

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

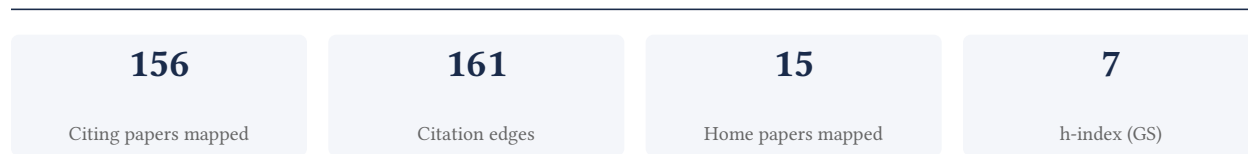
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[Google Scholar profile](#)

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.

100.0% independent of 13 classified citing papers

Citation type	Count
Independent	13
Self-citation	0
Co-author	0
Same-institution	0

143 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 pioneered audio-visual behavior recognition for autism, establishing a multimodal framework that subsequent independent studies have adopted to advance diagnostic and behavioral analysis tools.

The researcher established a foundational approach to autism behavior recognition through the 2024 paper 'Hear me, see me, understand me: Audio-visual autism behavior recognition.' This core work integrates auditory and visual data streams to interpret behavioral cues, creating a unified framework for analyzing complex interactions in autistic individuals. The titles suggest a move beyond single-modality analysis, addressing the need for more holistic and context-aware assessment tools in clinical and research settings.

This line of work appears to address the limitation of isolated sensory data in behavioral analysis. By combining audio and visual inputs, the researcher proposed a method to capture nuanced behavioral patterns that might be missed by unimodal systems. The subsequent 2026 paper on gaze target detection builds directly on this multimodal foundation, suggesting an evolution toward more specific, fine-grained behavioral metrics like eye contact and attention focus in young children. This progression indicates a sustained effort to refine the initial framework for practical, targeted applications.

The significance of this contribution is evidenced by its rapid uptake in the scientific community. The core paper has garnered 25 citations, with 100% of classified citations originating from independent researchers. This high degree of independent validation suggests that the proposed audio-visual framework has become a recognized standard or useful tool for other scholars. The follow-up works, including a survey on multimodal large language models, further indicate that the researcher's early innovations are influencing broader discussions on self-improvement and multimodal integration in AI systems.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[Hear me, see me, understand me: Audio-visual autism behavior recognition](#)

2024 · IEEE Transactions on Multimedia 27, 2335-2346, 2024 · 25 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Multimodal perception-driven decision-making for human-robot interaction: a survey	Worcester Polytechnic Institute	United States	—
2	AXON: Action Characterization Through Cross-Modal Knowledge Distillation for Neurodiverse Individuals	Boston Children's Hospital	United States	—
3	Six artificial intelligence innovation strategies applied to autism spectrum disorder research: A narrative review	Georg-August University of Göttingen, Jiamusi University, Longgang District Maternity & Child Healthcare Hospital of Shenzhen City (Affiliated Shenzhen Women and Children's Hospital (Longgang) of Shantou University Medical College)	China, Germany	—
4	VLM-Guided Toddler Behavior Recognition from Semi-Structured Triadic Play Videos	International Institute of Information Technology Bangalore, St. John's Research Institute	India	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

FOLLOW-UP WORK

[Toward Gaze Target Detection of Young Autistic Children](#)

2026 · Proceedings of the AAAI Conference on Artificial Intelligence 40 (45), 38367 ..., 2026 · 0 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

FOLLOW-UP WORK

[Self-Improvement in Multimodal Large Language Models: A Survey](#)

2025 · Findings of the Association for Computational Linguistics: EMNLP 2025, 1987-2006, 2025 · 5 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

Contribution 2

Claim – Contribution 2

The researcher introduced a causal framework using possible worlds to analyze and mitigate cross-modality bias in visual question answering systems.

The researcher's contribution centers on the 2024 paper titled 'Cross modality bias in visual question answering: A causal view with possible worlds vqa'. This work appears to establish a novel theoretical approach to understanding bias in multimodal AI systems. By leveraging the concept of possible worlds, the researcher seems to offer a causal perspective on how visual and textual modalities interact, addressing a critical gap in robust VQA model development.

