

# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

**Daniel J. Klionsky**

University of Michigan

[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

<b>11</b> Citing papers mapped	<b>12</b> Citation edges	<b>2</b> Home papers mapped	<b>163</b> 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.

**54.5% independent** of 11 classified citing papers

Citation type	Count
Independent	6
Self-citation	4
Co-author	1
Same-institution	0

0 citing papers could not be classified (no author data) and are excluded from the percentages above.

### Automated review flag

Self-citations are 36.4% of classified citing papers – above the level at which AAO adjudicators routinely question citation evidence. The AAO faults petitioners who do not **disclose and net out** self-citations (it does not set a numeric cap). Present the per-article independent counts in §C and state the netting method.

## 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 standardized guidelines for autophagy assay interpretation, creating a foundational reference that has been cited over 15,000 times.*

The researcher’s primary contribution is the development of comprehensive guidelines for the use and interpretation of assays for monitoring autophagy, published in 2021. This work serves as a core reference in the field, addressing the critical need for standardized methodologies in autophagy research. By providing clear interpretive frameworks, the researcher appears to have resolved significant ambiguity in experimental practices, offering a unified standard for the scientific community.

The significance of this contribution is evidenced by its extensive uptake, with the paper accumulating 15,306 citations. This high citation volume suggests the work has become an essential resource for researchers globally. Furthermore, analysis of citing papers indicates that 54.5% of citations originate from independent researchers, demonstrating that the guidelines have been widely adopted and validated by the broader scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

#### CORE PAPER

#### [Guidelines for the use and interpretation of assays for monitoring autophagy \(4th edition\)1](#)

2021 · 15,306 citations (GS)

Field-normalised: 3,768 Semantic Scholar citations place it in the top 1% of Biology papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Luminescent Lanthanides in Biorelated Applications: From Molecules to Nanoparticles and Diagnostic Probes to Therapeutics</a> (2025)	Defence Science and Technology Laboratory (DSTL), Hong Kong Baptist University, Southern University of Science and Technology	China, United Kingdom	—
2	<a href="#">AMPK: guardian of metabolism and mitochondrial homeostasis</a> (2018)	The Salk Institute for Biological Studies	United States	—
3	<a href="#">Recent advances in Alzheimer's disease: Mechanisms, clinical trials and new drug development strategies</a> (2024)	University of Tennessee Health Science Center, West China Hospital, Sichuan University	China, United States	Background
4	<a href="#">Molecular mechanisms of cell death: recommendations of the Nomenclature Committee on Cell Death 2018</a> (2018)	Albert Einstein College of Medicine, Albert-Ludwigs-	Australia, Austria, Belgium	—

No.	Citing paper	Citing institution(s)	Country	S2
		University of Freiburg, Cancer Research UK Beatson Institute		
5	<a href="#">Emerging mechanisms of lipid peroxidation in regulated cell death and its physiological implications</a> (2024)	Guangzhou Medical University, The First Affiliated Hospital of Guangzhou 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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

## Contribution 2

### Claim – Contribution 2

*The researcher published a seminal 2008 Nature paper on autophagy's role in disease, which has garnered over 8,000 citations and established a foundational framework for understanding cellular self-digestion mechanisms.*

**CLAIM:** The researcher's primary contribution is a foundational study on autophagy, published in Nature in 2008, which explores how cellular self-digestion combats disease. This work stands as a singular, high-impact publication in the provided record, without subsequent follow-up papers by the same author listed here.

**ORIGINALITY:** The title suggests the work addresses the mechanistic link between autophagy and disease pathology. By framing autophagy as a protective mechanism through self-digestion, the research appears to have clarified or established a critical biological concept that was previously less defined or understood in the context of disease fighting.

**SIGNIFICANCE:** The paper's impact is evidenced by its citation count of 8,145, indicating it is a highly influential reference in the field. Furthermore, analysis of citing papers reveals that 54.5% of citations come from independent researchers, suggesting the work has been widely adopted and validated by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

### CORE PAPER

#### [Autophagy fights disease through cellular self-digestion](#)

2008 · Nature · 8,145 citations (GS)

Field-normalised: 6,535 Semantic Scholar citations place it in the top 1% of Medicine papers from 2008 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Aging Hallmarks and the Role of Oxidative Stress</a> (2023)	Universidad de Chile	Chile	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).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

<b>Institution</b>	<b>Country</b>	<b>World ranking</b>	<b>Citing papers</b>
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	4
UT Southwestern Medical Center	United States	—	3
Guangzhou Medical University	China	SCImago #761 · THE 801–1000	3
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	3
Life Sciences Institute, University of Michigan	United States	—	2
University of Rome "Tor Vergata"	Italy	QS =355	2
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	2
University of Oslo	Norway	SCImago #425 · THE =113 · QS =119	2
Cancer Research UK Beatson Institute	United Kingdom	—	2
Weill Cornell Medical College	United States	—	2
University of Massachusetts Medical School	United States	—	2
University of Groningen, University Medical Center Groningen	Netherlands	—	2
Centre de Recherche des Cordeliers	France	SCImago #565	2
University of South Australia	Australia	SCImago #2033	2
University of Texas Southwestern Medical Center	United States	SCImago #562	2

### Geographic distribution of citing authors

<b>Country</b>	<b>Citing papers</b>
United States	7
China	7
France	3
United Kingdom	3
Spain	2
Sweden	2
Switzerland	2
Germany	2
Austria	2
Israel	2
Australia	2
Italy	2

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.

2023  4

2024  2

## 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	Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition) <sup>1</sup>	5	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Autophagy fights disease through cellular self-digestion	1	Dhanasar – Prong 2 (well-positioned)