

# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

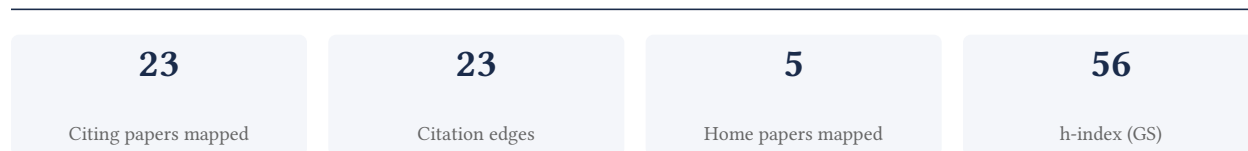
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[Google Scholar profile](#)

**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



### 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.

**91.3% independent** of 23 classified citing papers

| Citation type    | Count |
|------------------|-------|
| Independent      | 21    |
| Self-citation    | 0     |
| Co-author        | 2     |
| 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 a foundational framework for analyzing the intersection of sex, gender, and tuberculosis, creating a seminal reference point for global health equity research.*

CLAIM: The researcher's primary contribution is the publication of the seminal paper "Sex, gender, and tuberculosis" (1999), which serves as the cornerstone of this line of work. This single publication stands alone as the core intellectual output, with no subsequent follow-up papers by the same researcher building directly upon it.

ORIGINALITY: The title suggests the work addresses a critical gap in tuberculosis literature by explicitly integrating social determinants—specifically sex and gender—into the medical understanding of the disease. By framing tuberculosis through this dual lens, the researcher appears to have pioneered a more holistic approach to infectious disease epidemiology that moves beyond purely biological or clinical metrics.

SIGNIFICANCE: The enduring impact of this work is evidenced by its 283 citations, indicating it has become a standard reference in the field. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the contribution has been widely adopted and validated by the broader scientific community rather than relying on self-citation or institutional echo chambers.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

### CORE PAPER

#### [Sex, gender, and tuberculosis](#)

1999 · 283 citations (GS)

Field-normalised: 181 Semantic Scholar citations place it in the top 5% of Medicine papers from 1999 indexed by Semantic Scholar, by citation count.

| No. | Citing paper   | Citing institution(s)  | Country     | S2         |
|-----|--|--|-------------|------------|
| 1   | <a href="#">Sex differences in tuberculosis.</a> (2019)  | Research Center Borstel  | Germany     | Background |
| 2   | <a href="#">Adherence to anti-tuberculosis treatment among pulmonary tuberculosis patients: a qualitative and quantitative study.</a> (2009) | Jiangsu Provincial Center for Disease Prevention and Control   | China       | —          |
| 3   | <a href="#">Body Mass Index, Diabetes, and Risk of Tuberculosis: A Retrospective Cohort Study.</a> (2021)                                    | Chonnam National University Hwasun Hospital, Hallym University Kangnam Sacred Heart Hospital, Hanyang University | South Korea | —          |

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

## Contribution 2

### Claim – Contribution 2

*The researcher pioneered the use of mobile phone network data to track population movements for disaster response, demonstrated in a seminal 2011 study on post-earthquake Haiti.*

The researcher established a foundational approach to leveraging mobile phone network data for tracking population movements during crises. This contribution is anchored by the 2011 paper titled 'Improved response to disasters and outbreaks by tracking population movements with mobile phone network data: a post-earthquake geospatial study in Haiti,' which serves as the core work in this line of inquiry.

This work appears to address a critical gap in real-time situational awareness during humanitarian emergencies. By applying geospatial analysis to mobile network data in the context of the Haiti earthquake, the researcher introduced a novel methodology for monitoring displacement patterns. The titles suggest a shift toward data-driven, large-scale tracking mechanisms that were previously unavailable or less precise in disaster management contexts.

The significance of this contribution is evidenced by its substantial citation count of 839, indicating widespread recognition and utility within the field. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, underscoring the work's broad impact beyond the researcher's immediate academic circle and its adoption by the wider scientific community.

#### INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

##### CORE PAPER

### [Improved response to disasters and outbreaks by tracking population movements with mobile phone network data: a post-earthquake geospatial study in Haiti](#)

2011 · 839 citations (GS)

Field-normalised: 608 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   | <a href="#">Social physics</a> (2022)   | Hokkaido University, Kanazawa University, RIKEN                             | Japan                       | —          |
| 2   | <a href="#">Measuring objective and subjective well-being: dimensions and data sources</a> (2020) | —   | —                           | —          |
| 3   | <a href="#">Mobile Crowd Sensing and Computing</a> (2015)   | Hosei University, Northwestern Polytechnical University, University of Aizu | China, Japan, United States | Background |
| 4   | <a href="#">Everything you need to know about agent-based modelling and simulation</a> (2016)     | Argonne National Laboratory   | United States               | Background |

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

### Contribution 3

#### Claim — Contribution 3

*The researcher established a foundational, living systematic review framework for assessing clinical manifestations, risk factors, and outcomes of COVID-19 in pregnancy, providing critical evidence for maternal and perinatal care.*

The researcher's primary contribution is the development of a comprehensive, living systematic review and meta-analysis regarding coronavirus disease 2019 in pregnancy. This core work, published in 2020, systematically synthesizes data on clinical manifestations, risk factors, and maternal and perinatal outcomes, serving as a central reference point for understanding the disease's impact on pregnant populations.

