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

392	425	100	38
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.

33.3% independent of 3 classified citing papers

Citation type	Count
Independent	1
Self-citation	0
Co-author	0
Same-institution	2

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 foundational methods for processing and analyzing cardiac optical mapping data using potentiometric dyes, establishing a critical technical framework for electrophysiological research.

The researcher's contribution centers on the 2012 publication in the American Journal of Physiology-Heart and Circulatory Physiology, titled 'Processing and analysis of cardiac optical mapping data obtained with potentiometric dyes.' This work appears to provide essential methodological guidance for handling complex optical mapping data, a technique vital for understanding cardiac electrophysiology. By focusing on potentiometric dyes, the research addresses specific challenges in data acquisition and interpretation within this specialized field.

This line of work appears to address the need for standardized or improved analytical techniques in cardiac optical mapping. The title suggests a focus on the technical pipeline from data acquisition to analysis, implying that prior methods may have lacked robustness or clarity. As a standalone seminal paper without direct follow-ups by the same author in this dataset, it represents a distinct, self-contained methodological advancement that likely filled a gap in the literature regarding the reliable processing of dye-based optical signals.

The significance of this contribution is evidenced by its citation count of 282, indicating that the work has been widely recognized and utilized by the scientific community. Although the sample of classified citing papers is small, the presence of independent citations suggests that the methodology has been adopted by researchers outside the author's immediate circle. This external uptake underscores the utility and broad relevance of the proposed processing and analysis techniques in advancing cardiac research.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

Processing and analysis of cardiac optical mapping data obtained with potentiometric dyes

2012 · American Journal of Physiology-Heart and Circulatory Physiology · 282 citations (GS)

Field-normalised: 84 Semantic Scholar citations place it in the top 10% of Medicine papers from 2012 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Guidelines for assessment of cardiac electrophysiology and arrhythmias in small animals (2022)	Amsterdam University Medical Center, Baylor College of Medicine, Children's National Hospital	Canada, Germany, Netherlands	—

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
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	6
Amsterdam University Medical Center	Netherlands	—	2
Manipal Institute of Technology	India	—	2

Institution	Country	World ranking	Citing papers
University of Bristol	United Kingdom	SCImago #478 · THE =80 · QS 51	2
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
An-Najah National University	Palestine	SCImago #5526 · THE 801–1000 · QS 1001-1200	2
Beijing Anzhen Hospital, Capital Medical University	China	—	2
University Medical Center Utrecht	Netherlands	SCImago #479	2
Tanta University	Egypt	SCImago #4228 · THE 1001–1200 · QS 1201-1400	1
Baylor College of Medicine	United States	SCImago #560	1
Manipal Academy of Higher Education	India	THE 601–800	1
Dayananda Sagar University	India	—	1
BMS Institute of Technology and Management	India	—	1
Dalhousie University	Canada	SCImago #1299 · THE 351–400 · QS 283	1
University of New South Wales	Australia	SCImago #107 · QS 20	1

Geographic distribution of citing authors

Country	Citing papers
United Kingdom	11
China	10
United States	9
Netherlands	4
India	3
Palestine	2
Egypt	2
Japan	1
Australia	1
Norway	1
Poland	1
Portugal	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.

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).

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	Processing and analysis of cardiac optical mapping data obtained with potentiometric dyes	1	Dhanasar — Prong 2 (well-positioned)