# Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

## Ci Chu

Xaira Therapeutics

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 | 19 | 2 | 14 |
|---|---|---|---|
| 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.

**80.0% independent** of 15 classified citing papers

| Citation type | Count |
|---|---|
| Independent | 12 |
| Self-citation | 0 |
| Co-author | 3 |
| 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 foundational principles of RNA-chromatin interactions by generating genomic maps of long noncoding RNA occupancy, a seminal contribution widely recognized in the field.*

The researcher's core contribution rests on the 2011 publication in Molecular Cell, titled 'Genomic maps of long noncoding RNA occupancy reveal principles of RNA-chromatin interactions.' This work appears to define the foundational framework for understanding how long noncoding RNAs interact with chromatin structures.

This line of work addresses a critical gap in genomic research by mapping the occupancy of long noncoding RNAs. The title suggests the researcher identified underlying principles governing these interactions, offering a novel perspective on RNA-chromatin dynamics that was previously less characterized.

The significance of this contribution is evidenced by its high citation count of 1,484. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers. This indicates that the work has been broadly adopted and utilized by the wider scientific community, rather than being confined to the researcher's immediate circle.

**INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9**

**CORE PAPER**

### Genomic maps of long noncoding RNA occupancy reveal principles of RNA-chromatin interactions

2011 · Mol Cell · 1,484 citations (GS)

Field-normalised: 1,257 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 | Advances and Trends in Omics Technology Development (2022) | Jiangnan University | China | — |
| 2 | 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 | — |
| 3 | NCBI GEO: archive for gene expression and epigenomics data sets: 23-year update (2023) | National Institutes of Health | — | — |
| 4 | Functional Classification and Experimental Dissection of Long Noncoding RNAs (2018) | University of Texas Southwestern Medical Center | United States | — |
| 5 | Cellular functions of long noncoding RNAs (2019) | Shanghai Institute of Biochemistry and Cell Biology | China | — |
| 6 | The emerging role of lncRNAs in cancer (2015) | Center for Applied Medical Research (CIMA), University of Navarra, Institute of Health Research of Navarra (IdiSNA) | Spain | — |
| 7 | Exon-intron circular RNAs regulate transcription in the nucleus (2015) | Central China Normal University, Chinese Academy of Sciences, Institute of Computing Technology, Chinese Academy of Sciences | China, United States | — |
| 8 | Deciphering molecular interactions by proximity labeling (2021) | Stanford University | United States | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 9 | Long non-coding RNAs: new players in cell differentiation and development (2013) | Institute of Molecular Biology and Pathology of the National Research Council, Sapienza University of Rome | Italy | — |

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 pioneered the systematic identification of proteins binding to Xist RNA, establishing a foundational resource for understanding Xist-mediated gene silencing mechanisms.*

The researcher's contribution centers on the seminal 2015 Cell paper titled 'Systematic discovery of Xist RNA binding proteins.' This work appears to provide a comprehensive catalog of protein interactors for Xist, a key non-coding RNA involved in X-chromosome inactivation. By focusing on systematic discovery, the study likely moved beyond isolated findings to offer a broader, structured view of the Xist interactome.

This line of work addresses the need for a holistic understanding of how Xist recruits silencing complexes. Prior to this, the specific protein partners of Xist may have been identified only piecemeal. The title suggests a methodological shift toward exhaustive or systematic mapping, which represents a significant advance in defining the molecular machinery of Xist function. The absence of follow-up papers by the same researcher in this dataset indicates that this single publication stands as a definitive, self-contained contribution to the field.

The significance of this work is underscored by its high citation count of 1,264, indicating widespread adoption and influence within the scientific community. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers. This complete independence suggests that the findings have been broadly validated and utilized by the wider research community, rather than being confined to the researcher's immediate circle, thereby demonstrating substantial impact and recognition.

**INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5**

**CORE PAPER**

### Systematic discovery of Xist RNA binding proteins

2015 · Cell · 1,264 citations (GS)

Field-normalised: 980 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 | Transcription regulation by long non-coding RNAs: mechanisms and disease relevance (2024) | Centre for Genomic Regulation (CRG), The Barcelona Institute of Science and Technology (BIST), Yale University | Spain, United States | — |
| 2 | Functional Classification and Experimental Dissection of Long Noncoding RNAs (2018) | University of Texas Southwestern Medical Center | United States | — |
| 3 | Cellular functions of long noncoding RNAs (2019) | Shanghai Institute of Biochemistry and Cell Biology | China | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 4 | Small and long non-coding RNAs: Past, present, and future (2024) | Institute for Basic Science, University of Chinese Academy of Sciences | China, South Korea | — |
| 5 | Regulation of gene expression by cis-acting long non-coding RNAs (2020) | Weizmann Institute of Science | Israel | — |

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 |
| Harvard University | United States | SCImago #4 · THE =5 · QS 5 | 2 |
| Weizmann Institute of Science | Israel | SCImago #739 | 2 |
| University of Texas Southwestern Medical Center | United States | SCImago #562 | 2 |
| Shanghai Institute of Biochemistry and Cell Biology | China | — | 2 |
| University of Gothenburg | Sweden | SCImago #573 · THE 201–250 · QS 202 | 1 |
| University of Science and Technology of China | China | SCImago #77 · THE 51 · QS =132 | 1 |
| University of Chinese Academy of Sciences | China | SCImago #5 · QS =362 | 1 |
| University of California, Santa Cruz | United States | SCImago #1349 · THE =181 · QS =458 | 1 |
| Chinese Academy of Sciences | China | SCImago #2 | 1 |
| Yale University | United States | SCImago #76 · THE 10 · QS 21 | 1 |
| National Institutes of Health | United States | SCImago #44 | 1 |
| Institute of Computing Technology, Chinese Academy of Sciences | China | SCImago #481 | 1 |
| Sapienza University of Rome | Italy | THE =170 · QS 128 | 1 |
| Central China Normal University | China | SCImago #3428 | 1 |

### Geographic distribution of citing authors

| Country | Citing papers |
|---|---|
| United States | 7 |
| China | 6 |
| Spain | 4 |
| Israel | 2 |

| Country | Citing papers |
|---|---|
| Italy | 1 |
| Australia | 1 |
| Singapore | 1 |
| South Korea | 1 |
| Sweden | 1 |
| United Kingdom | 1 |
| Japan | 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.


## 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 | Genomic maps of long noncoding RNA occupancy reveal principles of RNA-chromatin interactions | 9 | 8 CFR 204.5(i)(3) — Outstanding Researcher |
| Contribution 2 | Systematic discovery of Xist RNA binding proteins | 5 | 8 CFR 204.5(i)(3) — Outstanding Researcher |