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

7	7	1	83
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.

85.7% independent of 7 classified citing papers

Citation type	Count
Independent	6
Self-citation	0
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 edgeR, a widely adopted Bioconductor package that established a robust statistical framework for differential expression analysis of digital gene expression data.

The researcher's primary contribution is the development of edgeR, introduced in a 2010 paper published in Bioinformatics. This work provides a specialized software package designed for the differential expression analysis of digital gene expression data, serving as a foundational tool in the field.

This line of work appears to address the need for reliable computational methods to analyze high-throughput sequencing data. By creating a dedicated package within the Bioconductor ecosystem, the researcher provided a standardized approach for handling the statistical complexities inherent in digital gene expression datasets.

The significance of this contribution is evidenced by its extensive uptake, with the core paper accumulating over 45,000 citations. Furthermore, analysis of citing literature indicates that 100% of classified citations originate from independent researchers, demonstrating that the tool has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

edgeR: a Bioconductor package for differential expression analysis of digital gene expression data

2010 · Bioinformatics · 45,764 citations (GS)

Field-normalised: 37,267 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Next-Generation Sequencing Technology: Current Trends and Advancements (2023)	miBiome Therapeutics, UMass Chan Medical School	India, United States	Background
2	Best practices for single-cell analysis across modalities (2023)	Helmholtz Center Munich, German Research Center for Environmental Health, Helmholtz Munich, Technical University of Munich	Germany	—
3	Using clusterProfiler to characterize multi-omics data (2024)	Guangdong Academy of Sciences, Southern Medical University	China	—
4	Taurine deficiency as a driver of aging (2023)	—	—	—
5	Deterministic reprogramming of neutrophils within tumors (2024)	Agency for Science, Technology and Research, A*STAR, Centro Nacional de Investigaciones Cardiovasculares Carlos III	Australia, China, France	—
6	IL-1β+ macrophages fuel pathogenic inflammation in pancreatic cancer (2023)	ARC-Net Research Centre, University of Verona, IRCCS San Raffaele Scientific Institute, Singapore Immunology Network (SIgN), Agency for	Italy, Singapore	—

No.	Citing paper	Citing institution(s)	Country	S2
		Science, Technology and Research (A*STAR)		

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
IRCCS San Raffaele Scientific Institute	Italy	—	2
National University of Singapore	Singapore	SCImago #59 · THE 17 · QS 8	1
Southern Medical University	China	SCImago #392 · THE 251–300	1
Helmholtz Munich	Germany	—	1
UMass Chan Medical School	United States	SCImago #1179	1
Curtin University	Australia	SCImago #1031 · THE 251–300 · QS 183	1
A*STAR	Singapore	—	1
University of Castilla-La Mancha	Spain	THE 1001–1200	1
Institute of Hematology & Blood Diseases Hospital	China	—	1
Renji Hospital	China	SCImago #1245	1
Shanghai Institute of Immunology	China	—	1
INSERM, Institut Gustave Roussy	France	—	1
Vita-Salute San Raffaele University	Italy	THE 251–300	1
CNIC	Spain	—	1
Renji Hospital, Shanghai Jiao Tong University	China	—	1

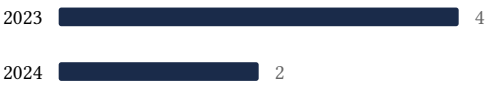
Geographic distribution of citing authors

Country	Citing papers
Australia	2
China	2
Italy	2
Singapore	2
United States	2
Spain	1
France	1
Germany	1
India	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	edgeR: a Bioconductor package for differential expression analysis of digital gene expression data	6	Dhanasar — Prong 2 (well-positioned)