

Writing an abstract

Who should read this?

Anyone interested in learning more about abstracts.

When is the correct time to write the abstract?

Write the abstract after you have finished writing the entire paper: not before.

What is an abstract?

An abstract is a self-contained, brief summary of the paper. It is used to communicate complex research and findings efficiently. It is the most widely read portion of a paper and should be an abbreviated version of the paper. Because online search databases contain abstracts only, it is vital to write a complete but concise description of your work to encourage others into obtaining a copy of the full paper. Simply put, the abstract should be short and clearly written—the two essential qualities of an excellent abstract.

What does the reader look for in an abstract?

The decision to read the entire paper is often predicated on what the reader finds in the abstract. The reader is looking for the purpose of the experiment, the plan, the most important findings, and the conclusion; however, the abstract should not contain anything not confirmed in the paper. The first sentence must state what was accomplished in your experiment and/or the purpose of the paper. The next sentence or sentences should describe the principal results. Background information relating to why the study was done may be included in the abstract or otherwise such information belongs in the introduction section. Experimental details, including instrumentation and parameters should not be in the abstract but rather in the experimental section of the paper. Because an abstract must stand alone from the rest of the paper, do not refer to equations, figures, tables, or cited sources. It is, however, the correct place to use abbreviations used later in the body of the paper.

What is the optimum length of an abstract?

One paragraph maximum or even only two or three sentences are optimum lengths. However, the length depends upon the complexity of the subject matter. Fewer than 200 words are usually sufficient.

What about key words and phrases?

Include key words and phrases so that information search engines can easily locate your paper.

How important is a good abstract?

A well-written abstract is often an indication that the entire paper meets the criteria and standards of a good scientific report.

Example of a satisfactory abstract

Characterization of materials used in the digital imaging industry has been performed using micro X-ray diffraction (microXRD) techniques. Case studies are described that demonstrate the use of microXRD for identification of phases, texture, and microstructure morphology of components used in imaging applications. [Adv. X-ray Anal. Vol. 49, pp. 352–362 (2006)]

Key words: digital imaging industry, micro X-ray diffraction (micro XRD), microstructure morphology.