

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

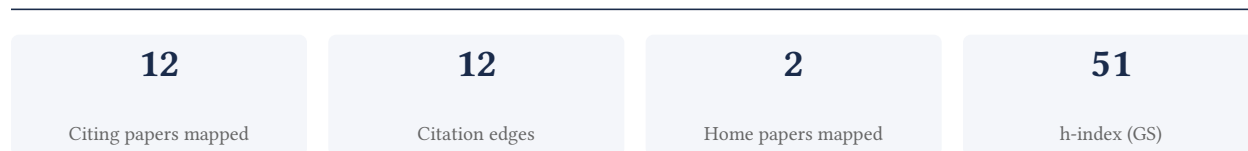
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[Google Scholar profile](#)

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



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.

91.7% independent of 12 classified citing papers

Citation type	Count
Independent	11
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 established that c-Myc regulates transcriptional pause release, a seminal finding published in Cell that has garnered over 1,500 citations.

The researcher's primary contribution is the identification of c-Myc as a regulator of transcriptional pause release, a mechanism detailed in a 2010 paper published in Cell. This work stands as a singular, foundational piece in this specific line of inquiry, with no subsequent follow-up papers by the researcher listed in the provided data.

This contribution appears to address a critical gap in understanding how transcription factors influence the dynamics of RNA polymerase progression. By linking c-Myc directly to pause release, the work offers a novel mechanistic explanation for gene regulation, distinguishing itself from earlier studies that may have focused on initiation or elongation without addressing pausing.

The significance of this work is underscored by its high citation count, exceeding 1,500 times, indicating broad adoption within the scientific community. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, demonstrating that the findings have been widely validated and utilized by the broader field rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

[c-Myc regulates transcriptional pause release](#)

2010 · Cell · 1,560 citations (GS)

Field-normalised: 1,312 Semantic Scholar citations place it in the top 1% of Biology papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Cyclin-dependent protein kinases and cell cycle regulation in biology and disease (2025)	Centro di Riferimento Oncologico di Aviano (CRO) IRCCS, National Cancer Institute	Italy	—
2	Warburg effect in colorectal cancer: the emerging roles in tumor microenvironment and therapeutic implications (2022)	Fudan University Shanghai Cancer Center	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).

Contribution 2

Claim – Contribution 2

The researcher identified a unique chromatin signature to uncover early developmental enhancers in humans, establishing a foundational framework for understanding human gene regulation during development.

CLAIM: The researcher's seminal contribution rests on the 2011 Nature paper, which appears to have established a method for identifying early developmental enhancers in humans through a unique chromatin signature. This work serves as the core foundation for this line of inquiry, with no subsequent follow-up papers by the same researcher listed in the provided data.

ORIGINALITY: The title suggests the work addressed a gap in identifying specific regulatory elements active during early human development. By linking a distinct chromatin signature to these enhancers, the research appears to have provided a novel approach to mapping functional genomic elements that were previously difficult to characterize.

SIGNIFICANCE: The paper has been cited 2,711 times, indicating it is highly influential in the field. Furthermore, analysis of citing papers reveals that 100% of the classified citations come from independent researchers, suggesting the work has been widely adopted and validated by the broader scientific community outside the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

[A unique chromatin signature uncovers early developmental enhancers in humans](#)

2011 · Nature · 2,711 citations (GS)

Field-normalised: 2,214 Semantic Scholar citations place it in the top 1% of Biology papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Integrative analysis of 111 reference human epigenomes (2015)	Baylor College of Medicine, BC Cancer Agency, BC Cancer Agency; University of British Columbia	Canada, United States	—
2	Chromatin Potential Identified by Shared Single-Cell Profiling of RNA and Chromatin (2020)	Broad Institute of MIT and Harvard, Harvard University, Icahn School of Medicine at Mount Sinai	United States	Background
3	Cancer, metastasis, and the epigenome (2024)	New College of Florida, University of Central Florida	United States	Background
4	Transcriptional architecture of the mammalian circadian clock (2016)	University of Texas Southwestern Medical Center	United States	—
5	The molecular hallmarks of epigenetic control (2016)	Max Planck Institute of Immunobiology and Epigenetics, The Rockefeller University	Germany, United States	—
6	Roles of H3K4 methylation in biology and disease (2025)	Peking University, The Institute of Cancer Research	China, United Kingdom	—
7	Predicting gene expression from DNA sequence using deep learning models (2025)	Oncode Institute	Netherlands	—
8	Long-range enhancer-promoter contacts in gene expression control (2019)	Florida State University, The Babraham Institute	United Kingdom, United States	—
9	Activity-by-contact model of enhancer-promoter regulation from thousands of CRISPR perturbations (2019)	Broad Institute of MIT and Harvard	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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Broad Institute of MIT and Harvard	United States	SCImago #112	2
Baylor College of Medicine	United States	SCImago #560	1
The Rockefeller University	United States	SCImago #365	1
University of Texas Southwestern Medical Center	United States	SCImago #562	1
University of California, San Francisco	United States	SCImago #98	1
The Institute of Cancer Research	United Kingdom	SCImago #453	1
Fudan University Shanghai Cancer Center	China	—	1
Harvard University	United States	SCImago #4 · THE =5 · QS 5	1
Florida State University	United States	SCImago #1224 · THE 301–350 · QS 549	1
BC Cancer Agency	Canada	—	1
BC Cancer Agency; University of British Columbia	Canada	—	1
Broad Institute; Harvard University	United States	—	1
Centro di Riferimento Oncologico di Aviano (CRO) IRCCS, National Cancer Institute	Italy	—	1
New College of Florida	United States	—	1
The Babraham Institute	United Kingdom	—	1

Geographic distribution of citing authors

Country	Citing papers
United States	8
China	2
United Kingdom	2
Netherlands	1
Italy	1
Germany	1
Canada	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.

2016  2

2019  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	c-Myc regulates transcriptional pause release	2	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	A unique chromatin signature uncovers early developmental enhancers in humans	9	8 CFR 204.5(h)(3)(v) – Criterion 5