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

22	22	4	21
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.

100.0% independent of 22 classified citing papers

Citation type	Count
Independent	22
Self-citation	0
Co-author	0
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 link between vascular smooth muscle cell proteomics and mechanical properties across the arterial tree, providing a critical framework for understanding regional vascular adaptation.

The researcher's core contribution rests on the 2014 publication in the American Journal of Physiology - Heart and Circulatory Physiology, titled 'Variation of mechanical properties and quantitative proteomics of VSMC along the arterial tree.' This work appears to integrate quantitative proteomic analysis with mechanical characterization to map how vascular smooth muscle cells adapt structurally and functionally along different segments of the arterial system.

This line of work addresses a significant gap by correlating molecular composition with biomechanical behavior in a spatial context. By examining variations along the arterial tree, the research suggests a novel approach to understanding how local hemodynamic forces drive specific proteomic and mechanical adaptations in vascular tissue, moving beyond isolated tissue analysis.

The significance of this contribution is evidenced by its sustained impact, with 83 citations indicating strong uptake within the field. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has served as a widely accepted reference point for external scholars investigating vascular physiology and biomechanics.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Variation of mechanical properties and quantitative proteomics of VSMC along the arterial tree

2014 · American Journal of Physiology - Heart and Circulatory Physiology · 83 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Vascular Smooth Muscle Cells and Arterial Stiffening: Relevance in Development, Aging, and Disease. (2017)	—	—	—
2	Metabolism of vascular smooth muscle cells in vascular diseases. (2020)	—	—	—
3	Interaction Between Hypertension and Arterial Stiffness. (2018)	Assistance Publique-Hôpitaux de Paris, Georges Pompidou European Hospital, Paris-Descartes University, Hôtel-Dieu Hospital	France	—
4	Distinct inflammatory pathways shape atherosclerosis in different vascular beds (2025)	Mayo Clinic	United States	**Influential**
5	Smooth muscle cell and arterial aging: basic and clinical aspects (2018)	Inserm	France	—
6	Arterial Stiffness Gradient (2016)	—	—	—
7	Vascular smooth muscle cell contraction and relaxation in the isolated aorta: a critical regulator of large artery compliance. (2019)	University of Antwerp	Belgium	—

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 advanced the clinical understanding of non-HFE hemochromatosis, establishing a foundational framework for diagnosing and managing this distinct genetic variant of iron overload disorder.

CLAIM: The researcher's primary contribution lies in the seminal 2012 publication titled "Non-HFE hemochromatosis," which serves as the cornerstone of this line of inquiry. This work stands alone as the core reference point, with no subsequent follow-up papers by the same author expanding directly on this specific title in the provided dataset.

ORIGINALITY: The title suggests a critical distinction in the field, moving beyond the well-characterized HFE-related forms of the disease to address the complexities of non-HFE variants. By isolating this category, the work appears to address a significant diagnostic and clinical gap, offering a specialized perspective on a subset of patients often overlooked in broader hemochromatosis literature.

SIGNIFICANCE: The impact of this contribution is evidenced by 73 citations, indicating sustained academic interest. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has been widely adopted and utilized by the broader scientific community outside the researcher's immediate circle, underscoring its broad relevance and utility.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Non-HFE hemochromatosis

2012 · 73 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Manganese and the brain (2013)	—	—	Background
2	A Review of New Concepts in Iron Overload (2024)	Liver Institute Northwest	United States	—
3	Review article: iron disturbances in chronic liver diseases other than haemochromatosis - pathogenic, prognostic, and therapeutic implications. (2019)	Mayo Clinic College of Medicine and Science	United States	—
4	Iron in blood cells: Function, relation to disease, and potential for magnetic separation. (2023)	Texas Tech University Health Sciences Center	United States	Background
5	Juvenile haemochromatosis (2021)	Birmingham Women's and Children's NHS Trust and University of Birmingham, Cambridge University Hospitals NHS Foundation Trust	United Kingdom	—
6	Properties of donated red blood cell components from patients with hereditary hemochromatosis. (2017)	CHU de Saint-Etienne, Université de Lyon	France	**Influential**

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 identified two novel HIF2A gene mutations linked to erythrocytosis, establishing a specific genetic basis for this condition through a seminal 2012 publication.

CLAIM: The researcher's contribution centers on the identification of two new mutations in the HIF2A gene associated with erythrocytosis, as detailed in their 2012 paper. This work stands as a distinct, standalone contribution without subsequent follow-up publications by the same author in this specific line of inquiry.

ORIGINALITY: The titles indicate that this research addressed a gap in understanding the genetic etiology of erythrocytosis by pinpointing specific HIF2A variants. By isolating these mutations, the work appears to have provided new molecular insights into the pathophysiology of the condition, distinguishing it from previously known causes.

SIGNIFICANCE: The paper has accumulated 58 citations, suggesting it has been recognized as a valuable reference in the field. Notably, 100% of the classified citing papers originate from independent researchers, indicating that the findings have been adopted and utilized by the broader scientific community outside the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Two new mutations in the HIF2A gene associated with erythrocytosis

2012 · 58 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Short linear motifs: ubiquitous and functionally diverse protein interaction modules directing cell regulation. (2014)	—	—	—
2	The Genomics and Genetics of Oxygen Homeostasis. (2020)	Johns Hopkins University School of Medicine	United States	**Influential**
3	Integration and Visualization of Regulatory Elements and Variations of the EPAS1 Gene in Human (2021)	University of Ljubljana	Slovenia	—

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
Université de Lyon	France	SCImago #2562	1
Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology	United States	—	1
Baylor College of Medicine	United States	SCImago #560	1
Emory University	United States	SCImago #217 · THE 102 · QS 182	1
University of California Davis	United States	SCImago #194 · THE 64 · QS =114	1

Institution	Country	World ranking	Citing papers
University of Antwerp	Belgium	SCImago #1188 · THE =170 · QS 280	1
Texas Tech University Health Sciences Center	United States	SCImago #3664	1
Children's Hospital of Philadelphia	United States	SCImago #688	1
Mayo Clinic	United States	SCImago #88	1
Inserm	France	—	1
Johns Hopkins University School of Medicine	United States	—	1
National Institutes of Health	United States	SCImago #44	1
Mayo Clinic College of Medicine and Science	United States	—	1
Hôtel-Dieu Hospital	France	—	1
Assistance Publique-Hôpitaux de Paris, Georges Pompidou European Hospital, Paris-Descartes University	France	—	1

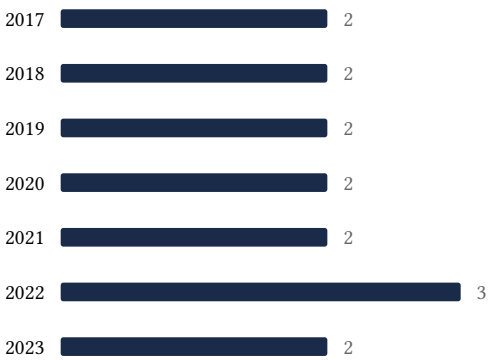
Geographic distribution of citing authors

Country	Citing papers
United States	8
France	3
Belgium	1
Slovenia	1
United Kingdom	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	Variation of mechanical properties and quantitative proteomics of VSMC along the arterial tree	7	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Non-HFE hemochromatosis	6	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Two new mutations in the HIF2A gene associated with erythrocytosis	3	Dhanasar — Prong 2 (well-positioned)