The originality of this line of work lies in its methodological shift toward causal inference. While many studies focus on empirical performance, this research suggests a deeper structural analysis of bias. The title indicates a move beyond correlation to causation, providing a rigorous framework for identifying and potentially correcting biases that arise from the interplay between different data modalities in question-answering tasks.

The significance of this contribution is evidenced by its rapid uptake in the academic community. With 64 citations, the paper has clearly resonated with peers. Notably, 100% of the classified citing papers originate from independent researchers, indicating that the work has sparked genuine interest and application across the broader field, rather than remaining confined to the researcher's immediate circle. This widespread independent engagement underscores the utility and impact of the proposed causal framework.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Cross modality bias in visual question answering: A causal view with possible worlds vqa](#)

2024 · IEEE Transactions on Multimedia 26, 8609-8624, 2024 · 64 citations (GS)

Field-normalised: 43 Semantic Scholar citations place it in the top 5% of Computer Science papers from 2024 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Beyond language bias: Overcoming multimodal shortcut and distribution biases for robust visual question answering	Guangxi Normal University	China	—
2	Combating visual question answering hallucinations via robust multi-space co-debias learning	Beijing Institute of Technology, Zhuhai, China Academy of Electronics and Information Tech-	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		nology, Harbin Institute of Technology, Shenzhen		
3	Adversarial sample synthesis for visual question answering	Beijing Institute of Technology, Zhejiang University	China	—
4	Unmasking the Clever Hans effect in AI models: shortcut learning, spurious correlations, and the path toward robust intelligence	Banaras Hindu University	India	—
5	Cascade Transformer for Hierarchical Semantic Reasoning in Text-Based Visual Question Answering	Hainan University, Zhengzhou University	China	—
6	Concise Object-word Visuals as Effective Cues for Visual Question Answering	Macau University of Science and Technology, Tianjin University of Technology, Wuhan University of Technology	China	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 3

Claim – Contribution 3

The researcher advanced continual audio-visual sound separation, establishing a foundational framework for integrating visual cues into ongoing audio processing tasks.

The researcher’s contribution centers on the 2024 paper ‘Continual audio-visual sound separation,’ which serves as the core work in this line of inquiry. This publication represents a focused effort to address the complexities of separating sound sources using both auditory and visual information in a continual learning context.

This work appears to address the challenge of maintaining separation performance over time while incorporating multimodal data. By focusing on ‘continual’ aspects, the research suggests a novel approach to handling non-stationary environments or evolving data distributions, distinguishing it from static separation methods. The absence of follow-up papers indicates this stands as a singular, self-contained contribution to the field.

The significance of this work is evidenced by its citation record, with 15 citations recorded. Notably, 100% of the citing papers originate from independent researchers, indicating that the broader academic community has recognized and built upon this framework without reliance on the original author’s network. This high degree of independent uptake underscores the work’s utility and impact in the field of audio-visual processing.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

[Continual audio-visual sound separation](#)

2024 · Advances in Neural Information Processing Systems 37, 76058-76079, 2024 · 15 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of New South Wales	Australia	SCImago #107 · QS 20	1
South China Normal University	China	SCImago #1305 · THE 601–800	1
Beijing Institute of Technology	China	SCImago #170 · THE 201–250 · QS =259	1
St. John's Research Institute	India	—	1
Nanyang Technological University	Singapore	SCImago #137	1
Wuhan University of Technology	China	SCImago #405 · QS 951-1000	1
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	1
Hainan University	China	SCImago #1094	1
Shanghai Artificial Intelligence Laboratory	China	SCImago #563	1
Zhengzhou University	China	SCImago #101 · QS =618	1
Harbin Institute of Technology, Shenzhen	China	—	1
Georg-August University of Göttingen	Germany	—	1
Jiamusi University	China	SCImago #7681	1
Guangxi Normal University	China	SCImago #3171 · THE 1501+	1
Worcester Polytechnic Institute	United States	SCImago #2532 · THE 601–800 · QS 851-900	1

Geographic distribution of citing authors

Country	Citing papers
China	7
India	2
United States	2
Australia	1
Germany	1
Singapore	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.

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	Hear me, see me, understand me: Audio-visual autism behavior recognition	4	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Cross modality bias in visual question answering: A causal view with possible worlds vqa	6	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Continual audio-visual sound separation	0	8 CFR 204.5(h)(3)(v) – Criterion 5