Isles show a pattern of alternating and unpredictable periods of dry and wet weather, accompanied by a similarly irregular cycle of temperature changes.
  - British weather is changeable.
- d. It is undeniable that the large majority of non-native learners of English experience a number of problems in attempting to master the phonetic patterns of the language.
  - Many learners find English pronunciation difficult.
- e. Tea, whether of the China or Indian variety, is well known to be high on the list of those beverages which are most frequently drunk by the inhabitants of the British Isles. *The British drink a large amount of tea*.
- f. It is not uncommon to encounter sentences which, though they contain a great number of words and are constructed in a highly complex way, none the less turn out on inspection to convey very little meaning of any kind.
  - Some long and complicated sentences mean very little.
- g. One of the most noticeable phenomena in any big city, such as London or Paris, is the steadily increasing number of petrol-driven vehicles, some in private ownership, others belonging to the public transport system, which congest the roads and render rapid movement more difficult year by year.

- While studies focusing on more narrow conceptualizations of XX1 are abundant, there is a dearth of research investigating the more encompassing principle of XX2.
- Rare attempts have been made to link XX to some form of XXX.
- A few studies that have examined XX and XXX report mixed findings. Contradictory to past findings that .....
- However, a review of the literature suggests that systematic research on the role of XX on XXX in the context of XXXX is lacking.
- While many studies have promoted XX and XXX as a means to enhance organizational performance, conceptualizing XX and XXX in the operations management context is still rudimentary.
- The link between XX and XXX is the subject of only a few studies.
- Studies that investigate the link between XX and XXX are scarce/is still in infant stage.
- However, there has been relatively little subsequent advancement in theorizing or research methods on the impact of X on XX, XXX and XXXX.

### Learn The Most Important - How To Write Problem Statement and Research Gap



#### What is style?

#### Reporting research

#### Research functions

- Metatevt
- Describing aims
- Explaining procedures
- Referring to figures
- Comparing results
- Citing other work
- Exercises

#### Sentence style

Vocabulary choice

#### Citing other researchers' work

A number of options are available to the writer in terms of (1) the form of the reference given to the author as well as (2) its position within the sentence.

#### 1.1 FORM OF CITATION

The form of citation can be either "integral" or "non-integral". An integral. citation is one in which the name of the researcher occurs in the actual citing sentence as a grammatical element of the sentence; in a non-integral citation, the researcher occurs either in **parenthesis** (*sulkeet*) or is referred to elsewhere by a **superscript number** (*viitenumero*).

"We speculate that coyotes have reduced the carrying capacity of bobcats in eastern Texas by diminishing the availability of prey."

then any of the following forms could be used to report the authors original claim, depending upon your rhetorical intention.

#### **INTEGRAL CITATION**

- 1. **Smith (2005)** suggested that coyotes may have reduced the carrying capacity of bobcats in eastern Maine by diminishing the availability of prey.
- 2. In a study of habitat partitioning in eastern Maine, coyotes were found by **Smith (2005)** to have reduced the carrying capacity of bobcats by diminishing the availability of prey.

#### NON-INTEGRAL CITATION

- Coyotes may affect the carrying capacity of bobcats by diminishing the availability of prey (Smith, 2005).
- Recently, it has been suggested that coyotes may affect the carrying capacity of bobcats by diminishing the availability of prey (Smith, 2005).
- In a study of habitat partitioning in eastern Maine, coyotes were found to have reduced the carrying capacity of bobcats by diminishing the availability of prey (Smith, 2005).
- Previous research suggests that coyotes may affect the carrying capacity of bobcats by diminishing the availability of prey (Smith, 2005).

#### 1.2 LOCATION IN THE SENTENCE

In integral citations, the name of the researcher occurs as a part of the actual text; it can be placed either at the beginning or the end of the sentence.

#### SENTENCE-INITIAL POSITION

- 1. Smith (2005) has reported that....
- 2. In a study of partridge by Smith (2005), it was found that...
- 3. As was also shown by Smith (2005), our results indicated that...
- 4. According to Smith (2005),....

#### SENTENCE-FINAL POSITION

- 5. ...has been reported by Virtanen (2005).
- 6. ...., as previously reported by Virtanen (2005).

