Fair Use Statement

1. Identification of Copyrighted Material:

- Work: "Enrichment of H₂¹⁷O from Tap Water, Characterization of the Enriched Water, and Properties of Several ¹⁷O-Labeled Compounds".
- Authors: Brinda Prasad, Andrew R. Lewis, and Erika Plettner.
- Publication: Anal. Chem. 2011, 83, 1, 231–239.
- DOI: 10.1021/ac1022887.
- Publisher/Copyright Holder: American Chemical Society.
- Material Shared: A combined digital file containing the full text of the aforementioned article and its complete
 associated Supporting Information (SI).

2. Assertion of Fair Use:

 The sharing of this copyrighted material is undertaken for specific, limited purposes, believed in good faith to constitute "fair use" under Section 107 of the U.S. Copyright Act (or applicable analogous principles in other jurisdictions).

3. Purpose and Character of Use (Factor 1):

- Non-Profit Educational and Research: The use is strictly for non-commercial research and educational
 purposes, specifically within the context of scholarly critique and the advancement of research methodology.
- **Transformative Use:** The work is not merely being reproduced; it is fundamentally repurposed as a **research specimen** for critical analysis. Its primary function in this context is not to convey its original purported findings, but to serve as the subject of rigorous evaluation and methodological demonstration.
- Critique and Commentary: A core purpose is to conduct and disseminate a detailed, peer-review-like critique of
 the article's methodology, analysis, and conclusions. This critique identifies significant flaws within the original
 work.
- Advancement of Knowledge & Methodology: The use includes the development and demonstration of a novel
 Al-driven prompt/technique for manuscript analysis. Sharing the specimen (the article + SI file) is integral to
 demonstrating and enabling the verification and further development of this new analytical method.

4. Nature of the Copyrighted Work (Factor 2):

- The original work is a published scholarly article, typically factual in nature, a category often amenable to fair use for purposes of scholarship and critique.
- However, the conducted analysis (central to this project) has revealed substantial flaws impacting the reliability
 and validity of the work's core research findings as presented. This impacts the assessment of its nature in the
 context of this specific use.

5. Amount and Substantiality of the Portion Used (Factor 3):

- The entire article and its complete Supporting Information are utilized and shared in a combined format.
- Justification: This amount is essential and necessary for the stated purpose. A comprehensive critique, akin to thorough peer review or forensic analysis, requires examination of the whole work, including all data and methods presented in the SI. Evaluating the integrity and validity of the research necessitates access to the complete context. Furthermore, the development and validation of the AI analysis prompt require the complete text as input. The combined file format, not available directly from the publisher, was the specific subject of the analysis.

6. Effect of the Use upon the Potential Market for or Value of the Copyrighted Work (Factor 4):

No Harm to Legitimate Market: This use is not intended to, nor is it likely to, negatively impact the legitimate
market or value of the original copyrighted work. The publisher's market relies on the perceived value of the article

as a source of valid scientific findings.

- Critique Reveals Lack of Value: The critique resulting from this research demonstrates fundamental flaws undermining the article's claimed scientific value. Therefore, sharing the work *specifically in this context* (as a specimen for critique and methodological development) does not substitute for or usurp the market for the work based on its originally purported merits, as those merits are shown to be compromised. Dissemination for critique serves the public interest by highlighting these issues, distinct from fulfilling the original market demand.
- Controlled Access for Verification via Private OSF Project: To ensure transparency and enable independent
 verification and follow-on research by interested parties engaging with the publicly disseminated research critique
 manuscript [TBD], the combined article + SI file (serving as the direct supporting evidence and test specimen) is
 hosted within a private Open Science Framework (OSF) project. A view-only link to this private project will be
 provided alongside the manuscript.
- Minimized Risk of Unintended Use: This method ensures that access is granted specifically to individuals who
 are actively reviewing or assessing the research critique presented in the manuscript. The private nature of the
 OSF project prevents general public discovery through search engines, and the view-only restriction prevents
 facile downloading and redistribution. Access requires the specific link obtained from the context of the critique
 manuscript.
- Purpose Remains Transformative, Not Substitutive: By utilizing a controlled-access, view-only repository
 linked directly to the research critique, this approach provides the necessary transparency for verification while
 strictly limiting potential downstream use and eliminating broad public access. This method strongly reinforces that
 the purpose is critique and verification (transformative uses), not market substitution for the original work's
 questioned scientific claims, thereby minimizing any potential harm to a legitimate market.

7. Conclusion:

- Based on the non-profit, educational, highly transformative nature of the use (critique, commentary, methodological advancement), the necessity of using the entire work for these specific purposes, and the argument that this use does not harm the legitimate market value due to the work's identified flaws and the distinct purpose of sharing, this distribution is asserted to be fair use.
- This material is intended solely for the recipient(s) for purposes directly related to verifying, understanding, or building upon the presented critique and methodological research. Further distribution is not permitted.
 Copyright remains with the original holder(s).