

Summary of Peer Review for "A New Era of Scientific Discourse: Transparent, AI-Augmented Peer Review for Rapid and Unbiased Scholarly Publishing"

The manuscript presents a **highly original, significant, and data-validated** model for an AI-augmented peer-review system, as implemented by the Scottish Science Society. It is well-structured, clearly written, and provides compelling empirical evidence to support its claims. [↗](#)

[↗](#) [↗](#)

Key Findings and Strengths

The empirical data demonstrates the system's success in addressing the core crises of traditional peer review:

- **Optimised Celerity (Speed):** The model drastically reduces publication timelines. The **mean time from submission to first decision was 2.8 hours**. The **mean time-to-publication** for accepted manuscripts was only **5.2 days** , representing a reduction of over 98% compared to many traditional journals. [↗](#) [↗](#) [↗](#)
- **Engineered Objectivity (Reliability):** By using an ensemble of three distinct Large Language Models (LLM-A: GPT-4 class, LLM-B: Claude 3 class, LLM-C: Gemini 1.5 class) , the system achieved a high degree of consensus. A final decision was reached automatically in **94.7% of cases** (71 out of 75 submissions). [↗](#) [↗](#) [↗](#)
- **Complete Accessibility (Equity):** The model operates on a **zero-cost, diamond open access** basis, with **no Article Processing Charges (APCs)** or subscription fees, directly addressing the economic barriers of scholarly publishing. [↗](#)
- **Readership and Engagement:** The model generated significant community interest, amassing **40,000 unique article views** across 68 published articles in its first year, demonstrating that its content is perceived as valuable. [↗](#)

Required Revisions (Minor)

The following minor points are requested for enhancement:

1. **Introduction Refinement:** Briefly state the system's **diamond open access/zero-cost model** in the Introduction to directly link the solution to the discussed problem of prohibitive APCs.
2. **Consensus Clarity:** Explicitly state the implied decision rule in the Methodology: that a **2/3 majority (two matching verdicts)** from the three LLMs is required for an immediate automated final decision.
3. **Readership Metric:** Briefly calculate and state the **average views per article** (approx. 588 views/article) to further quantify community engagement.
4. **Discussion Point:** Briefly suggest how the publicly published AI reviews can serve as a foundation or starting point for **human post-publication review (PPR)**, further emphasizing the human-AI augmentation synergy.