UNDERSTANDING THE PUBLISHING PROCESS

# How to publish in scholarly journals



elsevier.com/authors



# Save time organising and writing papers

Download Mendeley for free



www.mendeley.com

New iOS app available now

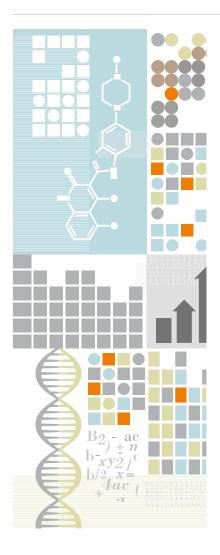




## How to publish in scholarly journals

#### **CONTENTS**

1	introduction	4
2	Find the right journal	_
	2.1 Introduction	5
	2.2 Journal Finder	5
	2.3 Journal Metrics	5
	2.4 Open Access Options	6
3	Prepare your paper	7
	3.1 Your manuscript	7
	3.2 Language quality	9
	3.3 Illustrations	10
	3.4 Content Innovation	
	3.4.1 AudioSlides	
	3.4.2 Graphical Abstracts	
	3.5 Adding Data	
	3.6 Ethics	
	3.7 SEO your article	
4	Submit and revise your paper	
	4.1 How to submit a paper?	
	4.2 Peer review	
	4.3 Article Transfer Service	
	4.4 Check the status of your paper	
5	After acceptance	_
	5.1 Article in press	
	5.2 Proofing	
	5.3 Share links & offprints	
6	Copyright	
7	Promote your work	_
	7.1 Share your paper	_
	7.2 Be discovered online	_
	7.3 Conferences	_
	7.4 Social Media	
8	7.5 Media relations	
0	8.1 Introduction	
	8.2 My Research Dashboard	,
	8.3 Altmetrics	
9	Why publish with Elsevier	
7	9.1 Introduction	
	9.2 Innovation	
	9.3 ScienceDirect	
	9.4 Scopus	
	9.5 Mendeley	
	9.6 Mobile Applications	
10	Further information and training	
	10.1 Publishing Campus	
	10.2 Authors' Update	
	10.3 Postdoc Free Access Program	



UNDERSTANDING THE PUBLISHING PROCESS

## How to publish in scholarly journals

#### Introduction

1

As researchers, you make huge strides in advancing essential knowledge. Your achievements can save lives and improve the way we live. If you're ready to share your knowledge with the world, this booklet outlines the best opportunities for publishing your research – and for seeing it shared globally.

The first question to ask yourself is, 'Do I have a story to tell?' Editors and reviewers look for original and innovative research that adds to their field of study, or immediately impacts patient care. This means that your conclusions must be sound and based on sufficiently robust data.

Secondly, ask yourself, 'Is there an audience for my research findings?' The more original and innovative your research, the more people will be interested. Consider whether your research is of interest to a local, regional or international audience. Identifying your audience is a major factor in selecting the right journal to submit your manuscript to. You can read more about selecting a journal in *section 2.2*.

#### There are several types of research articles:

- Letters and rapid or short communications are intended for the quick and early communication of significant or original advances, without including too much data or detail.
- 2. **Review papers** summarize recent developments on a specific topic, without introducing new data.
- 3. **Full articles** contain significant data, detail, developments and outcomes.
- 4. The new **microarticle** format enables you to publish research output, such as data, software, methods, videos and much more.

If you're unsure which type of article to write, discuss your options with your supervisor or colleagues. For the purposes of this booklet, we offer guidance for writing and publishing a full article. Once you've decided to write a full article, follow the guidelines of your chosen journal, and the general guidelines for scientific writing outlined in the following sections.

#### Find the right journal

#### 2.1 INTRODUCTION

Finding the right journal for your article can be key to reaching your target audience.

- Take into consideration the type of article you'd like to publish (full length, letter, review, microarticle)
- Check the references in your article, to give an indication of possible journals of interest
- Read the journal's aims and scope on the journal homepage on elsevier.com
- · Read or download the journal's Guide for Authors
- Check if the journal is invitation-only; some journals only accept articles after inviting the author to submit
- Check the journal's performance for review and publication timelines (see 2.3)
- If you need to publish open access, remember that most Elsevier journals explain their open access options on the journal homepage (see 2.4)
- Submit your paper to only one journal at a time (see 3.6, on ethics)

#### 2.2 JOURNAL FINDER

The Journal Finder tool locates Elsevier journals that most closely match your abstracts. An Elsevier journal will be recommended if it has published articles that are highly similar to your article. A list of relevant articles is generated, and the tool can filter on your preferred criteria, such as open access options, impact factor, review time, acceptance rate and production time. See journalfinder.elsevier.com.

#### **2.3 JOURNAL METRICS**

Journal metrics are at your disposal to help you select the most appropriate journal for your article. When used alongside information about the journal's scope, editorial board, international outlook and audience, they can help you to find the best destination for your research.

#### Different types of journal metrics

It's good practice to look at more than one metric to help you make your decision. You'll find a dedicated Journal Insights section on many of the journal home pages on elsevier.com, giving information about the journal's:

- Speed review speed and online publication time
- Reach geographic location of corresponding authors and journal usage
- Impact impact metrics based on citations received by articles

#### Impact metrics

The average impact of all the articles in a journal is often used as a proxy for the impact of a specific article – especially when the article hasn't yet had time to accumulate its own citations. It's important to take this kind of proxy metric into consideration.

The Journal Insights section on the Elsevier.com journal homepage has several impact metrics to be aware of. They all consider citations received per article, accounting for the size of each journal:

	SNIP	IPP	SJR	Impact Factor	Eigenfactgor
Full name	Source-Normalized Impact per Paper	Impact per Publication	SCImago Journal Rank	-	-
Measures	Citations relative to average for discipline; SNIP > 1 means journal is cited more than average for field	Average citations per article, review and conference paper. This is the numerator of SNIP	Average prestige per publication, depending on the SJR of the citing journal	Average citations per publication	Importance of a journal within its network
Accounts for varying journal size?	Υ	Υ	Υ	Υ	Υ
Accounts for varying behaviour between disciplines?	Υ	N	Υ	N	Υ
Availability	Ĭ	Elsevier at journalmet dividual journal home		Thomson Reuters  Free of charge via individual journal homepages: Journal Insights.	Free of charge at eigenfactor.org  Free of charge via individual journal homepages: Journal Insights

#### **2.4 OPEN ACCESS OPTIONS**

In general, open access stands for the free and permanent access to published research, combined with clear guidelines for readers to share and use the content. There are two main types of open access: gold and green.

