

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

14 Citing papers mapped	15 Citation edges	3 Home papers mapped	170 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 7 classified citing papers

Citation type	Count
Independent	7
Self-citation	0
Co-author	0
Same-institution	0

7 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 developed FSL, a widely adopted software suite for functional and structural MR image analysis, establishing a foundational tool for neuroimaging research.

The researcher’s primary contribution is the development and implementation of FSL, a comprehensive software suite for functional and structural magnetic resonance imaging analysis, as detailed in their seminal 2004 paper. This work stands as a core achievement in the field, providing essential computational tools for neuroimaging scientists.

This line of work appears to address the critical need for robust, accessible, and integrated software solutions for complex MR image analysis. By consolidating advances in both functional and structural domains into a single implementation, the researcher likely lowered barriers to entry for researchers requiring sophisticated image processing capabilities, thereby standardizing analytical workflows.

The significance of this contribution is evidenced by the paper’s extensive citation record, with over 16,000 citations indicating widespread adoption and reliance on the FSL suite. Furthermore, analysis of citing literature reveals that 100% of classified citations originate from independent researchers, underscoring the tool’s broad impact across the global scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

[Advances in functional and structural MR image analysis and implementation as FSL](#)

2004 · 16,621 citations (GS)

Field-normalised: 13,832 Semantic Scholar citations place it in the top 1% of Medicine papers from 2004 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Adversarial testing of global neuronal workspace and integrated information theories of consciousness (2025)	Allen Institute for Brain Science, Collège de France, Collège de France; NeuroSpin	Canada, China, France	—
2	Increased global integration in the brain after psilocybin therapy for depression (2022)	Imperial College London, Invicro London, University of California, San Francisco	United Kingdom, United States	—
3	Loss of fatty acid degradation by astrocytic mitochondria triggers neuroinflammation and neurodegeneration (2023)	Arizona State University, Center for Innovation in Brain Science & Arizona Alzheimer’s Consortium, University of Arizona	United States	—

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 2

Claim – Contribution 2

The researcher developed improved optimization methods for robust, accurate linear registration and motion correction of brain images, establishing a foundational standard in neuroimaging analysis.

CLAIM: The researcher’s primary contribution is the development of improved optimization techniques for the robust and accurate linear registration and motion correction of brain images, as detailed in their seminal 2002 paper published in NeuroImage.

ORIGINALITY: This work appears to address critical challenges in neuroimaging by enhancing the precision and stability of image alignment processes. The title suggests a methodological advancement over prior approaches, focusing on robustness and accuracy in handling motion artifacts, which are common obstacles in brain image analysis.

SIGNIFICANCE: The paper has been cited nearly 15,000 times, indicating widespread adoption and influence within the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that this work has served as a foundational reference for scholars outside the researcher’s immediate network, thereby underscoring its broad impact and utility in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

[Improved optimization for the robust and accurate linear registration and motion correction of brain images](#)

2002 · NeuroImage · 14,886 citations (GS)

Field-normalised: 12,133 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2002 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Alzheimer’s Disease Detection Using Deep Learning on Neuroimaging: A Systematic Review (2024)	The University of Newcastle	Australia	—
2	AI-based differential diagnosis of dementia etiologies on multimodal data (2024)	Boston Medical Center/Boston University, Boston University, Boston University/Boston Medical Center	United States	—
3	fMRIPrep: a robust preprocessing pipeline for functional MRI	Biocruces Health Research Institute, Max Planck Institute for Empirical Aesthetics, McGovern Institute for Brain Research, MIT	Canada, Germany, Spain	—

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 published a seminal 2012 paper that has garnered over 13,000 citations, establishing a foundational contribution widely adopted by independent scholars across the field.

The researcher’s primary contribution rests on a single, highly influential paper published in 2012. This work stands as the cornerstone of the provided record, demonstrating substantial impact without reliance on subsequent follow-up publications by the same author.

The originality of this contribution is inferred from its enduring presence in the literature. As a standalone seminal work, it appears to have addressed a critical gap or established a new standard that resonated deeply with the academic community, necessitating no immediate iterative follow-ups by the researcher to maintain its relevance.

The significance of this work is evidenced by its extensive citation record, with over 13,000 citations indicating broad adoption. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, confirming that the work has driven progress across the wider field rather than within a single collaborative group.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

[View article](#)

2012 · 13,587 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Reproducible brain-wide association studies require thousands of individuals	University of Minnesota	United States	—

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.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Max Planck Institute for Empirical Aesthetics	Germany	—	2
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
University of Arizona	United States	SCImago #408 · THE =138 · QS =287	1
Boston University Chobanian & Avedisian School of Medicine	United States	—	1
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	1
Boston University	United States	SCImago #272 · THE =76 · QS =88	1
University of California, San Francisco	United States	SCImago #98	1
The University of Newcastle	Australia	SCImago #1436 · THE 251–300	1
New York University Grossman School of Medicine	United States	—	1
University of Nebraska Medical Center	United States	SCImago #1778 · THE 501–600	1
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	1
Allen Institute for Brain Science	United States	—	1
Tel Aviv University	Israel	SCImago #507 · THE 201–250 · QS 223	1
University of Wisconsin–Madison	United States	SCImago #174 · THE =53 · QS =110	1

Geographic distribution of citing authors

Country	Citing papers
United States	6
Germany	2
Spain	2
Canada	2
Netherlands	1
United Kingdom	1
Israel	1
China	1
France	1
Australia	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.

2024  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	Advances in functional and structural MR image analysis and implementation as FSL	3	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Improved optimization for the robust and accurate linear registration and motion correction of brain images	3	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	View article	1	8 CFR 204.5(h)(3)(v) – Criterion 5