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

24	24	4	222
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 24 classified citing papers

Citation type	Count
Independent	24
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 advanced the conceptual framework of hematopoiesis, establishing an evolving paradigm for stem cell biology that has significantly influenced the field.

CLAIM: The researcher's primary contribution is the articulation of an evolving paradigm for stem cell biology within the context of hematopoiesis, as detailed in the 2008 Cell publication. This work serves as the foundational claim for this line of research, with no subsequent follow-up papers by the same author listed to extend this specific narrative.

ORIGINALITY: The title suggests a shift in theoretical understanding, proposing that hematopoiesis should be viewed through a dynamic, evolving lens rather than a static model. By framing stem cell biology as an evolving paradigm, the work appears to address the need for more flexible conceptual models in understanding blood cell development and stem cell behavior.

SIGNIFICANCE: The core paper has accumulated 3,658 citations, indicating substantial uptake by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the contribution has resonated widely beyond the author's immediate circle and has become a standard reference point for independent scholars in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

Hematopoiesis: an evolving paradigm for stem cell biology

2008 · Cell · 3,658 citations (GS)

Field-normalised: 2,566 Semantic Scholar citations place it in the top 1% of Biology papers from 2008 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Cancer stem cells: advances in knowledge and implications for cancer therapy (2024)	Xiangya Hospital, Central South University	China	—
2	Roles of macrophages in tumor development: a spatiotemporal perspective (2023)	Singapore Immunology Network	Singapore	—
3	Macrophage polarization in inflammatory bowel disease. (2023)	Shengjing Hospital of China Medical University	China	—
4	Discovery of target genes and pathways at GWAS loci by pooled single-cell CRISPR screens. (2023)	New York Genome Center	United States	—
5	From Monocytes to M1/M2 Macrophages: Phenotypical vs. Functional Differentiation. (2014)	National Research Council	Italy	—
6	Fate mapping analysis reveals that adult microglia derive from primitive macrophages. (2010)	—	—	—

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.

Contribution 2

Claim — Contribution 2

The researcher established the foundational concept of epigenetic memory in induced pluripotent stem cells, a seminal contribution that has garnered nearly 3,000 citations and widespread independent adoption.

The researcher's primary contribution centers on the 2010 paper titled 'Epigenetic memory in induced pluripotent stem cells.' This work serves as the cornerstone of the described line of research, standing alone without follow-up publications by the same author in this specific dataset. The title indicates a focus on the persistence of epigenetic marks during the reprogramming process, a critical area in stem cell biology.

This line of work appears to address the fundamental question of whether induced pluripotent stem cells retain molecular traces of their tissue of origin. By identifying epigenetic memory, the researcher likely provided a novel framework for understanding the limitations and characteristics of reprogrammed cells, distinguishing them from embryonic stem cells. The absence of follow-up papers by the researcher in this context suggests the core finding was sufficiently definitive to stand as a singular, high-impact contribution.

The significance of this work is evidenced by its substantial citation count of 2,878, indicating it is a highly influential reference in the field. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers. This complete independence underscores that the contribution has been widely adopted and built upon by the broader scientific community, rather than being confined to the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Epigenetic memory in induced pluripotent stem cells

2010 · 2,878 citations (GS)

Field-normalised: 2,340 Semantic Scholar citations place it in the top 1% of Biology papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Organs-on-chips: into the next decade (2021)	Leiden University Medical Center, National Institute for Environmental Health Sciences	Netherlands, United States	—
2	Advances in Pluripotent Stem Cells: History, Mechanisms, Technologies, and Applications. (2020)	Rush University Medical College	United States	—
3	Recent advances in 2D and 3D in vitro systems using primary hepatocytes, alternative hepatocyte sources and non-parenchymal liver cells and their use in investigating mechanisms of hepatotoxicity, cell signaling and ADME. (2013)	—	—	—
4	Emerging trends and new developments in regenerative medicine: a scientometric update (2000 - 2014). (2014)	—	—	**Influential**
5	Immunogenicity of induced pluripotent stem cells (2011)	—	—	—

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.