#### What is the difference between Gold and Green?

	GOLD OPEN ACCESS	GREEN OPEN ACCESS
Access	<ul> <li>Free public access to the final published article</li> <li>Access is immediate and permanent</li> </ul>	<ul> <li>Free public access to a version of your article</li> <li>Time delay may apply (embargo period)</li> </ul>
Fee	Open access fee is paid by the author, or on their behalf (for example by a funding body)	<ul> <li>No fee is payable by the author, as costs are covered by library subscriptions</li> </ul>
Use	Determined by your user license	<ul> <li>Authors retain the right to use their articles for a wide range of purposes.</li> <li>All open versions of your article should have a user license attached</li> </ul>
Options	Publish in an open access journal     Publish in a journal that supports     open access (also known as a hybrid     journal)	<ol> <li>Link to your article</li> <li>For selected journals Elsevier makes the articles freely available after an embargo period in the open archives</li> <li>Self-archive your manuscript</li> </ol>

Royel Therapies for Heart Failure.
#openaccess
ebiomedicine.com/article/S2352-...

EBiomedicine is a new open access journal that bridge

EBiomedicine is a new open access journal that bridges basic science & patient care in collaboration with Cell and The Lancet. It's one of the many open access journals Elsevier publishes.

Some funding bodies or institutions have a policy on public access to research. It's important to know the open access policy of your institution or funding body before you decide whether or not to publish open access. Elsevier offers a wide range of publication options for your research to comply with funding policy or institutional mandates. Elsevier publishes more than 220 gold open access journals and offers more than 1600 options to publish open access in subscription journals. For more information on your open access options, see elsevier.com/openaccessoptions.

#### Prepare your paper

#### 3.1 YOUR MANUSCRIPT

#### **Title**

The title is the main advertisement for your article. A great title entices the audience to read on; a poorly-titled article may never reach its target readers.

Your article's title should reflect its content clearly, enabling readers to decide whether it's relevant for them. Make the title catchy and keep it specific. Leave out phrases such as 'a study of', 'investigations into, 'observations on'; and avoid using abbreviations and jargon.

Remember, too, that abstracting and indexing services depend on accurate titles; they extract keywords from them for cross-referencing.

Why 'The effect of heating the albumen and vitellus of the Gallus gallus domesticus contained in calcium carbonate in H2O to 373.15 K' when 'Boiling a chicken egg in water' says it?

#### Essentially, effective titles:

- identify the article's main issue
- begin with the article's subject matter
- are accurate, unambiguous, specific and (when possible) complete
- are as short as possible
- are enticing and interesting; they make people want to read further

#### **Authors**

Only authors who've made an intellectual contribution to the research should be credited; those who'll take responsibility for the data and conclusions, and who've approved the final manuscript. The order of credited names can vary between disciplines; the corresponding author may not always be the first author.

#### **Keyword list**

Most journals request a list of keywords; important words that, along with those in the title, capture the research effectively. Keywords are used by abstracting and indexing services; choosing the right ones can increase the chances of your article being found by other researchers. Many Elsevier journals also ask for a subject classification during the online submission process; this helps editors to select reviewers.

#### **Abstract**

The abstract is your chance to describe your research in 200 words — so use it wisely. Together, the title and abstract should be able to fully represent your article, including for use by indexing services. Many authors write the abstract last, so it reflects the content accurately.

The abstract should summarize the problem or objective of your research, and its method, results, and conclusions. Usually an abstract doesn't include references, figures or tables. It should mention each significant

section of the article, with enough detail for readers to decide whether or not to read the whole paper. While it's great to make the abstract interesting, above all it should be accurate. Don't promise more than your article delivers.

#### The body of the text

Make the introduction brief. It should provide context and background, but not be a history lesson. It should state the problem being investigated, its contextual background, and the reasons for conducting the research. State the questions you're answering and explain any findings of others that you're challenging or furthering. Briefly and logically lead the reader to your hypotheses, research questions, and experimental design or method.

#### Method

(also called Materials and Methods or Experimental Methods)

This section should be detailed enough that readers can replicate your research, and assess whether the methods justify the conclusions. It's advisable to use the past tense – it's about what you *did* – and avoid using the first person, although this will vary from journal to journal. Ultimately, you should explain how you studied the problem, identify the procedures you followed, and structure this information as logically as possible.

If your methods are new, you'll need to explain them in detail. If they've been published before, cite the original work, including your amendments if you've made modifications. Identify the equipment and the materials you used, specifying their source. State the frequency of observations and what types of data were recorded. Give precise measurements, stating their strengths and weaknesses when necessary. Name any statistical tests, so your quantitative results can be judged.

If your research involved human participants, animals, stem cells or other biohazard materials, you'll need to include certain information in the ethics statement, such as committee approvals and permission to publish. You should also explain your criteria for selecting participants.

#### Results

This section should present your findings objectively, explaining them largely in text. It's where you show how your results contribute to the body of scientific knowledge, so be clear and logical. And it's important not to interpret your results – that comes in the Discussion & Conclusions section.

You can base the sequence of this text on the tables, figures and graphs that best present your findings. Emphasize any significant findings clearly. Tables and figures must be numbered separately; figures should have a brief but complete description – a legend – that reveals how the data was produced.

