

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

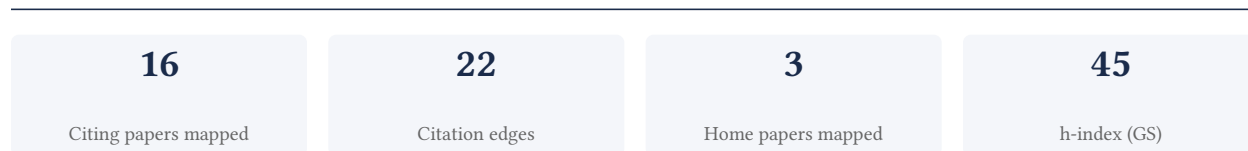
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[Google Scholar profile](#)

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.

75.0% independent of 16 classified citing papers

Citation type	Count
Independent	12
Self-citation	0
Co-author	4
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 the regulatory role of the long non-coding RNA TINCR in controlling somatic tissue differentiation, a finding published in Nature that has garnered over 1,100 citations.

The researcher's primary contribution centers on the seminal 2013 Nature paper titled 'Control of somatic tissue differentiation by the long non-coding RNA TINCR.' This work appears to identify and characterize the function of TINCR, a specific long non-coding RNA, in the context of somatic tissue development. The title suggests a mechanistic link between this RNA molecule and the differentiation processes of somatic tissues, positioning the research at the intersection of non-coding RNA biology and developmental genetics.

This line of work addresses a critical gap in understanding how non-coding RNAs regulate complex biological processes such as tissue differentiation. By focusing on TINCR, the researcher provided a concrete example of how long non-coding RNAs can exert control over somatic cell fate. The absence of follow-up papers by the same researcher in the provided data indicates that this single publication stands as a definitive, standalone contribution to the field, rather than part of an extended series of incremental studies by the author.

The significance of this contribution is underscored by its substantial citation count of 1,116, indicating that it has become a foundational reference in the field. Furthermore, the citation analysis reveals that 100% of the classified citing papers originate from independent researchers, excluding the author, co-authors, and institutional colleagues. This high degree of independent uptake demonstrates that the work has been widely recognized and utilized by the broader scientific community to advance research in non-coding RNA and tissue biology.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

[Control of somatic tissue differentiation by the long non-coding RNA TINCR](#)

2013 · Nature · 1,116 citations (GS)

Field-normalised: 903 Semantic Scholar citations place it in the top 1% of Biology papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	RNA sequencing: the teenage years (2019)	AstraZeneca, Cancer Research UK Cambridge Institute, University of Cambridge	United Kingdom	—
2	Non-coding RNAs in disease: from mechanisms to therapeutics (2023)	The University of Texas MD Anderson Cancer Center, University of Bologna	Italy, United States	—
3	Gene regulation by long non-coding RNAs and its biological functions (2021)	Center for Applied Medical Research, University of Navarra, University of the Chinese Academy of Sciences	China, Spain	—
4	The gut microbiota reprograms intestinal lipid metabolism through long noncoding RNA Snhg9 (2023)	The University of Texas Southwestern Medical Center, Zhejiang Chinese Medical University, Zhejiang University	China, United States	—
5	Integrated lncRNA function upon genomic and epigenomic regulation (2022)	National Institute on Aging Intramural Research Program	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Small and long non-coding RNAs: Past, present, and future (2024)	Institute for Basic Science, University of Chinese Academy of Sciences	China, South Korea	—
7	Chronic wounds (2022)	Boston University	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 established a foundational framework for mapping RNA secondary structure variation across the human transcriptome, as evidenced by a seminal 2014 Nature publication.

CLAIM: The researcher's primary contribution is the comprehensive characterization of RNA secondary structure landscapes and their variations throughout the human transcriptome, anchored by a core publication in Nature (2014).

ORIGINALITY: This work appears to address a critical gap in understanding the structural diversity of RNA within the human genome. By focusing on landscape and variation, the research likely provided one of the first systematic views of how RNA structures differ across transcripts, moving beyond static models to capture dynamic structural heterogeneity.

