



Reading closer, citing smarter: Upgrading editorial oversight

The integrity of scientific papers depends on two things: the authenticity of the writing and the reliability of the citations. Recently, the editorial board of Chimica Techno Acta has noticed a concerning trend. An increasing number of received submissions show signs of automated text generation without proper disclosure. Others have impressive-looking reference lists that prove superficial or even fabricated upon closer inspection. Traditional peer review alone is unable to identify these issues. This is why we have developed two proprietary analytical tools for our editorial office. These tools help our editors and reviewers to identify unethical authoring practices and to gain a comprehensive and evidence-based understanding of a manuscript's scholarly foundations.

The first tool, the **CT(A)I-detector**, focuses on the text itself, **Figure 1**. Although large language models have become remarkably flexible, they still struggle to capture the true rhythm of academic writing. Real authors naturally

vary sentence length, insert parenthetical comments, and add clarifying asides. They often use tentative wording ("it appears", "the data suggest"), because genuine research deals with probabilities, not certainties. By contrast, AI-generated text strives for unnatural uniformity, with every paragraph written with the same measured precision. Our detector scans for these subtle signs, identifying not only clichés but also deeper stylistic features. Like familiar plagiarism detectors (iThenticate, Turnitin), our tool does not accuse; it simply flags. This prompts our team to conduct a more detailed analysis. This enables us to distinguish between authors who openly use AI as a writing aid (acceptable) and those who attempt to pass off generated text as their own original work without editing the scientific context appropriately.

The second tool, the **Comprehensive Reference List Analyzer**, transforms a bibliography into a well-structured dataset, **Figure 2**. A reference list is a map of

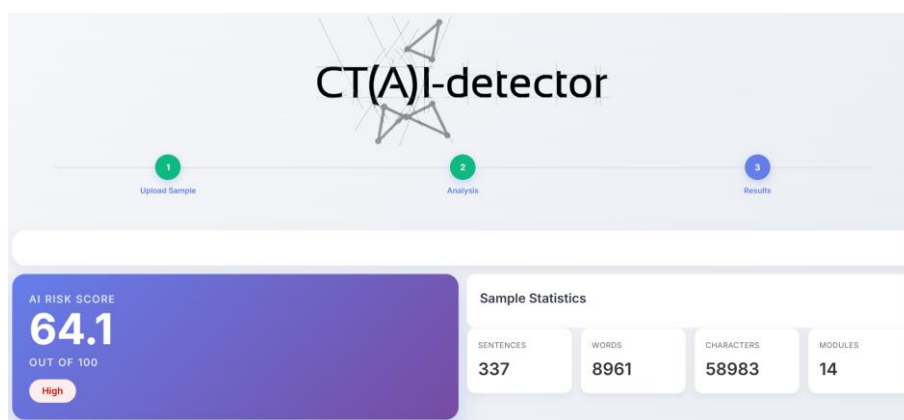


Figure 1. The title page fragment of the CT(A)I-detector tool after the analysis of a manuscript.

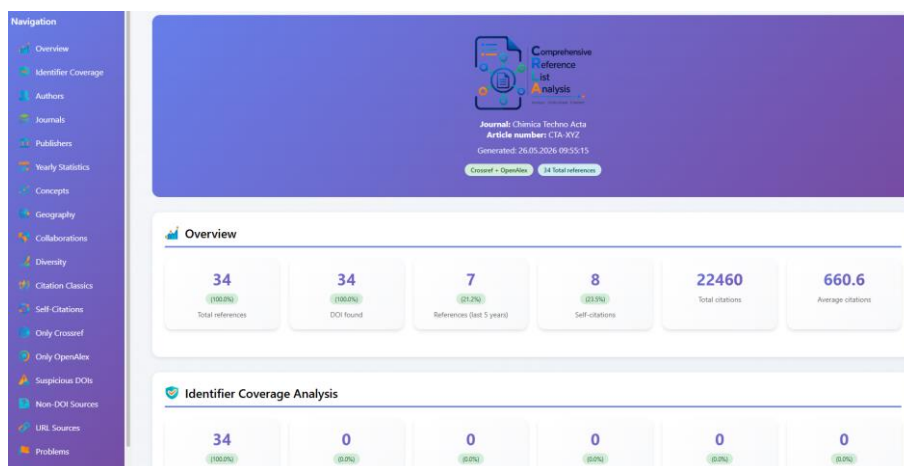


Figure 2. The fragment of a HTML report of the Comprehensive Reference List Analyzer tool.

intellectual debts. A classical map shows diverse terrain, such as recent discoveries alongside foundational classics, work from multiple countries and institutions, and a variety of journals. A suspicious map looks different. It might repeatedly cite the same narrow set of authors. It may reference papers whose DOIs do not resolve or whose metadata cannot be confirmed in any major database, which is a signal of potential fabrication. Our analyzer queries Crossref and OpenAlex simultaneously, collecting publication years, citation counts, author affiliations, and publisher information for each reference. Then, it presents our reviewers with a clear summary of the following: the share of self-citations, the percentage of references from the last five years, the geographic spread of cited authors, and (most importantly) a list of unverifiable references that appear to exist only on paper.

Neither tool makes decisions. They provide evidence. Flagged text or a suspicious bibliography does not automatically result in rejection. Rather, it leads to a more informed discussion among editors, reviewers, and authors. Some authors may have valid reasons for their choices. Others may need to revise their work. A few may need to withdraw their submission. In every case, however, the process becomes fairer and more transparent.

Chimica Techno Acta has always valued a rigorous and critical approach to scientific research. These new internal tools help us pay equal attention to article writing and citations, both of which are essential aspects of scientific integrity. We encourage our authors to familiarize themselves with our updated AI disclosure guidelines and to compile their reference lists carefully and ethically. Good science is honest science (in its data, its writing, and its references).

Sincerely,
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