#### **Discussion & Conclusions**

This is where you describe the meaning of your results, especially in the context of what was already known about the subject. You can present

general and specific conclusions, but take care not to summarize your article – that's what the abstract is for.

You should link this section back to the introduction, referring to your questions or hypotheses, and cover how the results relate to your expectations and cited sources. Do the results support or contradict existing theories? Are there any limitations? You can also suggest further experiments, uses and extensions.

Above all, the discussion should explain how your research has moved the body of scientific knowledge forward. Your conclusions must be supportable and not extend beyond your results, so avoid undue speculation and bold judgments about impact. This is also a good place to suggest practical applications for your results, and to outline what the next steps in your research will be.

To summarize, make sure that:

- your results directly support your conclusions
- you use specific expressions and quantitative descriptions '12 degrees higher' instead of 'a higher temperature'
- you only discuss what you defined early in the paper don't introduce the reader to a whole new vocabulary. If you missed an important term, go back to the introduction and insert it
- all interpretations and speculations are based on fact, not imagination

#### Acknowledgments

Keep acknowledgements brief, naming those who helped with your research; contributors, or suppliers who provided free materials. You should also disclose any financial or other substantive conflict of interest that could be seen to influence your results or interpretations.

#### **References**

New research builds on previously published work, which should always be acknowledged. Any information that isn't 'common knowledge', or generated by your experiments, must be recognized with a citation; and quoted text should be within quotation marks, and include a reference. The format of citations and references varies, so you should refer to the Guide for Authors for the journal you're submitting to.

#### **3.2 LANGUAGE QUALITY**

A scientific article should report your findings and conclusions as clearly and concisely as possible. To achieve this:

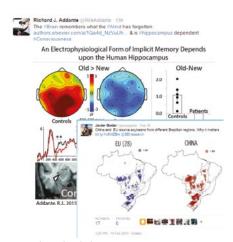
- Try to avoid unnecessary words or phrases keep it simple
- Use active writing when possible. For example, 'Carbon dioxide was consumed by the plant' is passive. Active writing shortens this phrase to, 'The plant consumed carbon dioxide' which is much snappier
- Tense is important. For known facts and hypotheses, use the present tense: 'The average life expectancy of a honey bee is six weeks.' But use the past tense when referring to experiments you've conducted: 'All the honey bees were maintained in an environment with a consistent temperature of 23°C.' And also use the past tense to describe results: 'The average life span of bees in our contained environment was eight weeks.'

"We have submitted around 600 papers for language editing. More than 99% of our researchers are satisfied with the work of Elsevier. Based on previous successful experiences with Elsevier, we encourage our researchers to use the language editing service before they submit their papers to a journal."

**PROF. CHEN JING,**Beijing Normal University, China

"The reader also gets a quick grasp about the paper that cannot be explained in a short written abstract"

TILBE GÖKSUN, Assistant Professor of Psychology at Koç University, Istanbul on creating her AudioSlides



Tweeted graphical abstracts

Elsevier has editing services to help ensure that your work is written in correct scientific English before submission, and that your paper is free of grammatical, spelling, and other common errors. Translation services are also available from or into Chinese, Portuguese, Spanish, Arabic, Turkish, Russian, German, Italian, Japanese, Korean and many more languages. For more information see webshop.elsevier.com/languageservices.

#### 3.3 ILLUSTRATIONS

Submitting any illustrations, figures or other artwork – like multimedia and supplementary files – in an electronic format means that we can produce your work to the best possible standard, ensuring accuracy, clarity and a high level of detail. For specific details on how to format and submit artwork, check elsevier.com/artwork.

Our professional illustration services can create or polish images to match your exact needs. We support detailed full-color and photorealistic images from sketches, or convert existing images into more simplified line drawings. The delivery of detailed graphs and tables takes only 48 hours. For more information see webshop.elsevier.com/illustrationservices.

#### **3.4 CONTENT INNOVATION**

Content innovations present your work in a more powerful form, making your article stand out from the crowd. Features such as the Virtual Microscope, Interactive Map Viewer and 3D Molecular Models on ScienceDirect can increase your article's value. To find out which content innovations are available for journals in your research field, visit elsevier.com/about/content-innovation.

#### 3.4.1 AUDIOSLIDES

AudioSlides are short, webcast-style presentations that let you present your research in your own words. Elsevier offers you the option of creating your own unique AudioSlides presentation; appearing alongside your published article on ScienceDirect, it complements your research and gives readers a succinct overview of your article's content. AudioSlides are free to access and can be shared – independently of the article – with colleagues, influential bloggers and on social media, including YouTube. You can make the most of your AudioSlides with our useful Tips and Tricks: elsevier.com/audioslides.

#### 3.4.2 GRAPHICAL ABSTRACTS

A graphical abstract is a visual summary of your article's main findings. Placed along with your article on ScienceDirect, graphical abstracts also turn up in online search results and help people to see your article's key points at a glance.

You can use your graphical abstract as a promotional tool by tweeting it, sharing it on social media or sending it to an influential blogger, and it is always linked to your article. For more information see elsevier.com/graphical-abstract.

To create your graphical abstract you can make use of our professional illustration services at the Elsevier webshop: webshop.elsevier.com.



"With Data in Brief, many developments in research can become more useful when data sources are shared.

