

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

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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 Criterion 5 (original contributions of major significance). 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

5 Citing papers mapped	5 Citation edges	1 Home papers mapped	32 h-index (GS)
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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 5 classified citing papers

Citation type	Count
Independent	5
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 that phase separation drives aberrant chromatin looping and cancer development, a finding published in Nature (2021) with 470 citations.

CLAIM: The researcher's core contribution is the identification of phase separation as a driver of aberrant chromatin looping and cancer development, as detailed in a 2021 Nature paper.

ORIGINALITY: This work appears to address the mechanistic link between biophysical phase separation and genomic instability in cancer. The titles suggest a novel conceptual framework connecting chromatin architecture to oncogenesis, distinguishing it from prior studies that may have focused on other regulatory mechanisms.

SIGNIFICANCE: With 470 citations, the paper is highly influential. Notably, 100% of the classified citing papers originate from independent researchers, indicating broad adoption and validation of these findings across the global scientific community beyond the researcher's immediate network.

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

CORE PAPER

[Phase separation drives aberrant chromatin looping and cancer development](#)

2021 · Nature · 470 citations (GS)

Field-normalised: 375 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	Long non-coding RNAs: definitions, functions, challenges and recommendations (2023)	California Institute of Technology, Cold Spring Harbour Laboratory, Colorado State University	Australia, Brazil, China	—
2	Transcription regulation by biomolecular condensates (2025)	Tsinghua University, University of Texas Southwestern Medical Center	China, United States	Influential
3	A guide to membraneless organelles and their various roles in gene regulation (2022)	Hokkaido University, Osaka University	Japan	—
4	A conceptual framework for understanding phase separation and addressing open questions and challenges (2022)	St. Jude Children's Research Hospital, Washington University in St. Louis	United States	—
5	Liquid-liquid phase separation in tumor biology (2022)	Fudan University, Fudan University Shanghai Cancer Center, Shanghai Pancreatic Cancer Institute	China	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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Osaka University	Japan	SCImago #546 · QS 91	2
University of Texas Southwestern Medical Center	United States	SCImago #562	2
University of Gothenburg	Sweden	SCImago #573 · THE 201–250 · QS 202	1
Hokkaido University	Japan	SCImago #975 · THE 351–400 · QS =170	1
Weizmann Institute of Science	Israel	SCImago #739	1
St. Jude Children's Research Hospital	United States	—	1
Garvan Institute of Medical Research	Australia	SCImago #592	1
Fudan University Shanghai Cancer Center	China	—	1
Harvard University	United States	SCImago #4 · THE =5 · QS 5	1
Fudan University	China	SCImago #46 · THE 36 · QS 30	1
University of California, Santa Cruz	United States	SCImago #1349 · THE =181 · QS =458	1
John Innes Centre	United Kingdom	—	1
Tsinghua University	China	SCImago #8 · THE 12 · QS =17	1
California Institute of Technology	United States	SCImago #449 · THE 7 · QS 10	1
Shanghai Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences	China	—	1

Geographic distribution of citing authors

Country	Citing papers
China	3
United States	3
Japan	2
Finland	1
Ireland	1
Israel	1
Australia	1
Singapore	1
Spain	1
Sweden	1
United Kingdom	1
Brazil	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.

2022  3

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	Phase separation drives aberrant chromatin looping and cancer development	5	8 CFR 204.5(h)(3)(v) – Criterion 5