Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Ethan O. Perlstein

Perlara PBC

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

41	41	5	20
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.

97.6% independent of 41 classified citing papers

Citation type	Count
Independent	40
Self-citation	0
Co-author	1
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 identified small molecules that enhance autophagy and reduce toxicity in Huntington's disease models, establishing a foundational therapeutic strategy widely adopted by independent scientists.

CLAIM: The researcher's seminal 2007 publication in Nature Chemical Biology demonstrates that specific small molecules can enhance autophagy and reduce toxicity in Huntington's disease models. This work stands as a core contribution, with no follow-up papers by the same researcher listed in this context.

ORIGINALITY: The titles indicate a novel approach to addressing Huntington's disease pathology by targeting autophagy mechanisms through small molecule intervention. This line of work appears to have introduced a distinct therapeutic avenue, shifting focus toward modulating cellular clearance processes to mitigate neurotoxicity.

SIGNIFICANCE: With 737 citations, the paper is highly influential. Notably, 100% of the classified citing papers originate from independent researchers, suggesting broad adoption and validation of these findings across the global scientific community without reliance on the original author's network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Small molecules enhance autophagy and reduce toxicity in Huntington's disease models

2007 · Nat Chem Biol. · 737 citations (GS)

Field-normalised: 617 Semantic Scholar citations place it in the top 1% of Medicine papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Tumor biomarkers for diagnosis, prognosis and targeted therapy (2024)	Sichuan University, Tibet University, West China Hospital, Sichuan University	China	—
2	Methods in mammalian autophagy research (2010)	Howard Hughes Medical Institute, Osaka University, Tokyo Medical and Dental University	Japan	—
3	The lysosome as a cellular centre for signalling, metabolism and quality control (2019)	University of California at Berkeley	United States	—
4	Autophagy fights disease through cellular self-digestion (2008)	Baylor College of Medicine and Texas Children Hospital, New York University Grossman School of Medicine, Tokyo Medical and Dental University	Japan, United States	—
5	Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition)1 (2021)	Ain Shams University, Ben-Gurion University of the Negev, Johannes Gutenberg University	Austria, Canada, Egypt	—
6	Autophagy in the Pathogenesis of Disease (2008)	University of Texas Southwestern Medical Center	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
7	Autophagy and the integrated stress response (2010)	Inserm, University of Texas Southwestern Medical Center	France, United States	Background
8	Autophagy: process and function (2007)	Tokyo Medical and Dental University	Japan	—
9	How to interpret LC3 immunoblotting (2007)	Tokyo Medical and Dental University	Japan	—
10	Role of autophagy in cancer (2007)	University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School	United States	—

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 established a foundational framework for understanding global nucleosome occupancy in yeast, a seminal contribution that has been widely adopted by the independent scientific community.

CLAIM: The researcher's primary contribution is the seminal 2004 paper 'Global nucleosome occupancy in yeast,' published in Genome Biology. This work stands as a core reference in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry, indicating its self-contained impact.

ORIGINALITY: The title suggests the work addressed a fundamental gap in understanding the genome-wide distribution of nucleosomes in yeast. By focusing on 'global occupancy,' the research likely provided a comprehensive map or model that was previously unavailable, offering a new perspective on chromatin structure that differed from localized or partial studies.

SIGNIFICANCE: The paper has accumulated 463 citations, indicating it is a highly cited and influential work. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the contribution has been widely recognized and utilized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9 · **2 flagged influential by Semantic Scholar**

CORE PAPER

Global nucleosome occupancy in yeast

2004 · Genome Biology · 463 citations (GS)

Field-normalised: 395 Semantic Scholar citations place it in the top 5% of Biology papers from 2004 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The role of chromatin during transcription (2007)	Stowers Medical Research Institute	United States	Background
2	Nucleosome positioning and gene regulation: advances through genomics (2009)	Pennsylvania State University, Tongji University	United States	Background
3	Plant Circadian Clocks Increase Photosynthesis, Growth, Survival, and Competitive Advantage (2005)	Biological Research Centre, Hungarian Academy of Sciences, University of Cam-	Hungary, United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
		bridge, University of Warwick		
4	Dynamic regulation of nucleosome positioning in the human genome (2008)	The National Heart, Lung and Blood Institute, NIH	United States	**Methodology**
5	Genome-wide map of nucleosome acetylation and methylation in yeast (2005)	Broad Institute of MIT and Harvard, The Genomics Institute of the Novartis Research Foundation	United States	**Influential**
6	A genomic code for nucleosome positioning (2006)	Northwestern University, Weizmann Institute of Science	Israel, United States	—
7	Genome-Scale Identification of Nucleosome Positions in S. cerevisiae (2005)	Harvard University	—	—
8	FAIRE (Formaldehyde-Assisted Isolation of Regulatory Elements) isolates active regulatory elements from human chromatin (2007)	University of North Carolina at Chapel Hill	United States	Background
9	Deciphering eukaryotic gene-regulatory logic with 100 million random promoters (2019)	Broad Institute of MIT and Harvard, The Hebrew University of Jerusalem, University of New Mexico	Israel, 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 isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Citing-text excerpts — how the field used this work

METHODOLOGY Dynamic regulation of nucleosome positioning in the human genome

"For example, a similar nucleosome depletion in the promoter region has been observed using both the MNase digestion strategy and sonication followed by H3-ChIP (Bernstein et al., 2004; Lee et al., 2004; Yuan et al., 2005)."

