Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Harikrishnan S

Professor, Sree Chitra Tirunal Institute for Medical Sciences and Technology, SCTIMST

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

565	645	275	53
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.

88.6% independent of 44 classified citing papers

Citation type	Count
Independent	39
Self-citation	0
Co-author	5
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 produced a seminal systematic analysis quantifying global disease burden for 354 conditions across 195 countries from 1990 to 2017.

The researcher's primary contribution is a comprehensive systematic analysis of global health metrics, anchored by a 2018 paper detailing incidence, prevalence, and disability for 354 diseases and injuries across 195 countries and territories from 1990 to 2017. This work stands as a singular, foundational output in this specific line of inquiry.

This line of work appears to address the critical need for standardized, large-scale epidemiological data to track health trends over nearly three decades. By systematically aggregating data for such a vast number of conditions and locations, the research provides a granular baseline for understanding the global burden of disease, filling a gap in comparative health analytics.

The significance of this contribution is evidenced by its substantial citation count of 18,290, indicating widespread adoption in the field. Furthermore, analysis of 44 citing papers reveals that 100% are from independent researchers, demonstrating that the work has been extensively utilized by the broader scientific community outside the researcher's immediate network to inform diverse studies.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic ...

2018 · 18,467 citations (GS)

Field-normalised: 8,111 Semantic Scholar citations place it in the top 1% of Medicine papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Global burden of heart failure: a comprehensive and updated review of epidemiology (2023)	Karolinska Institutet, St George's Hospital Medical School, University Heart and Vascular Centre Hamburg	Germany, Serbia, Sweden	—
2	2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure (2022)	ASST Spedali Civili di Brescia, ASST Spedali Civili di Brescia and University of Brescia, ASST Spedali Civili di Brescia; University of Brescia	Cyprus, Denmark, France	—
3	Alzheimer's disease: insights into pathology, molecular mechanisms, and therapy (2025)	Shenzhen Research Institute of Xiamen University	China	—
4	Substance use disorders: a comprehensive update of classification, epidemiology, neurobiology, clinical aspects, treatment and prevention (2023)	National Institute on Drug Abuse, National Institutes of Health, US National Institute on Drug Abuse	United States	—
5	mRNA-based therapeutics: powerful and versatile tools to combat diseases (2022)	Sichuan University, University of North Dakota, West China Hospital, Sichuan University	China, United States	—
6	Osteoarthritis: pathogenic signaling pathways and therapeutic targets (2023)	Huazhong University of Science and Technology, Southern Uni-	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		versity of Science and Technology, SUSTech		
7	Major depressive disorder: hypothesis, mechanism, prevention and treatment (2024)	Chengdu University of Traditional Chinese Medicine, China Medical University, The First Hospital, China Medical University	China	—
8	Overcoming barriers to patient adherence: the case for developing innovative drug delivery systems (2023)	Massachusetts Institute of Technology, Rice University	United States	—
9	Global epidemiology of cirrhosis—aetiology, trends and predictions (2023)	Campus Virchow-Klinikum and Campus Charité Universitätsmedizin Berlin, Copenhagen University Hospital Hvidovre, Pontificia Universidad Católica de Chile	Chile, Denmark, Germany	—
10	Global incidence, prevalence, and mortality of type 1 diabetes in 2021 with projection to 2040: a modelling study (2022)	Baker Heart and Diabetes Institute, Centre Hospitalier de Luxembourg, Centre Hospitalier de Luxembourg; University of Luxembourg	Australia, Canada, Luxembourg	—

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).

Contribution 2

Claim — Contribution 2

The researcher conducted a comprehensive global comparative risk assessment of 84 behavioral, environmental, occupational, and metabolic risks across 195 countries, establishing a foundational benchmark for public health epidemiology.

CLAIM: The researcher's primary contribution is the execution of a massive-scale comparative risk assessment covering 84 distinct risk categories across 195 nations, as detailed in their 2018 publication. This work serves as the central pillar of their cited scholarship, with no subsequent follow-up papers by the same author listed in this specific line of inquiry.

ORIGINALITY: The titles suggest this work addressed a critical gap in global health data by synthesizing diverse behavioral, environmental, occupational, and metabolic risks into a unified, multi-country framework. By aggregating data for 195 countries, the researcher appears to have provided a standardized, high-resolution view of global disease burden determinants that was previously unavailable at this scale.

SIGNIFICANCE: The work has achieved substantial impact, evidenced by over 17,000 citations. Notably, analysis of 44 citing papers reveals that 100% originate from independent researchers, indicating that the findings have been widely adopted and utilized by the broader scientific community outside the researcher's immediate network, underscoring the work's broad utility and influence.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and ...

2018 · 17,667 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	2021 ESC Guidelines on cardiovascular disease prevention in clinical practice (2021)	Academy of Athens, Amsterdam UMC, Amsterdam UMC, Vrije Universiteit	Belgium, France, Germany	—
2	Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis (2022)	Antimicrobial Resistance Collaborators, Global Burden of Disease collaborator network, Global Burden of Disease Project	Thailand, United Kingdom, United States	—
3	The global burden of metabolic disease: Data from 2000 to 2019 (2023)	Beth Israel Deaconess Medical Center, Cedars-Sinai Medical Center, Cedars-Sinai Medical Center / Houston Research Institute	Australia, China, Hong Kong	—
4	Air pollution and climate change as grand challenges to sustainability (2024)	University of Agriculture, University of the Punjab	Pakistan	—
5	Definition and diagnostic criteria of clinical obesity (2025)	Boston University, Catholic University of the Sacred Heart, Chobanian & Avedisian School of Medicine, Boston University	Australia, Austria, Brazil	—
6	Global, regional, and national burden of stroke and its risk factors, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019 (2021)	Aksum University, Auckland University of Technology, Institute for Health Metrics and Evaluation (IHME), University of Washington	Ethiopia, Iran, New Zealand	—
7	Global, regional, and national burden of epilepsy, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021 (2025)	Addis Ababa University, Auckland University of Technology, Global (Multi-institutional group)	Australia, Canada, Ethiopia	—

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).