Contribution 3

Claim — Contribution 3

The researcher produced a seminal comparative encyclopedia of mouse DNA elements, establishing a foundational reference for genomic analysis that has garnered over 2,200 citations.

The researcher's primary contribution is the creation of a comprehensive comparative encyclopedia of DNA elements in the mouse genome, published in 2014. This work serves as a core reference point in the field, providing a structured framework for understanding genomic composition.

This line of work appears to address the need for systematic, comparative mapping of non-coding and regulatory elements within the mouse genome. By compiling these elements into an encyclopedia format, the researcher likely provided a standardized resource that facilitated broader genomic studies, distinguishing this effort from earlier, less comprehensive annotations.

The significance of this contribution is evidenced by its substantial citation count of 2,206, indicating widespread adoption by the scientific community. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, underscoring the work's broad impact and utility beyond the researcher's immediate institutional circle.

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

CORE PAPER

A comparative encyclopedia of DNA elements in the mouse genome

2014 · 2,206 citations (GS)

Field-normalised: 1,602 Semantic Scholar citations place it in the top 1% of Biology papers from 2014 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Expanded encyclopaedias of DNA elements in the human and mouse genomes (2020)	—	—	—
2	Targeting and engineering long non-coding RNAs for cancer therapy (2024)	HAYA Therapeutics, Inselspital, Bern University Hospital, University of Bern, University College Dublin	Ireland, Switzerland	—
3	The functions and unique features of long intergenic non-coding RNA (2018)	Stanford University School of Medicine	United States	—
4	ChromBPNet: bias factorized, base-resolution deep learning models of chromatin accessibility reveal cis-regulatory sequence syntax, transcription factor footprints and regulatory variants (2024)	Lawrence Berkeley National Laboratory, Stanford University, University of California, Irvine	United States	—
5	Gene co-expression analysis for functional classification and gene–disease predictions (2017)	University of Liverpool	United Kingdom	**Influential**
6	History, Discovery, and Classification of lncRNAs. (2017)	Institut Curie	France	—

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
Peking University Third Hospital	China	SCImago #2770	1
Institute of Medical Innovation and Research, Peking University Third Hospital	China	—	1
Shenzhen Peking University-the Hong Kong University of Science and Technology Medical Center	China	—	1
Leiden University Medical Center	Netherlands	SCImago #412	1
University of Washington	United States	SCImago #45 · THE 25 · QS 81	1
University of California, Irvine	United States	SCImago #329 · THE 97 · QS 293	1
University of Liverpool	United Kingdom	SCImago #413 · THE 143 · QS =147	1
University College London	United Kingdom	SCImago #30	1
New York Genome Center	United States	—	1
Institut Curie	France	SCImago #791	1
Singapore Immunology Network	Singapore	SCImago #134	1
National Institute for Environmental Health Sciences	United States	—	1
Rush University Medical College	United States	—	1
National Research Council	Italy	—	1
Gladstone Institutes	United States	SCImago #153	1

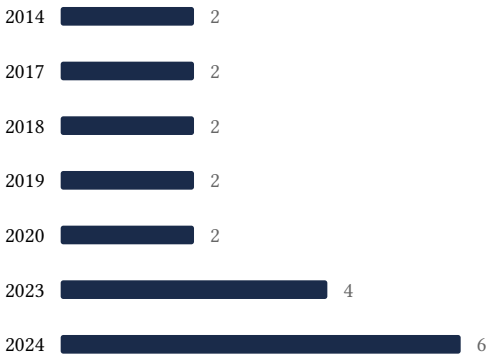
Geographic distribution of citing authors

Country	Citing papers
United States	7
China	3
United Kingdom	2
Germany	2
Italy	1
Netherlands	1
Poland	1
Singapore	1
Switzerland	1
France	1
Ireland	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	Hematopoiesis: an evolving paradigm for stem cell biology	6	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Epigenetic memory in induced pluripotent stem cells	5	Dhanasar — Prong 2 (well-positioned)
Contribution 3	A comparative encyclopedia of DNA elements in the mouse genome	6	Dhanasar — Prong 2 (well-positioned)