Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

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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 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

15	15	3	315
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 10 classified citing papers

Citation type	Count
Independent	10
Self-citation	0
Co-author	0
Same-institution	0

5 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 framework for understanding pathogen recognition and innate immunity, a seminal contribution that has been extensively cited by independent scholars worldwide.

The researcher's core contribution rests on the 2006 paper titled 'Pathogen recognition and innate immunity.' This work appears to define the fundamental mechanisms by which the immune system identifies pathogens, serving as a cornerstone reference in the field of immunology.

This line of work addresses the critical need to elucidate the initial stages of immune defense. By focusing on the intersection of pathogen detection and innate responses, the research likely provided a unified conceptual model that clarified previously fragmented understanding of how the body first responds to infection.

The significance of this contribution is evidenced by its extensive citation record, with over 26,000 citations indicating widespread adoption. Furthermore, analysis of citing literature reveals that 100% of sampled citations originate from independent researchers, demonstrating that the work has become a standard reference point for the broader scientific community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Pathogen recognition and innate immunity

2006 · 26,762 citations (GS)

Field-normalised: 11,982 Semantic Scholar citations place it in the top 1% of Medicine papers from 2006 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Toll-like receptor 4 (TLR4): new insight immune and aging (2023)	Gyeongsang National University, Kangwon National University	South Korea	Background
2	Intratumoural microbiota: a new frontier in cancer development and therapy	Huazhong University of Science and Technology, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology	China	Background
3	The mechanisms and roles of selective autophagy in mammals (2022)	Nagasaki University, National Institutes of Health, Osaka University	Japan, United Kingdom, 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 provided a seminal synthesis of Toll-Like Receptor biology in a highly cited Annual Review of Immunology article, establishing a foundational framework for the field.

The researcher's primary contribution is a comprehensive review of Toll-Like Receptors published in the Annual Review of Immunology in 2003. This work serves as the cornerstone of the provided evidence, with no follow-up papers by the same researcher listed to extend this specific line of inquiry.

This publication appears to address the need for a consolidated understanding of Toll-Like Receptors at a critical juncture in immunological research. By synthesizing existing knowledge in a premier review venue, the work likely clarified complex mechanisms and standardized terminology, offering a definitive reference point for the scientific community during a period of rapid discovery.

The significance of this contribution is underscored by its extensive citation record, with over 13,000 citations indicating widespread reliance on this framework. Furthermore, analysis of citing papers reveals that 100% of the sampled citations originate from independent researchers, demonstrating that the work has been broadly adopted and validated by the global scientific community beyond the author's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

Toll-Like Receptors

2003 · Annual Review of Immunology · 13,100 citations (GS)

Field-normalised: 4,553 Semantic Scholar citations place it in the top 1% of Medicine papers from 2003 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	From stress to inflammation and major depressive disorder: a social signal transduction theory of depression.	University of California, Los Angeles	United States	—
2	Smart Contact Lenses as Wearable Ophthalmic Devices for Disease Monitoring and Health Management (2023)	Yonsei University	South Korea	—

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 established standardized guidelines for autophagy assay interpretation, creating a foundational reference that has been cited nearly 15,000 times by independent scientists.

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 central reference point in the field, addressing the critical need for standardized methodologies in autophagy research. By providing clear interpretive frameworks, the researcher helped resolve ambiguities in experimental design and data analysis that previously hindered reproducibility and consistency across studies.

The significance of this contribution is evidenced by its extensive uptake within the scientific community. With nearly 15,000 citations, the paper has become a seminal resource. Notably, analysis of citing literature reveals that 100% of sampled citations originate from independent researchers, indicating that the work has been widely adopted and relied upon by the broader global scientific community rather than just the researcher's immediate circle. This high level of independent engagement underscores the work's role as a standard-setting benchmark in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Guidelines for the use and interpretation of assays for monitoring autophagy

2021 · 14,882 citations (GS)

Field-normalised: 4,392 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	Recent advances in Alzheimer's disease: Mechanisms, clinical trials and new drug development strategies	University of Tennessee Health Science Center, West China Hospital, Sichuan University	China, United States	—
2	Hallmarks of cardiovascular ageing (2023)	Centre de Recherche des Cordeliers, Medical University of Graz, University of Maribor	Austria, France, Slovenia	—
3	Copper-dependent autophagic degradation of GPX4 drives ferroptosis	Affiliated Cancer Hospital & Institute of Guangzhou Medical University, Centre de Recherche des Cordeliers, Guangzhou Medical University	China, France, United States	—
4	Copper metabolism in cell death and autophagy (2023)	Guangzhou Medical University, University of Michigan, UT Southwestern Medical Center	China, United States	—
5	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	3
Centre de Recherche des Cordeliers	France	SCImago #565	2
Guangzhou Medical University	China	SCImago #761 · THE 801–1000	2
UT Southwestern Medical Center	United States	—	2
University of Texas Southwestern Medical Center	United States	SCImago #562	1
Affiliated Cancer Hospital & Institute of Guangzhou Medical University	China	SCImago #1881	1
Université de Paris, Sorbonne Université, Inserm	France	—	1
National Institutes of Health	United States	SCImago #44	1

Institution	Country	World ranking	Citing papers
University College London	United Kingdom	SCImago #30	1
Gyeongsang National University	South Korea	SCImago #2728 · THE 1201–1500	1
Kangwon National University	South Korea	SCImago #2029 · THE 1201–1500 · QS 1001-1200	1
Nagasaki University	Japan	SCImago #3522 · THE 1201–1500 · QS 901-950	1
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	1
Union Hospital, Tongji Medical College, Huazhong University of Science and Technology	China	—	1
Second Xiangya Hospital, Central South University	China	—	1

Geographic distribution of citing authors

Country	Citing papers
United States	6
China	5
France	2
South Korea	2
Slovenia	1
Japan	1
Austria	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	Pathogen recognition and innate immunity	3	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Toll-Like Receptors	2	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Guidelines for the use and interpretation of assays for monitoring autophagy	5	8 CFR 204.5(i)(3) — Outstanding Researcher