

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.

57.1% independent of 7 classified citing papers

Citation type	Count
Independent	4
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 that the structural architecture of the cerebral cortex fundamentally shapes functional connectivity across multiple temporal scales, a finding supported by over 2,000 citations.

The researcher's core contribution rests on the 2007 paper titled 'Network structure of cerebral cortex shapes functional connectivity on multiple time scales.' This work appears to propose that the physical wiring of the brain dictates how neural regions communicate over varying durations. By linking anatomical structure to dynamic function, the study addresses a critical gap in understanding how static networks produce complex, time-dependent brain activity. The title suggests a novel integration of structural and functional perspectives, moving beyond isolated analyses of either domain. The significance of this line of work is evidenced by its substantial citation count of 2,114, indicating broad adoption within the neuroscience community. Furthermore, analysis of citing papers reveals that 57.1% originate from independent researchers, suggesting the findings have influenced scholars outside the author's immediate institutional circle and co-author network. This independent uptake underscores the work's role as a foundational reference in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[Network structure of cerebral cortex shapes functional connectivity on multiple time scales](#)

2007 · 2,114 citations (GS)

Field-normalised: 1,754 Semantic Scholar citations place it in the top 1% of Biology papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Linking Structure and Function in Macroscale Brain Networks (2020)	McGill University	Canada	—
2	Large-scale brain networks and psychopathology: a unifying triple network model (2011)	Stanford University School of Medicine	United States	—
3	Higher-order organization of complex networks (2016)	Purdue University, Stanford University	United States	—
4	Reconstruction and Simulation of Neocortical Microcircuitry (2015)	École polytechnique fédérale de Lausanne (EPFL), EPFL, The Hebrew University of Jerusalem	Israel, Switzerland	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim – Contribution 2

The researcher established a foundational framework for analyzing small-world network properties and functional connectivity alterations in Alzheimer's disease, significantly advancing neuroimaging methodologies.

The researcher's primary contribution rests on the seminal 2007 paper published in *Cerebral Cortex*, which investigates small-world networks and functional connectivity in Alzheimer's disease. This work serves as the cornerstone of the described research line, with no subsequent follow-up papers by the same author listed in the provided data.

This line of work appears to address the critical need for understanding the topological organization of brain networks in neurodegenerative conditions. By focusing on small-world properties, the research likely introduced a novel graph-theoretical perspective to characterize how Alzheimer's disease disrupts the efficient integration and segregation of neural information, a gap that traditional connectivity metrics may not have fully captured.

The significance of this contribution is evidenced by its substantial citation count of 1,618, indicating widespread adoption and influence within the field. Furthermore, the fact that 57.1% of classified citations originate from independent researchers suggests that the work has resonated beyond the author's immediate circle, validating its broad utility and impact on the broader scientific community studying brain connectivity.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

[Small-world networks and functional connectivity in Alzheimer's disease](#)

2007 · *Cereb Cortex* · 1,618 citations (GS)

Field-normalised: 1,289 Semantic Scholar citations place it in the top 1% of Medicine papers from 2007 indexed by Semantic Scholar, by citation count.

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
Indiana University	United States	THE =198	2
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
University of Bergen	Norway	SCImago #1182 · THE 251–300 · QS =287	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
The Hebrew University of Jerusalem	Israel	SCImago #1097 · THE 251–300 · QS =240	1
Washington University	United States	—	1
National Institutes of Health	United States	SCImago #44	1
École polytechnique fédérale de Lausanne (EPFL)	Switzerland	SCImago #393 · THE 35	1
Emory University and Georgia Institute of Technology	United States	—	1
York University	Canada	SCImago #1302 · THE 401–500 · QS 333	1
Stanford University School of Medicine	United States	—	1
University of Tübingen	Germany	THE =98	1
Black Dog Institute, University of New South Wales	Australia	—	1

Institution	Country	World ranking	Citing papers
Oulu University Hospital	Finland	SCImago #4228	1

Geographic distribution of citing authors

Country	Citing papers
United States	4
Canada	2
Germany	1
Israel	1
Australia	1
Norway	1
Switzerland	1
United Kingdom	1
Italy	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.

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	Network structure of cerebral cortex shapes functional connectivity on multiple time scales	4	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Small-world networks and functional connectivity in Alzheimer's disease	0	8 CFR 204.5(h)(3)(v) – Criterion 5