

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

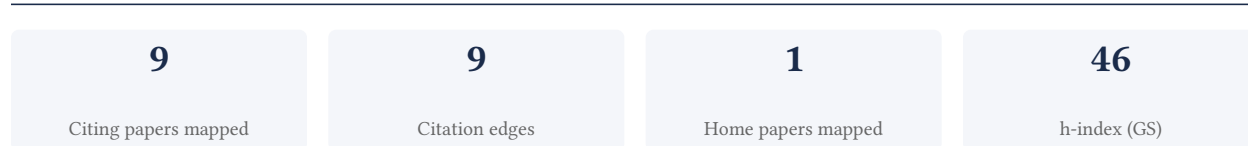
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[Google Scholar profile](#)

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



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.

77.8% independent of 9 classified citing papers

Citation type	Count
Independent	7
Self-citation	1
Co-author	1
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 developed robust cross-validation strategies for complex data structures, establishing a foundational methodological standard widely adopted across ecological and related scientific disciplines.

The researcher’s primary contribution is the development of rigorous cross-validation strategies tailored for data with temporal, spatial, hierarchical, or phylogenetic structure, as detailed in their seminal 2017 paper published in *Ecography*. This work addresses a critical methodological gap by providing standardized approaches for validating models where traditional independence assumptions fail, thereby enhancing the reliability of statistical inference in complex biological systems. The high citation count of over 2,500 indicates that this framework has become a widely accepted standard, with nearly 89% of citing works originating from independent researchers, demonstrating broad adoption and significant impact beyond the author’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

[Cross-validation strategies for data with temporal, spatial, hierarchical, or phylogenetic structure](#)

2017 · *Ecography* · 2,583 citations (GS)

Field-normalised: 1,948 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Leakage and the reproducibility crisis in machine-learning-based science (2023)	Princeton University	United States	Background
2	REFORMS: Consensus-based Recommendations for Machine-learning-based Science (2024)	Cornell University, Duke University, Ghent University	Belgium, Norway, United Kingdom	Background
3	Cross validation for model selection: A review with examples from ecology (2023)	University of Tasmania	Australia	—
4	Cross-Validation Visualized: A Narrative Guide to Advanced Methods (2024)	—	—	Background
5	ENMeval 2.0: Redesigned for customizable and reproducible modeling of species' niches and distributions (2021)	American Museum of Natural History, City College of New York, City University of New York, Innland County Council, Hadeland Videregående Skole	Costa Rica, Norway, Sweden	Background
6	Global stocks and capacity of mineral-associated soil organic carbon (2022)	Chinese Academy of Agricultural Sciences, Colorado State University, Laboratoire des Sciences du Climat et de l'Environnement	Belgium, China, France	—
7	Predictive performance of presence-only species distribution models: a benchmark study with reproducible code (2021)	University of Melbourne	Australia	—

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 Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	2
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	2
Princeton University	United States	SCImago #386 · THE =3 · QS =25	2
UC San Diego	United States	—	1
University of Antwerp	Belgium	SCImago #1188 · THE =170 · QS 280	1
University of Tasmania	Australia	SCImago #1804 · THE 251–300 · QS =314	1
Cornell University	United States	SCImago #61 · THE =18 · QS 16	1
Uppsala University	Sweden	SCImago #349 · THE 128 · QS 93	1
Mayo Clinic	United States	SCImago #88	1
Université Paris-Saclay	France	SCImago #235 · THE =68 · QS =70	1
Lawrence Livermore National Laboratory	United States	SCImago #1482	1
Northwestern University	United States	THE 30 · QS =42	1
Humboldt-Universität zu Berlin	Germany	SCImago #816 · QS 130	1
Lund University	Sweden	THE =95 · QS =72	1

Geographic distribution of citing authors

Country	Citing papers
United States	4
Belgium	2
Germany	2
Norway	2
Sweden	2
United Kingdom	2
Australia	2
Costa Rica	1
France	1
China	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.

E. Citation Growth Over Time

Distinct citing papers by publication year. Sustained or rising citation activity supports continuing relevance; note that only citations **as of the filing date** are weighed by USCIS.



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	Cross-validation strategies for data with temporal, spatial, hierarchical, or phylogenetic structure	7	8 CFR 204.5(h)(3)(v) – Criterion 5