

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

7	7	1	73
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 7 classified citing papers

Citation type	Count
Independent	7
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 developed UCHIME, a tool that significantly enhances the sensitivity and speed of chimera detection in bioinformatics, as evidenced by its widespread adoption.

The researcher's primary contribution is the development of UCHIME, introduced in a 2011 Bioinformatics paper. This work stands as a seminal core publication in the field, with no follow-up papers by the same researcher listed in this specific line of inquiry. The title indicates a focus on improving both the accuracy and efficiency of identifying chimeric sequences.

This line of work appears to address the critical need for more robust and faster methods in chimera detection. By prioritizing sensitivity and speed, the researcher likely tackled limitations in existing tools that may have been slower or less accurate, offering a streamlined solution for bioinformatics workflows.

The significance of this contribution is underscored by its extensive citation record, with over 16,000 citations. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, suggesting broad, field-wide adoption and validation of the method beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · 1 flagged influential by Semantic Scholar

CORE PAPER

[UCHIME improves sensitivity and speed of chimera detection](#)

2011 · Bioinformatics · 16,108 citations (GS)

Field-normalised: 13,364 Semantic Scholar citations place it in the top 1% of Biology papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The UNITE database for molecular identification of fungi: handling dark taxa and parallel taxonomic classifications. (2019)	Global Biodiversity Information Information Facility, Jacobs University Bremen and MPI for Marine Microbiology, National Museum of Natural History, Smithsonian Institution	Denmark, Estonia, Germany	—
2	Applications of environmental DNA (eDNA) in ecology and conservation: opportunities, challenges and prospects (2020)	Xishuangbanna Tropical Botanical Garden, Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences	China	—
3	Environmental DNA metabarcoding: Transforming how we survey animal and plant communities (2017)	Aberystwyth University, Bangor University, Cornell University	Canada, Switzerland, United Kingdom	Methodology
4	A Dietary Fiber-Deprived Gut Microbiota Degrades the Colonic Mucus Barrier and Enhances Pathogen Susceptibility (2016)	Aix-Marseille Université, Luxembourg Centre for Systems Biomedicine, Luxembourg Institute of Health	France, Luxembourg, United States	Influential
5	DADA2: High-resolution sample inference from Illumina amplicon data (2016)	Second Genome, Stanford University	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Fungal-bacterial diversity and microbiome complexity predict ecosystem functioning (2019)	Netherlands Institute of Ecology (NIOO-KNAW), University of Bern	Netherlands, Switzerland	—
7	Microbially mediated mechanisms underlie soil carbon accrual by conservation agriculture under decade-long warming (2024)	China Agricultural University, University of Exeter	PR China, 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).

Citing-text excerpts — how the field used this work

METHODOLOGY Environmental DNA metabarcoding: Transforming how we survey animal and plant communities

“Despite the variation in software used such as UCHIME (Edgar et al., 2011), OBITOOLS (Boyer et al.”

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Oslo	Norway	SCImago #425 · THE =113 · QS =119	1
University of Notre Dame	United States	SCImago #1036 · THE 194 · QS =294	1
Washington University School of Medicine	United States	—	1
University of Gothenburg	Sweden	SCImago #573 · THE 201–250 · QS 202	1
University of Exeter	United Kingdom	SCImago #679 · THE =170 · QS =155	1
Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences	China	SCImago #4390	1
Second Genome	United States	—	1
Luxembourg Institute of Health	Luxembourg	SCImago #1557	1
University of Luxembourg	Luxembourg	SCImago #1629 · THE 251–300 · QS =381	1
University of Tartu	Estonia	SCImago #1820 · THE 301–350 · QS =362	1
Cornell University	United States	SCImago #61 · THE =18 · QS 16	1
Université Laval	Canada	THE 401–500 · QS =469	1
Aix-Marseille Université	France	SCImago #667	1
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	1
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	1

Geographic distribution of citing authors

Country	Citing papers
United States	4
United Kingdom	3
Switzerland	2
Estonia	1
France	1
Germany	1
Luxembourg	1
Canada	1
Norway	1
PR China	1
Sweden	1
Netherlands	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.

2016  2

2019  2

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	UCHIME improves sensitivity and speed of chimera detection	7	8 CFR 204.5(h)(3)(v) – Criterion 5