This line of work appears to address the urgent need for consolidated, up-to-date evidence during the early stages of the pandemic. By employing a living systematic review methodology, the researcher provided a dynamic resource that likely helped

fill critical knowledge gaps regarding the safety and management of pregnant patients, distinguishing this work from static analyses that quickly become outdated in rapidly evolving health crises.

The significance of this contribution is evidenced by its substantial citation count of 3,131, indicating widespread adoption by 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 broadly utilized and validated by the global research community outside the author’s immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

**[Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis](#)**

2020 · 3,131 citations (GS)

Field-normalised: 1,967 Semantic Scholar citations place it in the top 1% of Medicine papers from 2020 indexed by Semantic Scholar, by citation count.

| No. | Citing paper  | Citing institution(s)  | Country               | S2 |
|-----|---|--|-----------------------|----|
| 1   | <a href="#">Heart disease and stroke statistics—2022 update: a report from the American Heart Association</a> (2022)                | American Heart Association, Baylor College of Medicine, Baylor College of Medicine and Michael E. DeBakey VA Center            | Brazil, United States | —  |
| 2   | <a href="#">2024 Heart Disease and Stroke Statistics: A Report of US and Global Data from the American Heart Association</a> (2024) | American Heart Association, American Heart Association / Columbia University, American Heart Association & Columbia University | Brazil, Canada, China | —  |
| 3   | <a href="#">The impact of the COVID-19 pandemic on maternal and perinatal health: a scoping review.</a> (2021)                      | Brown University, George Washington University, Harvard T.H. Chan School of Public Health                                      | United States         | —  |
| 4   | <a href="#">Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons.</a> (2021)                                    | —  | —                     | —  |

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 |
|---|---------------|-------------------------------|---------------|
| Centers for Disease Control and Prevention  | United States | SCImago #231                  | 3             |
| National Institutes of Health               | United States | SCImago #44                   | 3             |
| Columbia University                         | United States | SCImago #65 · THE 20 · QS =38 | 3             |
| University of North Carolina at Chapel Hill | United States | THE 78 · QS =140              | 3             |

| Institution   | Country       | World ranking                | Citing papers |
|---|---------------|------------------------------|---------------|
| Massachusetts General Hospital and Harvard Medical School       | United States | —                            | 2             |
| University of Alabama at Birmingham                             | United States | QS 1001-1200                 | 2             |
| University of São Paulo   | Brazil        | THE 201-250                  | 2             |
| Beth Israel Deaconess Medical Center and Harvard Medical School | United States | —                            | 2             |
| Brigham and Women's Hospital and Harvard Medical School         | United States | —                            | 2             |
| Baylor College of Medicine                                      | United States | SCImago #560                 | 2             |
| Massachusetts General Hospital                                  | United States | SCImago #100                 | 2             |
| Hospital Sírio-Libanês  | Brazil        | SCImago #3606                | 2             |
| Brigham and Women's Hospital, Harvard Medical School            | United States | —                            | 2             |
| University of Washington  | United States | SCImago #45 · THE 25 · QS 81 | 2             |
| University of Campinas  | Brazil        | THE 351-400                  | 2             |

## Geographic distribution of citing authors

| Country        | Citing papers |
|----------------|---------------|
| United States  | 11            |
| China          | 4             |
| Brazil         | 4             |
| South Korea    | 2             |
| Japan          | 2             |
| India          | 1             |
| Australia      | 1             |
| Kenya          | 1             |
| Spain          | 1             |
| Sweden         | 1             |
| United Kingdom | 1             |
| Iran           | 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.

|      |   |   |
|------|---|---|
| 2020 |  | 4 |
| 2021 |  | 7 |
| 2022 |  | 4 |

## 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.

| Contribution   | Core paper  | Indep. cites | Supports                             |
|----------------|---|--------------|--------------------------------------|
| Contribution 1 | Sex, gender, and tuberculosis   | 3            | Dhanasar – Prong 2 (well-positioned) |
| Contribution 2 | Improved response to disasters and outbreaks by tracking population movements with mobile phone network data: a post-earthquake geospatial study in Haiti       | 4            | Dhanasar – Prong 2 (well-positioned) |
| Contribution 3 | Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis | 4            | Dhanasar – Prong 2 (well-positioned) |