

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

Hernan Ortega

Museo de Historia Natural-UNMSM, profesor principal de Ciencias Biologicas

[Google Scholar profile](#)

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Criterion 5 (original contributions of major significance). It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

A. Overview & Filtering Statement

4	4	1	31
Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)

Filtering statement – methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper’s authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar’s known collaborators; *same-institution* citations are by authors affiliated with the scholar’s institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar’s own circle.

Known limitations – counsel must verify. (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight – re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar’s own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

100.0% independent of 4 classified citing papers

Citation type	Count
Independent	4
Self-citation	0
Co-author	0
Same-institution	0

0 citing papers could not be classified (no author data) and are excluded from the percentages above.

C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total – the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing – how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner’s choice of comparison field.

Contribution 1

Claim – Contribution 1

The researcher published a seminal study in Science Advances analyzing how hydropower dams disrupt ecological connectivity between the Andes and the Amazon basin.

CLAIM: The researcher’s primary contribution is a 2018 study published in Science Advances that examines the fragmentation of Andes-to-Amazon connectivity caused by hydropower dams. This work stands as a core publication in the field, with no follow-up papers by the same researcher listed in the provided data.

ORIGINALITY: The title suggests the work addresses a critical gap in understanding the large-scale ecological impacts of infrastructure development. By focusing on the specific connectivity between the Andes and the Amazon, the research appears to offer a novel perspective on how hydropower projects alter regional ecological networks, a topic of significant environmental concern.

SIGNIFICANCE: The paper has garnered 440 citations, indicating substantial uptake by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has influenced scholars outside the researcher’s immediate institution and collaboration network, thereby underscoring its broad independent impact.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[Fragmentation of Andes-to-Amazon connectivity by hydropower dams](#)

2018 · Science Advances · 440 citations (GS)

Field-normalised: 328 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Human impacts on global freshwater fish biodiversity (2021)	INRAE, Aix Marseille Univ, Institute of Hydrobiology, Chinese Academy of Sciences, Qingdao National Laboratory for Marine Science and Technology	China, France	—
2	River Damming Impacts on Fish Habitat and Associated Conservation Measures (2023)	Beijing Normal University, Chinese Academy of Sciences, Federal University of Western Pará	Brazil, Canada, China	—
3	Anthropogenic stresses on the world's big rivers (2019)	University of Illinois at Urbana-Champaign, University of Illinois Urbana-Champaign	United States	—
4	Lakes in the era of global change: moving beyond single-lake thinking in maintaining biodiversity and ecosystem services (2020)	—	—	Background

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar’s read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2’s isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Chinese Academy of Sciences	China	SCImago #5 · QS =362	1
Hohai University	China	SCImago #727 · QS 1001-1200	1
Utrecht University	Netherlands	SCImago #162 · QS =103	1
Chinese Academy of Sciences	China	SCImago #2	1
University of Saskatchewan	Canada	SCImago #1541 · THE 351-400 · QS 378	1
University of Illinois at Urbana-Champaign	United States	SCImago #206 · THE =41	1
Institute of Hydrobiology, Chinese Academy of Sciences	China	SCImago #3422	1
Beijing Normal University	China	SCImago #542 · THE =134 · QS =247	1
University of Illinois Urbana-Champaign	United States	QS =70	1
Tsinghua University	China	SCImago #8 · THE 12 · QS =17	1
National Oceanic and Atmospheric Administration	United States	SCImago #825	1
Université Toulouse 3 Paul Sabatier	France	—	1
INRAE, Aix Marseille Univ	France	—	1
Qingdao National Laboratory for Marine Science and Technology	China	—	1
University of Montpellier	France	QS =430	1

Geographic distribution of citing authors

Country	Citing papers
China	2
United States	2
Brazil	1
Netherlands	1
South Korea	1
France	1
Canada	1

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar's own institution and circle** – the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution's rank as probative on its own.

F. AAO Precedent Considerations

Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- Self-citations are disclosed and netted out – a Google Scholar total alone is faulted (§1.1).
- Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- The petition articulates why the citations show major significance – numbers never stand alone (§1.5).
- For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- Co-author / collaborator citations are identified and not counted as independent (§1.7).
- Recognition is shown beyond the scholar's own institution and circle (§1.8).
- Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- For large-collaboration papers, the scholar's specific role is documented (§1.13).
- Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

Disclaimer

The AAO decisions referenced here are **non-precedent** – persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition's merits. All analysis must be reviewed by qualified immigration counsel.

G. Citation Evidence Index

Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition's exhibit numbers.

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Fragmentation of Andes-to-Amazon connectivity by hydropower dams	4	8 CFR 204.5(h)(3)(v) – Criterion 5