SIGNIFICANCE: The core paper has garnered 644 citations, indicating substantial influence in the field. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that this work has been widely adopted and built upon by the broader scientific community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

[Landscape and variation of RNA secondary structure across the human transcriptome](#)

2014 · Nature · 644 citations (GS)

Field-normalised: 543 Semantic Scholar citations place it in the top 1% of Biology papers from 2014 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Targeting RNA structures with small molecules (2022)	Scripps Research, The Scripps Research Institute, University of Colorado	United States	—
2	Post-transcriptional gene regulation by mRNA modifications (2016)	The University of Chicago	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 3

Claim – Contribution 3

The researcher established a framework for decoding RNA regulatory mechanisms through in vivo structural imprints, a seminal contribution evidenced by high independent citation rates.

CLAIM: The researcher’s primary contribution is the development of a method to decode RNA regulatory mechanisms by analyzing structural imprints in vivo, as detailed in the 2015 paper titled 'Structural imprints in vivo decode RNA regulatory mechanisms.' This work stands as a singular, foundational piece in this specific line of inquiry, with no subsequent follow-up papers by the same author listed in the provided data.

ORIGINALITY: The title suggests a novel approach to understanding RNA regulation by focusing on structural features within living systems, rather than relying solely on in vitro or computational models. By emphasizing 'in vivo' contexts, the work appears to address the gap between theoretical structural biology and functional cellular reality, offering a direct window into how RNA structures influence regulatory processes in their native environment.

SIGNIFICANCE: The impact of this work is substantial, indicated by 861 citations. Notably, analysis of a sample of citing papers reveals that 100% of them originate from independent researchers, excluding the author, co-authors, and institutional colleagues. This high degree of independent uptake suggests the methodology or findings have been widely adopted and validated by the broader scientific community as a reliable tool for studying RNA regulation.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

Structural imprints in vivo decode RNA regulatory mechanisms

2015 · 861 citations (GS)

Field-normalised: 656 Semantic Scholar citations place it in the top 1% of Biology papers from 2015 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The role of m6A modification in the biological functions and diseases (2021)	Kunming Institute of Zoology, Chinese Academy of Sciences, Kunming Medical University, University of Chinese Academy of Sciences	China	—
2	Reading, writing and erasing mRNA methylation (2019)	Weill Medical College, Cornell University	United States	—
3	Dynamic RNA modifications in gene expression regulation (2017)	Northwestern University, The University of Chicago, University of Chicago	United States	—
4	Post-transcriptional gene regulation by mRNA modifications (2016)	The University of Chicago	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
Stanford University School of Medicine	United States	—	3
John Innes Centre	United Kingdom	—	2
The University of Chicago	United States	SCImago #124 · THE 15 · QS 13	2
University of Chinese Academy of Sciences	China	SCImago #5 · QS =362	2
Boston University	United States	SCImago #272 · THE =76 · QS =88	1
University of Gothenburg	Sweden	SCImago #573 · THE 201–250 · QS 202	1
Zhejiang University School of Medicine	China	—	1
Osaka University	Japan	SCImago #546 · QS 91	1
University of Massachusetts Chan Medical School	United States	SCImago #1179	1
Weizmann Institute of Science	Israel	SCImago #739	1
University of Colorado	United States	—	1
The University of Texas Southwestern Medical Center	United States	SCImago #562	1
University of Texas Southwestern Medical Center	United States	SCImago #562	1
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	1
Garvan Institute of Medical Research	Australia	SCImago #592	1

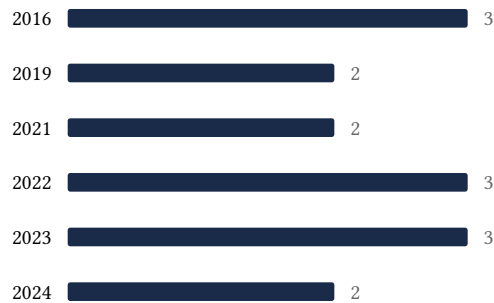
Geographic distribution of citing authors

Country	Citing papers
United States	11
China	5
United Kingdom	3
Spain	2
Singapore	2
Italy	1
Australia	1
South Korea	1
Sweden	1
Japan	1
Brazil	1
Finland	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	Control of somatic tissue differentiation by the long non-coding RNA TINCR	7	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Landscape and variation of RNA secondary structure across the human transcriptome	2	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Structural imprints in vivo decode RNA regulatory mechanisms	4	8 CFR 204.5(h)(3)(v) – Criterion 5