We are excited and grateful for the opportunity to have our data accessible at no cost to the community."

**PROF. BARRAZA-LOPEZ,**Department of Physics, University of Arkansas

#### 3.5 ADDING DATA

Sharing research data is a good scientific practice; sharing makes your scientific findings reproducible and helps others to build upon them. Elsevier helps researchers to store, share, discover and use data — for example by creating bidirectional links between articles and data, and launching data journals. For more information, see elsevier.com/about/research-data/open-data.

#### 3.6 ETHICS

Understanding the boundaries in scientific research and publishing is a key step in making sure your work gets off to the best start. Scientific misconduct and breach of publishing ethics can take different forms, and be committed knowingly or unknowingly. Examples of misconduct and breaches include:

- Authorship disputes deliberately misrepresenting a scientist's relationship with published work
- **Conflict of interest** not disclosing to a journal that you have a direct or indirect conflict which prevents you from being unbiased
- Plagiarism passing off another's work or idea as your own
- **Simultaneous submission** submitting a paper to more than one publication at the same time
- **Research fraud** including fabrication (making up research data) and falsification (manipulating research data, tables or images)
- **Salami slicing** the 'slicing-up' of research that would form one meaningful paper into several different papers

The Ethics in Research & Publication Program is a collaboration between Elsevier and an independent panel of experts in research and publishing ethics. The program's online resources and tools have been developed to help you feel confident that you're doing the right things. See elsevier.com/ethics.

#### 3.7 SEO YOUR ARTICLE

Search Engine Optimization (SEO) helps to ensure that your article appears higher in the results returned by search engines such as Google. This can mean you attract more readers, gain higher visibility in the academic community, and potentially increase citations.

Tips for SEO include:

- Use keywords, especially in the title and abstract
- Add captions with keywords to all photographs, images, graphs and tables
- Add titles or subheadings (with keywords) to the different sections of your article
- Make sure there are as many links as possible to your article, e.g., from your institute's website, Wikipedia, LinkedIn, blogs and social media

For more detailed information on how to use SEO, see our guidelines on the Publishing Campus, College of Skills Training: publishingcampus.com.

#### Submit and revise your paper

Once you've checked (and re-checked!) your manuscript, you're ready to submit it to the journal editor via the submission and peer review system.

#### 4.1 HOW TO SUBMIT A PAPER?

Elsevier's Editorial System (EES) has transitioned to Evise®, a fully online workflow for article publication. Submission is simple: direct links for registration and log-in are provided from our journals' Guide for Authors.

#### 4.2 PEER REVIEW

After submission, each manuscript is checked for plagiarism, and assessed carefully to determine if it fits the aims and scope of the journal. If journal representatives are enthusiastic about the work, the journal editor will appoint reviewers.

#### What does the peer reviewer do?

Reviewers help determine the validity, significance and originality of the work, and can suggest improvements to the manuscript and the research. On their recommendation, editors will accept, accept with revisions, or reject a manuscript.

To make good judgments, peer reviewers use their own checklists to evaluate the content for scientific value and originality, to see that articles adhere to general scientific practice as well as the journal's specific guidelines, and to check that you've referenced correctly. The peer reviewer will look closely at your methodology and the validity of your data, and consider your ethical approach. They will then recommend changes before your manuscript is published. See elsevier.com/reviewers/home for more details.

#### Different types of peer review

Type of review	Description
Single blind (most common)	Reviewer identity hidden from author; reviewer knows identity of authors
Double blind	Both reviewer and author remain anonymous to each other
Open	Reviewer and author are known to each other

#### **4-3** ARTICLE TRANSFER SERVICE

Several Elsevier journals operate a complimentary Article Transfer Service. The editor will offer this service if they feel your article fits better with another Elsevier journal; with your approval, your submission will be transferred there.

#### **4.4** CHECK THE STATUS OF YOUR PAPER

After submission you can follow the status of your article in the Elsevier Editorial System (EES or Evise), using a reference number that you'll receive by email.

If your paper is accepted for publication, you can follow the publication status through to completion using the 'track your article' feature. You'll receive a reference number and link via email, after final decision.

## After acceptance: article in press, proofing, share link and offprints

#### Congratulations! Your article has been accepted!

There are a few more things to consider that can optimise the publication of your work. Elsevier will do everything it can to have your article published as quickly and accurately as possible.

#### **5.1 ARTICLES IN PRESS**

Accepted articles are published online on ScienceDirect as an 'article in press', and assigned an issue at a later date. You can track your article and citations throughout this process.

#### **5.2 PROOFING**

Accurate proofreading and clear marking of corrections are essential for the production of a quality article. As soon as your article has been typeset, you'll receive an email with either a PDF attachment of your article or a link to it on our online proofing system.

#### **5-3 SHARE LINK AND OFFPRINTS**

Most of our journals give authors a personalized link that provides 50 days free access to the final published version of their article on ScienceDirect. This link can also be used for sharing via email and social networks. For more information see elsevier.com/author-share-link.

Some journals provide offprints; an exact copy of the article published either on paper or as a PDF.

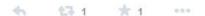
You can order paper offprints before publication, using the provided Offprint Order Form. If your journal doesn't issue paper offprints as standard, you'll pay a small fee. Once you've submitted the order form, you should allow 30-60 days for delivery of the offprints.

