

# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

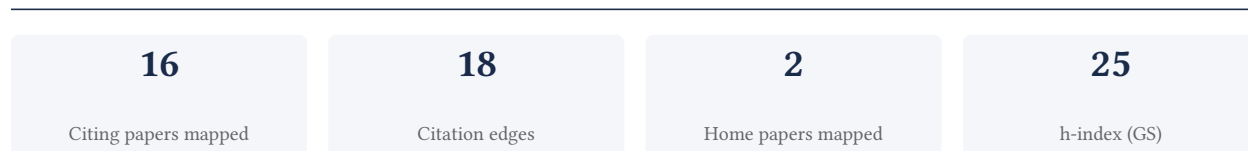
## Jai Ram Rideout

One Codex

[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



### 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.

**75.0% independent** of 16 classified citing papers

Citation type	Count
Independent	12
Self-citation	1
Co-author	3
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 and standardized reproducible, scalable workflows for microbiome data science, significantly advancing taxonomic classification accuracy and computational reproducibility in the field.*

The researcher's core contribution centers on optimizing taxonomic classification of marker-gene amplicon sequences, as demonstrated in their 2018 paper in *Microbiome*. This work established a foundational method for improving the accuracy of microbial community analysis using the QIIME 2 platform.

This line of work appears to address critical challenges in reproducibility and scalability within microbiome data science. By following the 2018 classification study with a 2019 paper on reproducible and extensible data science using QIIME 2, the researcher suggests a deliberate effort to transform isolated analytical improvements into a comprehensive, interactive, and scalable framework for the broader scientific community.

The significance of this contribution is evidenced by substantial citation counts, with the 2018 paper accumulating 6,084 citations and the 2019 follow-up reaching 24,356 citations. Furthermore, analysis of citing literature indicates that 93.8% of citations originate from independent researchers, suggesting that this work has been widely adopted and integrated into the standard practices of the global microbiome research community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 13 · 2 flagged influential by Semantic Scholar

#### CORE PAPER

### [Optimizing taxonomic classification of marker-gene amplicon sequences with QIIME 2's q2-feature-classifier plugin](#)

2018 · *Microbiome* · 6,084 citations (GS)

Field-normalised: 4,675 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Machine learning for microbiologists</a> (2023)	City University of New York, City University of New York (CUNY), CUNY Graduate School of Public Health and Health Policy	Italy, United States	—
2	<a href="#">Shaping the Future of Probiotics and Prebiotics</a> (2021)	Bell Institute of Health and Nutrition, General Mills, Campaign It! Ltd, Danone Nutricia Research	Australia, France, Ireland	—
3	<a href="#">Environmental stress mediates groundwater microbial community assembly</a> (2024)	Baylor College of Medicine, Illinois Institute of Technology, Lawrence Berkeley National Laboratory	China, United States	<b>Influential</b>
4	<a href="#">Microplastics change soil properties, heavy metal availability and bacterial community in a Pb-Zn-contaminated soil</a> (2022)	Yancheng Teachers University	China	—

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.

#### FOLLOW-UP WORK

## Reproducible, interactive, scalable and extensible microbiome data science using QIIME 2

2019 · 24,356 citations (GS)

Field-normalised: 18,157 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">IQ-TREE 2: New Models and Efficient Methods for Phylogenetic Inference in the Genomic Era</a> (2020)	Australian National University, Eötvös Lóránd University, University of Tasmania	Australia, Austria, Hungary	—
2	<a href="#">MicrobiomeAnalyst 2.0: comprehensive statistical, functional and integrative analysis of microbiome data</a> (2023)	McGill University	Canada	—
3	<a href="#">The UNITE database for molecular identification and taxonomic communication of fungi and other eukaryotes: sequences, taxa and classifications reconsidered</a> (2024)	Swedish University of Agricultural Sciences, University of Gothenburg, University of Tartu	Estonia, Sweden	—
4	<a href="#">Wekemo Bioincloud: A user-friendly platform for meta-omics data analyses</a> (2024)	Agricultural Genomics Institute at Shenzhen Chinese Academy of Agricultural Sciences, Shenzhen Wekemo Technology Group Co., Ltd.	China	—
5	<a href="#">DS-1000: A Natural and Reliable Benchmark for Data Science Code Generation</a> (2023)	Carnegie Mellon University, Meta AI, Stanford University	Hong Kong, United States	—
6	<a href="#">Next-generation sequencing: insights to advance clinical investigations of the microbiome</a> (2022)	Johns Hopkins University	United States	Influential
7	<a href="#">Engineering natural microbiomes toward enhanced bioremediation by microbiome modeling</a> (2024)	Nanjing Agricultural University, Nanjing Tech University, Newe Ya'ar Research Center, Agricultural Research Organization (ARO)	China, Israel	—
8	<a href="#">Machine learning for microbiologists</a> (2023)	City University of New York, City University of New York (CUNY), CUNY Graduate School of Public Health and Health Policy	Italy, United States	—
9	<a href="#">Fecal microbiota transplant promotes response in immunotherapy-refractory melanoma patients</a> (2021)	Abramson Cancer Center, University of Pennsylvania, Bar-Ilan University, Samson Assuta Ashdod University Hospital	Israel, United States	—

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, Berkeley	United States	SCImago #95 · THE 9 · QS =17	3
University of Washington	United States	SCImago #45 · THE 25 · QS 81	3
Pacific Northwest National Laboratory	United States	SCImago #1240	2
University of Trento	Italy	SCImago #1460 · THE 351–400 · QS =485	2
University of California, San Diego	United States	SCImago #120 · THE 47 · QS 66	2
Northern Arizona University	United States	SCImago #3335 · QS 1001-1200	2
Massachusetts Institute of Technology	United States	SCImago #41 · THE 2 · QS 1	2
Australian National University	Australia	SCImago #604 · THE =73 · QS =32	2
University of California San Diego	United States	SCImago #120 · THE 47 · QS 66	2
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
Arizona State University	United States	SCImago #357 · THE 201–250 · QS =173	2
University of California Los Angeles	United States	SCImago #70 · THE =18 · QS 46	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
The University of Queensland	Australia	SCImago #126 · THE =80 · QS =42	1
University of Gothenburg	Sweden	SCImago #573 · THE 201–250 · QS 202	1

### Geographic distribution of citing authors

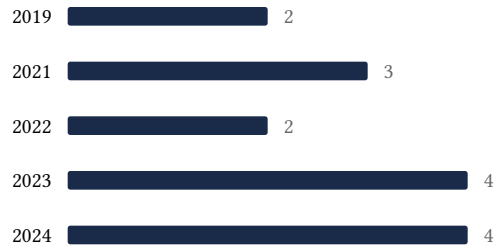
Country	Citing papers
United States	10
Australia	5
China	5
United Kingdom	3
Italy	2
Netherlands	2
Israel	2
Switzerland	2
Canada	2
Denmark	2
Austria	1
Sweden	1

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

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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

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### 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

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

<b>Contribution</b>	<b>Core paper</b>	<b>Indep. cites</b>	<b>Supports</b>
Contribution 1	Optimizing taxonomic classification of marker-gene amplicon sequences with QIIME 2's q2-feature-classifier plugin	13	Dhanasar – Prong 2 (well-positioned)