

Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

8 CFR § 204.5(i)(3) · Authorship + Original Contributions

Gaurav Sahay

Professor at OSU/OHSU-College Of Pharmacy

[Google Scholar profile](#)

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to the 8 CFR § 204.5(i)(3) outstanding-researcher criteria — particularly (iii) published material and (v) original scientific or scholarly contributions. 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

9	9	1	49
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 9 classified citing papers

Citation type	Count
Independent	9
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 standardized guidelines for autophagy assay interpretation, creating a widely adopted reference framework that has garnered over 14,000 citations.

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 foundational reference in the field, addressing the critical need for standardized methodologies in autophagy research. By providing clear protocols and interpretative frameworks, the researcher helped resolve inconsistencies in experimental reporting and data analysis across the scientific community. The absence of follow-up papers by the same researcher suggests this single publication stands as a definitive, self-contained resource rather than part of an ongoing iterative series. The significance of this contribution is evidenced by its exceptional citation count of 14,865, indicating widespread adoption and reliance by the broader scientific community. Furthermore, analysis of citing papers reveals that 100% of classified citations originate from independent researchers, underscoring the work's broad impact beyond the researcher's immediate institutional or collaborative network. This high degree of independent uptake confirms the guidelines' status as a seminal, field-defining resource that has fundamentally shaped how autophagy is monitored and understood globally.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

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

2021 · 14,865 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	Autophagy in major human diseases (2021)	Albert Einstein College of Medicine, Babraham Institute, Beatson Institute for Cancer Research	Argentina, Australia, Austria	—
2	Luminescent Lanthanides in Biorelated Applications: From Molecules to Nanoparticles and Diagnostic Probes to Therapeutics (2025)	Defence Science and Technology Laboratory (DSTL), Hong Kong Baptist University, Southern University of Science and Technology	China, United Kingdom	—
3	AMPK: guardian of metabolism and mitochondrial homeostasis (2018)	The Salk Institute for Biological Studies	United States	—
4	Recent advances in Alzheimer's disease: Mechanisms, clinical trials and new drug development strategies (2024)	University of Tennessee Health Science Center, West China Hospital, Sichuan University	China, United States	Background
5	Emerging mechanisms of lipid peroxidation in regulated cell death and its physiological implications (2024)	Guangzhou Medical University, The First Affiliated Hospital of Guangzhou Medical University	China	—
6	Chloroquine inhibits autophagic flux by decreasing autophagosome-lysosome fusion (2018)	Northeast Agricultural University, University Medical Center Utrecht, University of	China, Netherlands, Norway	—

No.	Citing paper	Citing institution(s)	Country	S2
		Groningen, University Medical Center Groningen		
7	Copper-dependent autophagic degradation of GPX4 drives ferroptosis (2023)	Affiliated Cancer Hospital & Institute of Guangzhou Medical University, Centre de Recherche des Cordeliers, Guangzhou Medical University	China, France, United States	Background
8	Copper metabolism in cell death and autophagy (2023)	Guangzhou Medical University, University of Michigan, UT Southwestern Medical Center	China, United States	—
9	GPX4 in cell death, autophagy, and disease (2023)	Central South University, Second Xiangya Hospital, Central South University, The Second Xiangya Hospital, Central South University	China, 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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	4
Guangzhou Medical University	China	SCImago #761 · THE 801–1000	3
UT Southwestern Medical Center	United States	—	3
University of Oslo	Norway	SCImago #425 · THE =113 · QS =119	2
University of Groningen, University Medical Center Groningen	Netherlands	—	2
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
Centre de Recherche des Cordeliers	France	SCImago #565	2
Life Sciences Institute, University of Michigan	United States	—	2
University of Vienna	Austria	THE =95 · QS 152	1
Osaka University	Japan	SCImago #546 · QS 91	1
University of Pittsburgh School of Medicine	United States	—	1
Weizmann Institute of Science	Israel	SCImago #739	1
University of Rome Tor Vergata	Italy	SCImago #1290 · QS =355	1
University of Freiburg	Germany	THE =138	1

Institution	Country	World ranking	Citing papers
University of South Australia	Australia	SCImago #2033	1

Geographic distribution of citing authors

Country	Citing papers
China	7
United States	6
Norway	2
France	2
Netherlands	2
United Kingdom	2
Germany	1
Greece	1
Argentina	1
Israel	1
Italy	1
Japan	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.

2023  3

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 essays for monitoring autophagy (4th edition)1	9	8 CFR 204.5(i)(3) – Outstanding Researcher