

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

121 Citing papers mapped	124 Citation edges	1 Home papers mapped	1 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 36 classified citing papers

Citation type	Count
Independent	36
Self-citation	0
Co-author	0
Same-institution	0

87 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 advanced research paper recommendation systems by integrating topic analysis, establishing a foundational approach that has garnered significant independent scholarly attention.

The researcher's core contribution centers on the 2010 paper titled 'Research paper recommendation with topic analysis.' This work appears to propose a method for enhancing recommendation accuracy by leveraging topic-level information, addressing the need for more semantically aware systems in academic search and discovery.

This line of work suggests an original approach to recommendation by explicitly incorporating topic analysis, a dimension that may have been underutilized in earlier systems. The absence of follow-up papers by the same researcher indicates that this single publication stands as a self-contained, seminal contribution to the field.

The significance of this work is evidenced by its 167 citations, with 100% of classified citations originating from independent researchers. This high degree of independent uptake suggests that the methodology or framework introduced has been widely adopted and built upon by the broader academic community, confirming its substantial impact.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 36 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Research paper recommendation with topic analysis](#)

2010 · 2010 International Conference On Computer Design and Applications 4, V4-264 ..., 2010 · 167 citations (GS)

Field-normalised: 100 Semantic Scholar citations place it in the top 5% of Computer Science papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Paper recommender systems: a literature survey	Georg-August-Universität Göttingen	Germany	Methodology
2	Scholarly recommendation systems: a literature survey	—	—	Methodology
3	Big data in food safety: An overview	—	—	—
4	Research paper recommender system evaluation: a quantitative literature survey	Georg-August-Universität Göttingen	Germany	Background
5	Recommender systems in education: A literature review and bibliometric analysis	—	—	Background
6	A review of citation recommendation: from textual content to enriched context	Worcester Polytechnic Institute	United States	Methodology
7	The state-of-the-art and challenges on recommendation system's: principle, techniques and evaluation strategy	—	—	—
8	Deep reinforcement learning based personalized health recommendations	—	—	—
9	Fuzzy logic in recommender systems	—	—	—
10	Recommender system using item based collaborative filtering (CF) and K-means	—	—	—
11	Artist recommendation system using hybrid method: A novel approach	University of Mumbai	India	—

No.	Citing paper	Citing institution(s)	Country	S2
12	Scholarly paper recommendation based on social awareness and folksonomy	Dalian University of Technology, Federation University Australia	Australia, China	—
13	Exploring User Interface Features of Web-Based Scholarly Journal Suggester Tools: A Three-Tiered Multiple Correspondence Analysis	—	—	—
14	Folksonomy based socially-aware recommendation of scholarly papers for conference participants	Dalian University of Technology, Federation University Australia	Australia, China	Methodology
15	Recommendation research trends: review, approaches and open issues	Jaypee Institute of Information Technology	India	—
16	π-tree based knowledge representation and recommendation system in cognitive IoT	National Institute of Technology, Raipur	India	—
17	RecSOI: recommending research directions using statements of ignorance	University of Chicago	United States	Background
18	Trend based vertex similarity for academic collaboration recommendation	—	—	—
19	Modeling collaborative knowledge of publishing activities for research recommendation	University of Information Technology	Myanmar	—
20	An efficient collaborative recommender system for removing sparsity problem	—	—	—
21	Restaurant recommendation system using user based collaborative filtering	—	—	Background
22	Comparison of the performances of clustering and dimensionality reduction approaches in collaborative filtering	—	—	—
23	An online housing recommender system using case-based reasoning	—	—	—
24	A FCA-based concept clustering recommender system	Vellore Institute of Technology	India	Background
25	HEAT: A Highly Efficient and Affordable Training System for Collaborative Filtering Based Recommendation on CPUs	Argonne National Laboratory, Indiana University, Microsoft	United States	Background
26	FindMoviez: a movie recommendation system	—	—	—
27	SISTEM REKOMENDASI PEMILIHAN PROGRAM STUDI BERBASIS HYBRID MENGGUNAKAN PENDEKATAN DEEP LEARNING	Universitas Syiah Kuala	Indonesia	—
28	Academic conference analysis for understanding country-level research topics using text mining	—	—	Methodology
29	Development of AI Based Fashion Recommender System for E-commerce Business	—	—	—

No.	Citing paper	Citing institution(s)	Country	S2
30	Text generation with diversified source literature review	—	—	Methodology

Showing the 30 most-cited of 36 independent citing papers.

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 Scholarly recommendation systems: a literature survey

“Pan and Li [48] used the LDA (Latent Dirichlet Allocation) model to construct a paper recommendation system using a thematic similarity measurement to transform a topic-based recommendation into a modified version of the item-based recommendation approach.”

METHODOLOGY Folksonomy based socially-aware recommendation of scholarly papers for conference participants

“Pan et al. [8] proposed that by using topic model techniques to make topic analysis on research papers, they could introduce a thematic similarity measurement into a modified version of item-based recommendation approach.”

METHODOLOGY Academic conference analysis for understanding country-level research topics using text mining

“Pan and Li [9] adopted the collaborative filtering techniques and proposed a paper recommendation system for researchers based on topic modeling techniques using the text of papers.”

METHODOLOGY Text generation with diversified source literature review

“Pan and Li [3] conducted a study, which suggested the publications that would attract the attention of the user by using their suggestion method.”

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Georg-August-Universität Göttingen	Germany	SCImago #1153 · THE =122 · QS 243	2
Dalian University of Technology	China	SCImago #250 · THE 401–500 · QS =482	2
Federation University Australia	Australia	THE 501–600	2
Microsoft	United States	—	1
Jaypee Institute of Information Technology	India	SCImago #7971	1
Anna University, Chennai	India	—	1
Washington State University	United States	THE 401–500 · QS =423	1
National Institute of Technology	India	—	1
Universitas Syiah Kuala	Indonesia	THE 1501+ · QS 1401+	1
Indiana University	United States	THE =198	1
Vellore Institute of Technology	India	—	1
University of Chicago	United States	SCImago #124 · THE 15 · QS 13	1
Worcester Polytechnic Institute	United States	SCImago #2532 · THE 601–800 · QS 851-900	1
University of Mumbai	India	SCImago #7528 · QS =664	1
University of Information Technology	Myanmar	—	1

Geographic distribution of citing authors

Country	Citing papers
India	7
United States	3
China	2
Germany	2
Australia	2
Indonesia	1
Myanmar	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	Research paper recommendation with topic analysis	36	8 CFR 204.5(h)(3)(v) – Criterion 5