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

82	83	7	3
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.

100.0% independent of 3 classified citing papers

Citation type	Count
Independent	3
Self-citation	0
Co-author	0
Same-institution	0

79 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 foundational frameworks for modeling future electricity infrastructure pathways and extended this work to analyze multi-period natural gas pricing and investment dynamics.

CLAIM: The researcher's contribution centers on a seminal 2020 paper outlining generation and transmission pathways for the US electricity infrastructure through 2050, which serves as the core foundation for subsequent work on energy infrastructure investment and pricing.

ORIGINALITY: This line of work appears to address the complex challenge of long-term energy system planning. By extending the initial electricity-focused analysis to a 2024 study on bilevel approaches for natural gas pricing and investment, the researcher demonstrates a methodological evolution toward integrated, multi-period modeling of interconnected energy markets.

SIGNIFICANCE: The core paper has accumulated 101 citations, indicating substantial uptake within the field. Notably, 100% of the classified citing papers originate from independent researchers, suggesting that the work has influenced scholars outside the researcher's immediate institutional circle and established a recognized baseline for future infrastructure studies.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

US electricity infrastructure of the future: Generation and transmission pathways through 2050

2020 · Applied energy 260, 114267, 2020 · 101 citations (GS)

Field-normalised: 62 Semantic Scholar citations place it in the top 5% of Engineering papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Temporal Evolution Pathway and Forecasting of Non-Fossil Energy Consumption and Carbon Emission Under China's Carbon Peak Target: A Markov Switching AR ...	City University of Hong Kong, Hohai University, Nanjing University of Posts and Telecommunications	China	—
2	A new methodology to estimate future water-energy nexus based on artificial neural networks	Federal University of Ceará, Federal University of Maranhão	Brazil	—
3	Wind-based microgrids: A business analysis and their role in mitigating grid congestion	Johns Hopkins University	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.

FOLLOW-UP WORK

A bilevel approach to multi-period natural gas pricing and investment in gas-consuming infrastructure

2024 · Energy 303, 131754, 2024 · 1 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
Federal University of Ceará	Brazil	SCImago #3819 · QS 1201-1400	1
Hohai University	China	SCImago #727 · QS 1001-1200	1
City University of Hong Kong	China	SCImago #342 · THE 73 · QS =63	1
Nanjing University of Posts and Telecommunications	China	SCImago #1044	1
Wuhan Institute of Technology	China	SCImago #2626	1
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	1
Federal University of Maranhão	Brazil	SCImago #6735 · THE 1501+	1

Geographic distribution of citing authors

Country	Citing papers
Brazil	1
China	1
United States	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	US electricity infrastructure of the future: Generation and transmission pathways through 2050	3	8 CFR 204.5(h)(3)(v) — Criterion 5