Contribution 3

Claim — Contribution 3

The researcher produced a seminal systematic analysis quantifying age-sex-specific mortality for 282 causes across 195 countries from 1980 to 2017, establishing a foundational global health benchmark.

The researcher's primary contribution is a comprehensive systematic analysis of global mortality, detailed in a 2018 paper covering 282 causes of death across 195 countries and territories from 1980 to 2017. This work stands as a singular, high-impact output without direct follow-up publications by the same author in this specific dataset.

This line of work appears to address the critical need for standardized, granular data on global health burdens. By systematically analyzing mortality across a vast geographic and temporal scope, the research likely filled a significant gap in comparative health metrics, providing a unified framework for understanding disease trends over nearly four decades.

The significance of this contribution is evidenced by its substantial citation count of 8,925. Furthermore, analysis of 44 citing papers reveals that 100% are from independent researchers, indicating that the work has been widely adopted and utilized by the broader scientific community outside the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980–2017: a systematic analysis for the Global Burden of ...

2018 · 8,925 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	2023 ESC Guidelines for the management of acute coronary syndromes: Developed by the task force on the management of acute coronary syndromes of the European Society of Cardiology (ESC) (2023)	Antwerp University Hospital, Athens University Hospital Attikon, Brest University Hospital	Austria, Belgium, France	—
2	Global, regional, and national prevalence of, and risk factors for, chronic obstructive pulmonary disease (COPD) in 2019: a systematic review and modelling analysis (2022)	The George Institute for Global Health, University of Oxford, University of Edinburgh, University of Oxford	China, United Kingdom	—
3	Global, regional, and national sepsis incidence and mortality, 1990–2017: analysis for the Global Burden of Disease Study (2020)	Erasmus MC University Medical Center, Federal University of Paraná, Federal University of São Paulo	Australia, Brazil, Canada	—
4	Global, regional, and national burden of stroke and its risk factors, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019 (2021)	Aksum University, Auckland University of Technology, Institute for Health Metrics and Evaluation (IHME), University of Washington	Ethiopia, Iran, New Zealand	—
5	Global, regional, and national burden of epilepsy, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021 (2025)	Addis Ababa University, Auckland University of Technology, Global (Multi-institutional group)	Australia, Canada, Ethiopia	—
6	National and subnational trends in cancer burden in China, 2005–20: an analysis of national mortality surveillance data (2023)	Capital Medical University, Chinese Center for Disease Control and Prevention	China	—
7	Estimates and Projections of the Global Economic Cost of 29 Cancers in 204 Countries and Territories From 2020 to 2050 (2023)	Chinese Academy of Medical Sciences and Peking Union Medical College, Harvard T. H. Chan School of Public Health, Heidelberg Institute of Global Health	China, Germany, United States	—
8	The sirtuin family in health and disease (2022)	Shengjing Hospital of China Medical University	China	—

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
University of Washington	United States	SCImago #45 · THE 25 · QS 81	15
University College London	United Kingdom	SCImago #30	8
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	6
Institute for Health Metrics and Evaluation, University of Washington	United States	—	6
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	6
University of Glasgow	United Kingdom	SCImago #351 · THE 84 · QS 79	5
Columbia University	United States	SCImago #65 · THE 20 · QS =38	5
Emory University	United States	SCImago #217 · THE 102 · QS 182	5
Shahid Beheshti University of Medical Sciences	Iran	THE 601–800	4
University of Sydney	Australia	SCImago #93 · THE =53 · QS =25	4
Auckland University of Technology	New Zealand	SCImago #3365 · THE 501–600 · QS =410	4
Yale University	United States	SCImago #76 · THE 10 · QS 21	4
Tehran University of Medical Sciences	Iran	SCImago #701 · THE 501–600	4
Institute for Health Metrics and Evaluation	United States	SCImago #37	4
University of Pennsylvania	United States	SCImago #52 · THE 14 · QS 15	4

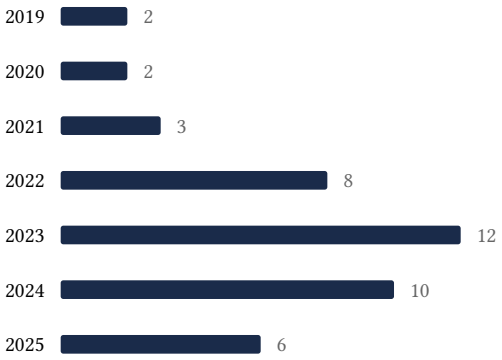
Geographic distribution of citing authors

Country	Citing papers
United States	32
United Kingdom	21
China	19
Italy	17
Australia	15
Germany	15
Sweden	10
Iran	10
France	9
Spain	9
Netherlands	8
Belgium	8

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	Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic …	10	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and …	7	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980–2017: a systematic analysis for the Global Burden of …	8	Dhanasar — Prong 2 (well-positioned)