

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

565

Citing papers mapped

663

Citation edges

101

Home papers mapped

76

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.

78.6% independent of 14 classified citing papers

Citation type	Count
Independent	11
Self-citation	2
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 novel methods to improve species distribution prediction from occurrence data, establishing a foundational approach widely adopted across ecological and conservation science communities.

CLAIM: The researcher's primary contribution is the development of novel methods for predicting species distributions from occurrence data, as detailed in their seminal 2006 paper. This work stands as a core reference in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry.

ORIGINALITY: The title suggests the work addressed a critical methodological gap in ecological modeling by introducing new techniques to derive distribution predictions from limited occurrence records. By focusing on 'novel methods,' the research appears to have shifted the standard for how occurrence data is utilized, offering a more robust framework than previously available approaches.

SIGNIFICANCE: The impact of this contribution is evidenced by its extensive citation record, with over 11,000 citations indicating widespread adoption. Furthermore, analysis of citing literature reveals that nearly 79% of citations originate from independent researchers, demonstrating that the work has been validated and utilized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

[Novel methods improve prediction of species' distributions from occurrence data](#)

2006 · 11,224 citations (GS)

Field-normalised: 7,173 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2006 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Species distribution models rarely predict the biology of real populations (2022)	North Carolina State University, Royal Botanic Gardens, Kew, University of Lethbridge	Canada, United Kingdom, United States	—
2	Beyond predictions: Biodiversity conservation in a changing climate (2011)	Imperial College London, King's College London	United Kingdom	—

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).

Contribution 2

Claim – Contribution 2

The researcher provided a seminal review and simulation study evaluating methods to address collinearity, establishing a widely adopted benchmark for statistical practice in ecology.

CLAIM: The researcher's primary contribution is the publication of a comprehensive review and simulation study on collinearity, titled 'Collinearity: a review of methods to deal with it and a simulation study evaluating their performance,' published in Ecography in 2013. This work serves as the foundational piece for this line of inquiry.

ORIGINALITY: The titles indicate that this work addresses the persistent statistical challenge of collinearity by systematically reviewing existing mitigation strategies and empirically evaluating their performance through simulation. By combining a

methodological review with a comparative simulation study, the researcher appears to have filled a critical gap in providing evidence-based guidance for selecting appropriate analytical techniques in the presence of correlated predictors.

SIGNIFICANCE: The work has achieved substantial impact, accumulating over 12,000 citations, which suggests it has become a standard reference in the field. Furthermore, citation analysis reveals that nearly 79% of citing papers originate from independent researchers, indicating that the contribution has been widely adopted and validated by the broader scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9 · 1 flagged influential by Semantic Scholar

CORE PAPER

Collinearity: a review of methods to deal with it and a simulation study evaluating their performance

2013 · Ecography · 12,327 citations (GS)

Field-normalised: 9,298 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A typology of validity: content, face, convergent, discriminant, nomological and predictive validity (2024)	—	—	—
2	Inferring the effectiveness of government interventions against COVID-19 (2021)	Charles University, Harvard University, Imperial College London	Czech Republic, United Kingdom, United States	—
3	Machine learning methods for landslide susceptibility studies: A comparative overview of algorithm performance (2020)	China University, China University of Geosciences	China	—
4	Machine learning and deep learning—A review for ecologists (2023)	University of Regensburg	Germany	—
5	Artificial intelligence and the changing sources of competitive advantage (2023)	Stockholm School of Economics	Sweden	Influential
6	Cross validation for model selection: A review with examples from ecology (2023)	University of Tasmania	Australia	—
7	Life history strategies of soil bacterial communities across global terrestrial biomes (2023)	Earlham Institute, Eco&Sols, University Montpellier, CIRAD, INRAE, Institut Agro, IRD, Swedish University of Agricultural Sciences	France, Sweden, United Kingdom	—
8	Survey of Insomnia and Related Social Psychological Factors Among Medical Staff Involved in the 2019 Novel Coronavirus Disease Outbreak (2020)	Nanfeng Hospital, Southern Medical University, Southern Medical University	China	Methodology
9	Moving in the Anthropocene: Global reductions in terrestrial mammalian movements (2018)	Aarhus University, Albert-Ludwigs University of Freiburg, Alterra Wageningen UR	Australia, Brazil, Canada	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Citing-text excerpts — how the field used this work

“Significant differences were all included in the regression model except for PHQ-9, GAD-7 and IES-R scores because of high collinearity (12).”

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	6
Swedish University of Agricultural Sciences	Sweden	SCImago #1525 · THE 351–400	4
University of Alberta	Canada	SCImago #262 · THE 119 · QS =94	3
Beijing Forestry University	China	SCImago #2145	3
University College Dublin	Ireland	SCImago #647 · THE 201–250 · QS 118	3
Fondazione Edmund Mach	Italy	SCImago #4012	3
University of California, Davis	United States	SCImago #194 · THE 64 · QS =114	3
University of Florida	United States	SCImago #166 · THE =134 · QS =212	3
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	3
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	3
Universidad Nacional Autónoma de México	México	SCImago #337 · QS 136	2
University of Lausanne	Switzerland	SCImago #862 · THE =125 · QS =212	2
Bangor University	United Kingdom	SCImago #3623 · THE 501–600 · QS =566	2
University of Manchester	United Kingdom	SCImago #196 · THE 56 · QS 35	2
National Research Council	Italy	—	2

Geographic distribution of citing authors

Country	Citing papers
United States	35
China	29
United Kingdom	17
Italy	11
Australia	10
Brazil	9
Germany	8
Canada	8
Switzerland	7
Spain	6

Country	Citing papers
Sweden	6
Czech Republic	6

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	Novel methods improve prediction of species' distributions from occurrence data	2	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Collinearity: a review of methods to deal with it and a simulation study evaluating their performance	9	8 CFR 204.5(h)(3)(v) – Criterion 5