After publication, you can order paper offprints from the Elsevier Author WebShop: webshop.elsevier.com. You can order from 50 to 250 offprints, in increments of 50, published on high-quality glossy paper and with optional covers.



Anna Jacob Egalite @annaegalite · Feb 27

Very excited to share the FREE ACCESS link to our new race-matching paper in EER @briankisida @MarcusAWinters authors.elsevier.com/a/1QcPH~1QBc8yK



#### Copyright

When you publish with Elsevier, you enter into a legal agreement. This means that both we at Elsevier and you as an author agree to certain rights and responsibilities, and promise to act in a legally-sound manner.

#### **Protecting Author rights**

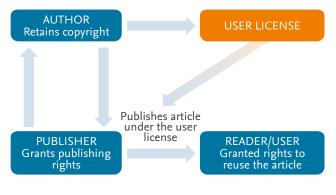
Copyright aims to protect the specific way the article has been written to describe the research and its results. Elsevier is committed to the protection and defense of its authors' work and reputations. We take allegations of infringement, plagiarism, ethical disputes and fraud very seriously.

#### **Publishing Agreement**

In order for Elsevier to be able to publish and disseminate your article, we need certain publishing permissions. These permissions are defined by a publishing agreement between the author and the publisher. You'll be asked to complete a Journal Publishing Agreement or license during the time between your article's acceptance and its final version. For more information, see elsevier.com/copyright.

#### End user license

If you've chosen to publish your article gold open access, you also select an end user license to determine how readers can share and use your article without having to request permission. Elsevier offers a choice of commercial or non-commercial user license, so you can select the license which suits your type of research. (For Health & Medical Science journals there are different regulations; see elsevier.com/openaccesslicenses.)



#### What is the license process?

**Step 1:** Authors sign a publishing agreement where they will retain copyright but grant publishing rights to the publisher.

**Step 2:** Readers can use and share the article as defined by the user license.

Step 3: The author grants the publisher the right to publish the article under the applicable license

**Step 4:** The publisher makes the article available online with the author's user license.

Before choosing an end user license, we recommend that you:

- Understand what each user license permits, and the rights it grants to readers for using your article
- Check if your funding body or institution has a policy requiring the use of a specific license
- Read your journal's Guide for Authors to ensure it offers the license you want to use
- Visit the Creativecommons.org site for more information on what to consider before selecting a user license. (It's important to note that you can't revoke your chosen license.)

For more information, see elsevier.com/openaccesslicenses.

#### Promote your work

More than one million scientific articles are published each year, and that number is rising. So it's increasingly important for you to find ways to make your article stand out.

Promoting your research does not begin after your manuscript is finished and has been published online. It should be on your mind even whilst you are doing it and writing up your paper. Promoting your research also continues some time after it has been published and the tracking the performance of your promotion activities will help drive improved results. For more detailed guidelines see elsevier.com/promote-your-work.



"Once authors have published in an Elsevier journal, they come back because of the other things Elsevier does for them: the My Research

Dashboard, the support for how to get the word out, how do you deal with media, how do you look at the impact of what you've done."

#### DR. BARBARA YAWN.

Director, Department of Research, Olmsted Medical Center; Adjunct Professor, University of Minnesota; Chief Editor, Respiratory Medicine Case Reports

#### **7-1 SHARE YOUR PAPER**

Sharing your research and findings can help you make a greater impact in your community, leading to better collaboration, new ideas and potential innovations. Millions of researchers have access to your publication on ScienceDirect, helping them to find, access, and cite your research in its best available version.

Elsevier will send you a 'Share Link': a personal, customized short link that you'll receive after the final publication of your article. We encourage you to share this link on social media; anyone clicking on it gets 50 days free access to your newly published article on ScienceDirect.

The more links there are to your article from a range of websites, the more readers you'll attract and the higher it will appear on search engine results.

For more information on sharing your article see elsevier.com/sharing-articles.

#### 7.2 BE DISCOVERED ONLINE

It's important people can find you and links to your publications online. There are a few easy tools to help you increase your online visibility.

If you have a personal page at your institute, include links to the final versions of your articles on that page. You should also ensure that your CV is available online, with links to your publications. You can do this on the popular networking site LinkedIn, or on a personal website or blog.

Finally, keep your SCOPUS and ORCID author profiles up-to-date so others can find your journal. You can now update both at orcid. scopusfeedback.com. Just follow the easy online steps.

#### **7.3 CONFERENCES**

Presenting and networking personalizes your work, giving it a face and voice, and can create new opportunities for collaboration. Make sure you connect with other delegates on Facebook and LinkedIn, and direct them to your website or blog. If you create a poster for a conference, post it on your website and provide links on your blog, social media profiles, online CV, or institutional page.

#### 7.4 SOCIAL MEDIA

Every day, scholarly articles receive 12,000 new mentions across social media, news and blogs: that's one mention every seven seconds! It's a powerful medium for reaching your potential readers. You don't have to be on all social media – it can be best to find one or two channels that suit you and your purposes. The most widely-used media are Facebook, Twitter and LinkedIn.

Build up a group of followers and share links to your publications. You can enhance your posts with visuals and videos that attract more attention. And don't forget to share your AudioSlides and Graphical Abstracts.

