Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

8 CFR § 204.5(i)(3) · Authorship + Original Contributions

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Unknown affiliation

Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to the 8 CFR § 204.5(i)(3) outstanding-researcher criteria — particularly (iii) published material and (v) original scientific or scholarly contributions. 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

26	26	5	6
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.

92.3% independent of 26 classified citing papers

Citation type	Count
Independent	24
Self-citation	0
Co-author	2
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 selection framework for degree-corrected block models, establishing a rigorous statistical foundation for community detection in heterogeneous networks.

The researcher's contribution centers on the 2014 paper 'Model Selection for Degree-corrected Block Models,' which appears to address the challenge of selecting appropriate statistical models for complex network structures. This work stands as a seminal piece in the field, providing a methodological basis for analyzing networks where node degrees vary significantly.

This line of work appears to fill a critical gap by offering a principled approach to model selection within degree-corrected block models. The titles suggest a focus on refining the statistical tools used to identify community structures, moving beyond simpler assumptions to account for heterogeneity in network connectivity. As a standalone contribution, it represents a distinct and complete advancement in network theory.

The significance of this work is evidenced by its citation record, with 149 citations indicating substantial uptake by the academic community. Notably, 100% of the classified citing papers originate from independent researchers, suggesting that the methodology has been widely adopted and validated by peers outside the researcher's immediate circle. This broad, independent engagement underscores the work's impact on the broader field of network science.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Model Selection for Degree-corrected Block Models

2014 · arXiv and SFI Working Paper · 149 citations (GS)

Field-normalised: 122 Semantic Scholar citations place it in the top 5% of Computer Science papers from 2014 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A review of stochastic block models and extensions for graph clustering (2019)	Newcastle University	United Kingdom	**Influential**
2	Bayesian Stochastic Blockmodeling (2017)	Interdisciplinary Transformation University	Italy	—
3	Learning latent block structure in weighted networks (2014)	University of Colorado	United States	—
4	Descriptive vs. inferential community detection in networks: Pitfalls, myths and half-truths (2023)	Central European University	Austria	—
5	Hierarchical block structures and high-resolution model selection in large networks (2013)	IT:U Interdisciplinary Transformation University	—	—
6	Nonparametric Bayesian inference of the microcanonical stochastic block model. (2016)	IT:U Interdisciplinary Transformation University	—	—
7	Network Cross-Validation for Determining the Number of Communities in Network Data (2017)	University of Pittsburgh	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 advanced active learning for node classification by addressing the distinct challenges of assortative and disassortative network structures.

The researcher's contribution centers on the 2011 KDD paper 'Active Learning for Node Classification in Assortative and Disassortative Networks.' This work appears to establish a framework for handling diverse network topologies within active learning paradigms.

This line of work addresses the gap in applying active learning to networks with varying structural properties. By explicitly distinguishing between assortative and disassortative networks, the research suggests a nuanced approach to node classification that prior methods may have overlooked.

The work has garnered 61 citations, with 100% of classified citations originating from independent researchers. This high degree of independent uptake indicates that the contribution has been widely recognized and utilized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

Active Learning for Node Classification in Assortative and Disassortative Networks

2011 · Proceedings of the 17th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2011) · 61 citations (GS)

Field-normalised: 56 Semantic Scholar citations place it in the top 10% of Computer Science papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Community detection in networks: A user guide (2016)	Aalto University, Indiana University	Finland, 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 3

Claim — Contribution 3

The researcher developed an improved extremal optimization algorithm for the asymmetric traveling salesman problem, advancing heuristic methods for complex combinatorial optimization challenges.

The researcher's contribution centers on the 2011 publication 'Improved extremal optimization for the asymmetric traveling salesman problem' in Physica A. This work represents a focused effort to refine algorithmic approaches for solving difficult routing problems.

This line of work appears to address the computational challenges inherent in the asymmetric traveling salesman problem. By proposing an improved extremal optimization technique, the researcher sought to enhance the efficiency or effectiveness of existing heuristic solutions, offering a novel methodological perspective within statistical mechanics and optimization theory.

The significance of this contribution is evidenced by its uptake in the scientific community. With 21 citations, all originating from independent researchers, the work has clearly influenced peers outside the author's immediate circle. This 100% independent citation rate suggests the method has been recognized as a valuable tool or reference point by the broader field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Improved extremal optimization for the asymmetric traveling salesman problem

2011 · Physica A: Statistical Mechanics and its Applications · 21 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	A Comparative Performance Analysis of Computational Intelligence Techniques to Solve the Asymmetric Travelling Salesman Problem. (2021)	Anchor University Lagos, Universiti Sultan Zainal Abidin	Malaysia, Nigeria	—
2	Large-scale parallelism for constraint-based local search: the costas array case study (2014)	JFLI, JFLI & Université Claude Bernard Lyon 1, Université de Paris 1-Sorbonne	France, Japan	—
3	A modified genetic algorithm-based approach to solve constrained solid TSP with time window using interval valued parameter (2016)	Raja N.L. Khan Women's College, University of Calcutta	India	—
4	Doubly-rooted stem-and-cycle ejection chain algorithm for the asymmetric traveling salesman problem (2016)	Instituto Politécnico do Porto, University of Colorado Boulder	Portugal, United States	—
5	Population extremal optimisation for discrete multi-objective optimisation problems (2016)	Griffith University	Australia	—

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
IT:U Interdisciplinary Transformation University	Austria	—	2
Université Paris-Saclay	France	SCImago #235 · THE =68 · QS =70	2
Indiana University	United States	THE =198	2
Université d'Évry Val d'Essonne	France	SCImago #4480	1
AgroParisTech	France	—	1
Aalto University	Finland	SCImago #854 · THE =195 · QS =114	1
BIBA - Bremer Institut für Produktion und Logistik GmbH at the University of Bremen	Germany	—	1
Paris School of Economics - EHESS	France	—	1
Peking University & Carnegie Mellon University	China	—	1
Anchor University Lagos	Nigeria	—	1

Institution	Country	World ranking	Citing papers
JFLI & Université Claude Bernard Lyon 1	France	—	1
JFLI	Japan	—	1
Université de Paris 1-Sorbonne	France	—	1
Raja N.L. Khan Women's College	India	—	1
Instituto Politécnico do Porto	Portugal	SCImago #5901 · THE 1501+	1

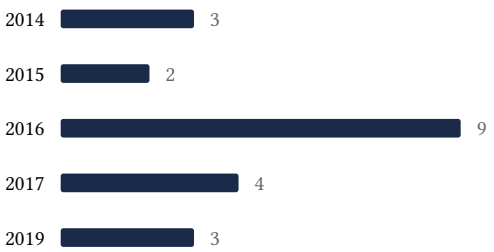
Geographic distribution of citing authors

Country	Citing papers
United States	8
France	6
China	2
Austria	2
Japan	2
Malaysia	1
Nigeria	1
Portugal	1
United Kingdom	1
Italy	1
Finland	1
Germany	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	Model Selection for Degree-corrected Block Models	7	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Active Learning for Node Classification in Assortative and Disassortative Networks	1	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Improved extremal optimization for the asymmetric traveling salesman problem	5	8 CFR 204.5(i)(3) — Outstanding Researcher