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 2026-06-10 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

8	8	1	41
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.

87.5% independent of 8 classified citing papers

Citation type	Count
Independent	7
Self-citation	1
Co-author	0
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 developed a model for growing scale-free networks with tunable clustering, addressing a key limitation in early network science literature.

CLAIM: The researcher's primary contribution is the development of a framework for generating scale-free networks with tunable clustering, as demonstrated in their 2002 Physical Review E paper. This work stands as a seminal piece in the field, establishing a method to control clustering coefficients in network growth models.

ORIGINALITY: Prior to this work, standard scale-free network models often failed to reproduce the high clustering coefficients observed in real-world systems. The titles suggest this research addressed that gap by introducing a mechanism to tune clustering, thereby bridging the divide between theoretical scale-free properties and empirical network structures.

SIGNIFICANCE: With over 1,500 citations, the paper is highly influential. Analysis of citing literature indicates that 87.5% of citations come from independent researchers, suggesting the work has been widely adopted and validated by the broader scientific community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Growing scale-free networks with tunable clustering

2002 · Physical Review E · 1,509 citations (GS)

Field-normalised: 1,051 Semantic Scholar citations place it in the top 1% of Physics papers from 2002 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Structure and Function of Complex Networks. (2003)	Santa Fe Institute, University of Michigan	United States	Background
2	Complex networks: Structure and dynamics (2006)	National Research Council, Queen Mary University of London, Universidad San Francisco de Quito	Ecuador, Italy, Spain	—
3	The Kuramoto model in complex networks (2016)	Potsdam Institute for Climate Impact Research, Universidade de São Paulo	Brazil, Germany	—
4	How digital media drive affective polarization through partisan sorting (2022)	—	—	—
5	Design Space for Graph Neural Networks (2020)	Stanford University	United States	**Methodology**
6	Evolution of networks (2002)	Ioffe Institute, University of Aveiro	Portugal, Russia	—
7	Hierarchical Organization in Complex Networks (2003)	University of Notre Dame	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).

Citing-text excerpts — how the field used this work

METHODOLOGY Design Space for Graph Neural Networks

> *"We use two families of graphs prevalent in the real-world small-world [33] and scale-free graphs [9], which have diverse structural properties, measured by a suite of graph statistics ."*

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Notre Dame	United States	SCImago #1036 · THE 194 · QS =294	1
Universidade de São Paulo	Brazil	SCImago #99 · THE 201–250 · QS 108	1
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	1
Queen Mary University of London	United Kingdom	SCImago #416 · THE =134 · QS =110	1
National Research Council	Italy	—	1
Potsdam Institute for Climate Impact Research	Germany	SCImago #2238	1
University of Aveiro	Portugal	THE 601–800 · QS 419	1
University of Zaragoza	Spain	THE 1001–1200	1
Santa Fe Institute	United States	SCImago #3445	1
Umeå University	Sweden	SCImago #1412 · THE 401–500 · QS =401	1
Stanford University	United States	SCImago #18 · THE =5 · QS 3	1
Universidad San Francisco de Quito	Ecuador	SCImago #5948 · THE 1201–1500	1
Ioffe Institute	Russia	—	1

Geographic distribution of citing authors

Country	Citing papers
United States	3
Ecuador	1
Germany	1
Italy	1
Portugal	1
Brazil	1
Spain	1
Sweden	1
United Kingdom	1
Russia	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	Growing scale-free networks with tunable clustering	7	8 CFR 204.5(h)(3)(v) — Criterion 5