#### **7.5 MEDIA RELATIONS**

Elsevier promotes selected research papers to the global scientific media. If you think your article is interesting for a wider audience, or you'd like more information about any of the promotional channels mentioned above, contact us at researchcomm@elsevier.com to explore the possibilities.

Remember to also get in touch with the press office at your institute to see what they can do to help you promote your paper.



#### Monitor your impact

#### 8.1 INTRODUCTION

It's worth bearing in mind that your peers and tutors monitor your impact. Being aware of this helps you to submit your article to the most appropriate place (section 2.3), and also to position yourself by proactively supplying information about your own performance.

Just like when you're considering where to publish, the best approach to monitoring your impact is to have multiple ways of assessing your performance.

If you're at an early stage in your career, you can use metrics that don't require longer timeframes:

- **Collaboration** how big is your network? What's the status of colleagues in your network? Where in the world are they located?
- Scholarly output how productive are you?
- Usage how often have your publications been viewed?
- Altmetrics how many times is your output shared in collaboration networks like Mendeley or on social media?
- **Journal status** what's the status of the journals that have published your work? The average citation impact of all the articles in a journal is a useful proxy for the impact your articles will achieve when they've had time to accumulate citations.

When you're at a later stage in your research career, with a sizeable output and an impressive number of citations, further metrics can then become useful:

- Citation count how many citations has your articles received?
- Outstanding articles which of your articles are in the top percentile of comparable articles?
- h-index this rates your entire publication career based on both output and citation impact. (An h-index of 11 indicates that 11 of a researcher's articles have each received at least 11 citations.)

#### 8.2 MY RESEARCH DASHBOARD

Every author who's published at least one article with Elsevier in the last 10 years will now be invited to register for a personalized dashboard offering:

- Early feedback on how your publications are being downloaded, shared and cited
- Data about the geographic locations and research disciplines of your readers
- Detailed information about search terms used in ScienceDirect to find your publications
- A comparison of your article's performance against others

If you're an Elsevier author but haven't yet been invited to register for your personal dashboard, don't worry. We'll soon be in touch – and in the meantime, you'll continue to receive our current services:

"The dashboard presents the impact data in a clear and compelling manner. It makes me feel like authoring more articles. Thanks, this is so motivating!"

#### ALAN SHEMI,

School of Chemical and Metallurgical Engineering, University of the Witwatersrand, Author International Journal of Mineral Processing



My Research Dashboard: A personal and real time feedback service to authors. Combining metrics dating back 10 years. Including Elsevier and non-Elsevier publications.

- **CiteAlert**, a weekly service that automatically notifies you by email when your work is cited by an article in an Elsevier-published journal.
- **Article Usage Alerts**, a quarterly email for authors notifying them of the usage of their article for the first year after publication.



Very cool, #AeolianResearch dashboard tracks how many people read my article each month and where they are from sciencedirect.com/science/articl...



#### 8.3 ALTMETRICS

Who's talking about papers online – and what are they saying? Altmetrics, an alternative way to measure impact promptly after publication, allows you to track and analyze the online activity around your article.

Online article mentions are monitored from social media sites (Twitter, Facebook, Google+ and more); science blogs; reference managers, such as Mendeley; mainstream media outlets, including the New York Times, The Guardian, and non-English language publications such as Die Zeit and Le Monde; and special interest publications such as Scientific American and New Scientist.

#### Why publish with Elsevier?

"Elsevier has a continuing pipeline of innovating products and ideas."

**DR. GREGORY POLAND,** *Editor-in-Chief Vaccine* 



"The idea that you can find and publish 'hidden gems' from your lab book really resonated with us.

It allowed us to publish a useful finding that may otherwise have stayed in the lab book or been buried in another manuscript."

#### K. MELICAN,

author and a member of the MethodsX advisory board from Karolinska Institutet, Stockholm, Sweden on the new microarticle journal MethodsX

#### 9.1 INTRODUCTION

Of course, you'll consider other publishers and journals for your article. Why Elsevier? Well, chances are that the leading journal in your field of expertise – *The Lancet* if you're a medical scientist – is published by Elsevier. We publish thousands of journals and books, including many of the world's most renowned titles such as *Cell* and *Tetrahedon Letters*. We also continue to launch leading open access journals, such as *EBiomedicine* and *Heliyon*.

#### 9.2 INNOVATION

We also pride ourselves on our innovative approach, offering online services, article-based publishing and new types of open access publishing; including microarticles, which allow you to publish research output such as data, software, methods, videos, and more. We're constantly looking for ways to make your articles easier to find, and to facilitate collaboration between researchers and authors. Content innovation provides you with new tools to present your article: Share Links allow you to share your work with a wide audience; and My Research Dashboard lets you monitor your impact in a new and detailed way.

#### 9.3 SCIENCEDIRECT

Elsevier publishes your article on ScienceDirect, a leading information solution providing authoritative, full-text scientific, technical and medical content from Elsevier. By optimizing the platform and indexing all content, Elsevier works to ensure that your article is more visible and can be found more easily by search engines, library discovery services, A&I databases, and other search and discovery tools.

Your article will be accessible immediately after acceptance, and has a unique DOI (Digital Object Identifier) which will always link to the latest available version. Elsevier also participates in the multi-publisher initiative CrossRef, which creates direct links between your article and those that cite you. The CrossMark logo in online PDF or HTML documents helps readers to verify that they're using the most recent and reliable version of your work.