Contribution 3

Claim — Contribution 3

The researcher developed a stereoselective three-component coupling method to synthesize spirooxindole libraries, establishing a foundational protocol for accessing these complex heterocyclic scaffolds with high stereocontrol.

The researcher's primary contribution is the development of a stereoselective three-component coupling reaction for synthesizing spirooxindole libraries, as detailed in a 2004 paper published in the Journal of the American Chemical Society. This work stands as a seminal core publication in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry, suggesting the original method itself constitutes the complete and self-contained contribution.

This line of work appears to address the challenge of efficiently constructing spirooxindole frameworks, which are valuable structural motifs in medicinal chemistry. By introducing a three-component coupling strategy, the researcher likely provided a streamlined approach to generating structural diversity and stereochemical complexity, offering a practical alternative to more laborious synthetic routes that may have existed prior to 2004.

The significance of this contribution is evidenced by its substantial citation count of 320, indicating widespread recognition and utility within the chemical community. Furthermore, analysis of 41 citing papers reveals that 100% are from independent researchers, demonstrating that the method has been broadly adopted and validated by the wider scientific community rather than being confined to the researcher's immediate circle or institution.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8 · **1 flagged influential by Semantic Scholar**

CORE PAPER

A library of spirooxindoles based on a stereoselective three-component coupling reaction

2004 · Journal of the American Chemical Society · 320 citations (GS)

Field-normalised: 247 Semantic Scholar citations place it in the top 5% of Chemistry papers from 2004 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Sonogashira Reaction: A Booming Methodology in Synthetic Organic Chemistry (2007)	University of Alicante	Spain	—
2	Isatins As Privileged Molecules in Design and Synthesis of Spiro-Fused Cyclic Frameworks (2012)	University of Botswana	Botswana	—
3	Pyrrolidinyl-spirooxindole natural products as inspirations for the development of potential therapeutic agents (2007)	Northwestern University	United States	—
4	Asymmetric multicomponent reactions (AMCRs): the new frontier (2005)	Universidad de Alicante	Spain	—
5	Strategies for the enantioselective synthesis of spirooxindoles (2012)	University of California	United States	—
6	Catalytic Enantioselective 1,3-Dipolar Cycloadditions of Azomethine Ylides for Biology-Oriented Synthesis (2014)	Max-Planck Institut für Molekulare Physiologie	Germany	—
7	The utilization of spirocyclic scaffolds in novel drug discovery (2016)	Vitae Pharmaceuticals	United States	—
8	Recent advances in multicomponent reactions for diversity-oriented synthesis (2010)	University of California, Davis	United States	**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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Toronto	Canada	SCImago #39 · THE 21 · QS 29	4
Tokyo Medical and Dental University	Japan	QS =697	4
Northwestern University	United States	THE 30 · QS =42	2
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	2
University of Texas Southwestern Medical Center	United States	SCImago #562	2
Broad Institute of MIT and Harvard	United States	SCImago #112	2

Institution	Country	World ranking	Citing papers
Washington University School of Medicine	United States	—	1
University of California, Davis	United States	SCImago #194 · THE 64 · QS =114	1
Johannes Gutenberg University	Germany	—	1
University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School	United States	—	1
Stowers Medical Research Institute	United States	—	1
Biological Research Centre, Hungarian Academy of Sciences	Hungary	—	1
The National Heart, Lung and Blood Institute, NIH	United States	—	1
The Genomics Institute of the Novartis Research Foundation	United States	—	1
UiT The Arctic University	Norway	—	1

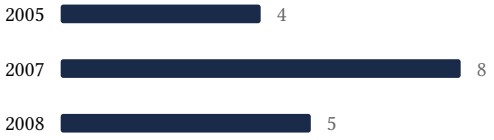
Geographic distribution of citing authors

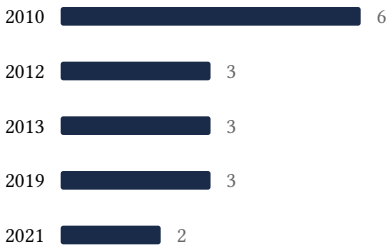
Country	Citing papers
United States	23
Canada	5
Japan	4
Iran	3
Germany	3
Israel	3
United Kingdom	3
Norway	2
China	2
Spain	2
Botswana	1
Italy	1

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	Small molecules enhance autophagy and reduce toxicity in Huntington's disease models	10	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Global nucleosome occupancy in yeast	9	Dhanasar — Prong 2 (well-positioned)

Contribution	Core paper	Indep. cites	Supports
Contribution 3	A library of spirooxindoles based on a stereoselective three-component coupling reaction	8	Dhanasar — Prong 2 (well-positioned)