Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

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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 Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. 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

10	10	2	58
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 10 classified citing papers

Citation type	Count
Independent	10
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 established soil pH as a primary predictor of bacterial community structure at a continental scale, providing a foundational framework for understanding large-scale microbial ecology.

The researcher's core contribution rests on a seminal 2009 paper in Applied and Environmental Microbiology, which utilized pyrosequencing to assess soil pH as a predictor of bacterial community structure. This work stands alone as the primary vehicle for this specific line of inquiry, with no follow-up papers by the same researcher building directly upon it in the provided dataset.

This line of work appears to address the challenge of identifying key environmental drivers of microbial diversity across vast geographical areas. By focusing on soil pH at a continental scale, the research suggests a shift toward understanding broad ecological patterns rather than localized variations, offering a novel perspective on the determinants of soil bacterial community composition.

The significance of this contribution is underscored by its substantial citation count of 4512, indicating widespread recognition within the scientific community. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has been adopted and utilized by the broader field beyond the researcher's immediate institutional or collaborative network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

Pyrosequencing-based assessment of soil pH as a predictor of soil bacterial community structure at the continental scale

2009 · Applied and Environmental Microbiology · 4,512 citations (GS)

Field-normalised: 3,562 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2009 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Microbial diversity drives multifunctionality in terrestrial ecosystems (2016)	Hawkesbury Institute for the Environment, Western Sydney University, Instituto de Suelos, The James Hutton Institute	Argentina, Australia, Spain	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 2

Claim — Contribution 2

The researcher established a foundational framework for analyzing global microbial diversity at unprecedented sequencing depths, enabling standardized, large-scale ecological comparisons across diverse environments.

CLAIM: The researcher's seminal 2011 publication in Proceedings of the National Academy of Sciences introduced a methodological approach for assessing 16S rRNA diversity at a depth of millions of sequences per sample. This work serves as the core contribution, with no subsequent follow-up papers by the same author listed in this specific line of inquiry.

ORIGINALITY: The title suggests a significant methodological advancement, addressing the challenge of capturing comprehensive microbial diversity through high-depth sequencing. By focusing on 'global patterns' and 'millions of sequences,' the work

appears to have moved beyond limited sampling depths, offering a robust standard for large-scale ecological analysis that was likely novel at the time of publication.

SIGNIFICANCE: The paper has accumulated 10,879 citations, indicating it is a highly influential reference in the field. Analysis of citing literature reveals that 100% of the sampled citations originate from independent researchers, demonstrating broad adoption across the scientific community rather than self-citation or institutional clustering. This widespread independent uptake underscores the work's status as a foundational tool for microbial ecology research.

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

CORE PAPER

Global patterns of 16S rRNA diversity at a depth of millions of sequences per sample

2011 · Proceedings of the National Academy of Sciences (Proc Natl Acad Sci U S A) · 10,879 citations (GS)

Field-normalised: 8,708 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Environmental DNA metabarcoding: Transforming how we survey animal and plant communities (2017)	Aberystwyth University, Bangor University, Cornell University	Canada, Switzerland, United Kingdom	—
2	A Communal Catalogue Reveals Earth's Multiscale Microbial Diversity (2017)	Oregon State University, University of California San Diego, University of Colorado Boulder	United States	—
3	Fungal-bacterial diversity and microbiome complexity predict ecosystem functioning (2019)	Netherlands Institute of Ecology (NIOO-KNAW), University of Bern	Netherlands, Switzerland	—
4	Analysis of compositions of microbiomes with bias correction (2020)	University of Pittsburgh	United States	—
5	The commensal microbiome is associated with anti–PD-1 efficacy in metastatic melanoma patients (2018)	University of Chicago	United States	—
6	RESCRIPt: Reproducible sequence taxonomy reference database management (2021)	ETH Zürich, Northern Arizona University, University of Arkansas for Medical Sciences	Australia, Switzerland, United States	—
7	The oral microbiome: Role of key organisms and complex networks in oral health and disease (2021)	University of California, San Francisco	United States	—
8	Structure and function of the global topsoil microbiome (2018)	European Molecular Biology Laboratory, Leiden University, Swedish University of Agricultural Sciences	Estonia, Netherlands, Norway	—
9	Killing tumor-associated bacteria with a liposomal antibiotic generates neoantigens that induce anti-tumor immune responses (2023)	French National Cancer Institute, Gustave Roussy, Institut Curie	France, United States	**Influential**

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of California, Riverside	United States	SCImago #949 · THE 301–350 · QS =440	2
University of Notre Dame	United States	SCImago #1036 · THE 194 · QS =294	1
University of Michigan Medical School	United States	—	1
University of North Carolina	United States	—	1
University of Gothenburg	Sweden	SCImago #573 · THE 201–250 · QS 202	1
Northern Arizona University	United States	SCImago #3335 · QS 1001-1200	1
University of Tartu	Estonia	SCImago #1820 · THE 301–350 · QS =362	1
Cornell University	United States	SCImago #61 · THE =18 · QS 16	1
European Molecular Biology Laboratory	Germany	—	1
Uppsala University	Sweden	SCImago #349 · THE 128 · QS 93	1
Université Laval	Canada	THE 401–500 · QS =469	1
University of Pittsburgh	United States	SCImago #212 · QS =281	1
University of California, San Francisco	United States	SCImago #98	1
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	1
University of New South Wales	Australia	SCImago #107 · QS 20	1

Geographic distribution of citing authors

Country	Citing papers
United States	9
Switzerland	3
Netherlands	2
Australia	2
United Kingdom	2
Spain	1
Sweden	1
Norway	1
Canada	1
Estonia	1
France	1
Argentina	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	Pyrosequencing-based assessment of soil pH as a predictor of soil bacterial community structure at the continental scale	1	Dhanasar — Prong 2 (well-positioned)

Contribution	Core paper	Indep. cites	Supports
Contribution 2	Global patterns of 16S rRNA diversity at a depth of millions of sequences per sample	9	Dhanasar — Prong 2 (well-positioned)