#### 9.4 SCOPUS

Scopus is the largest abstract and citation database of peer-reviewed literature – scientific journals, books and conferences – and features tools to track, analyze and visualize scholarly research. Its vast database contains abstracts and references from more than 21,000 titles, obtained from over 5,000 publishers worldwide, ensuring broad interdisciplinary coverage in the fields of science, technology, medicine, social sciences and the arts and humanities.

For authors, Scopus can simplify the search for relevant full-text content and potential research partners with advanced search functions and email alerts on specific topics, people and institutions.

#### Scopus lets you:

- Search for relevant topics or articles during the literature review phase
- Decide where, and with whom, to publish analyze the top journals and authors in your discipline
- Discover who is citing you, see their h-index and output information
- Explore how many citations an article or author has received, and identify potential collaborators
- Find information to support your grant or other applications

Additionally, Scopus helps you manage your research output and monitor your reputation. Just sign-up to receive citation alerts to track when your work is cited in other articles; and use the Scopus Author Profile page to view and analyze your output, including your h-index.



"Mendeley makes it much easier to share information with our overseas colleagues we can discuss

research papers over time zones and if internet connections are unreliable."

**POLLY COMPSTON,**Mendeley Research Advisor, The Brooke,
London, UK

#### 9.5 MENDELEY

Mendeley is a powerful reference manager, and an academic social network with more than three million users. By creating a free account you'll discover relevant research, and connect and collaborate with the global community. Go to mendeley.com and explore.

#### 9.6 MOBILE APPLICATIONS

Mobile applications let you access information anytime, anywhere, on your mobile devices. This user-friendliness means that Elsevier is committed to developing apps for the numerous products and services we offer.

For more information on mobile applications visit elsevier.com/authors/author-services



"Thank you for this excellent service. I have recommended it to my researchers. I am looking forward to the next events"

**PROF. DR. ANNE MARIE OUDESLUYS,**Department of Pediatrics, Leiden University
Medical Centre, on a Publishing Connect webinar.



"I used the access for writing a postdoctoral fellowship proposal, which successfully came through after

the free-access period ended. Some of the Elsevier journals I could access during that time were very helpful for finding relevant literature. The free access has contributed to the success of the proposal"

**DR. CHRISTOPHER V. SYNATSCHKE,** Feodor-Lynen Postdoctoral Fellow, Simpson Querrey Institute for BioNanotechnology, Northwestern University, USA

#### Further information and training

#### 10.1 PUBLISHING CAMPUS

The Elsevier Publishing Campus website gives information, advice and training resources to anyone pursuing a career in academia, including teachers and tutors. The Campus offers career advice and shows how you can make the most of the opportunities that come your way. Online lectures cover topics and trends in research, while regular blogs detail industry big ideas like open science, open access and big data. The Campus can help to boost essential publishing skills, such as writing, reviewing and grantwriting, and plenty of tips and tricks are offered by industry experts. Certificates of completion are awarded for the Campus' interactive training courses; these can be added to your CV, to show how far you've come on your research journey.

For more information see publishing campus.com.

#### 10.2 AUTHORS' UPDATE

Our interactive Authors' Update website has all the information you need to help you get published and promote your articles. Regular posts keep you in touch with industry developments and services designed to support your publishing efforts. You can also sign-up to receive free, regular email alerts.

For more information see elsevier.com/authors-update.

#### 10.3 POSTDOC FREE ACCESS PROGRAM

Elsevier's Postdoc Free Access Program supports young scholars who are between jobs or looking for their first postdoctoral position. Qualified applicants are granted up to twelve months' free access to all our journals and books on ScienceDirect, greatly benefitting their work on grant applications and research projects.

For more information see elsevier.com/postdoc-free-access

### **Elsevier Publishing Campus**

Training. Advice. Discussion. Networking.

Packed with free online lectures and interactive courses, together with expert advice and resources, to help you on your way to publishing a world-class book or journal article.

#### College of Skills Training

Boost your publishing skills in journals and books



#### College of Big Ideas



#### College of Networking

Make the most of every opportunity



#### College of Research Solutions

Training for effective and efficient research skills



#### College of Career Planning

Get ahead in your academic career



#### College of Recommended Organizations

Reach your potential with support from global resources



### Heliyon

## Your Research Is Now Welcome at Heliyon

#### Submit Today at www.heliyon.com

Heliyon is a broad-scope, open access journal with innovation and collaboration at its core. We publish research from all disciplines. If your work is technically sound, it's welcome.

We tap into Elsevier's vast network of experts, cutting-edge channels, and unique technology so that your research is...

#### **Published Fast**

If it's accepted, we aim to get your article published online in 72 hours

#### Open

Readers will have immediate and permanent access to your article

#### Connected

With our new technologies you can reach your community and beyond

Our door is open — submit today

Authors' Update elsevier.com/authors-update

ElsevierConnect elsevier.com/elsevierconnect

Authors' Home elsevier.com/authors

Publishing Campus - online training publishingcampus.com

Ethics in Research & Publication elsevier.com/ethics

Postdoc Free Access elsevier.com/postdoc-free-access

Journal Finder journalfinder.elsevier.com

Elsevier Webshop webshop.elsevier.com

Promote your work elsevier.com/promote-your-work

Share Link elsevier.com/author-share-link

My Research Dashboard elsevier.com/MyResearchDashboard/about

