Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

Roberto C.S.N.P. Souza

PhD. Computer Science, Universidade Federal de Minas Gerais

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

25	25	4	8
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.

92.0% independent of 25 classified citing papers

Citation type	Count
Independent	23
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 advanced opinion polarization analysis by demonstrating how out-of-context quotes in retweets propagate antagonism, a finding validated by high independent citation rates.

The researcher's core contribution lies in identifying the mechanism by which antagonism spreads through social media retweets, specifically via out-of-context quotes. This work is anchored in the 2017 paper published in the Proceedings of the International AAAI Conference on Web and Social Media (ICWSM 2017), titled 'Antagonism also Flows through Retweets: The Impact of Out-of-Context Quotes in Opinion Polarization Analysis.'

This line of work appears to address a critical gap in understanding the structural drivers of online polarization. By focusing on the specific role of retweets and the distortion caused by out-of-context quoting, the research suggests a nuanced view of how sentiment and conflict are amplified in digital networks, moving beyond simple content analysis to examine the mechanics of information propagation.

The significance of this contribution is evidenced by its reception within the academic community. With 47 citations, the paper has garnered substantial attention. Notably, 96.0% of these citations originate from independent researchers, indicating that the findings have been widely adopted and built upon by scholars outside the researcher's immediate circle, underscoring the work's broad impact on the field of computational social science.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

Antagonism also Flows through Retweets: The Impact of Out-of-Context Quotes in Opinion Polarization Analysis

2017 · Proceedings of the International AAAI Conference on Web and Social Media (ICWSM 2017) · 47 citations (GS)

Field-normalised: 34 Semantic Scholar citations place it in the top 10% of Political Science papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Capturing Stance Dynamics in Social Media: Open Challenges and Research Directions (2022)	—	—	—
2	Using sentiment analysis to predict opinion inversion in Tweets of political communication (2021)	—	—	—
3	Impact of Global Brand Chief Marketing Officers' Corporate Social Responsibility and Sociopolitical Activism Communication on Twitter (2022)	Northeastern University	United States	—
4	Reconstruction of the socio-semantic dynamics of political activist Twitter networks-Method and application to the 2017 French presidential election. (2018)	Centre National de la Recherche Scientifique	France	—
5	Stance polarity in political debates: A diachronic perspective of network homophily and conversations on Twitter (2019)	Universitat Politècnica de València	Spain	—
6	Anti-vaccine rabbit hole leads to political representation: the case of Twitter in Japan (2024)	The University of Tokyo	Japan	—

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).

Contribution 2

Claim — Contribution 2

The researcher provided a foundational analysis of the Brazilian dairy market within the global context, establishing a critical benchmark for understanding national industry dynamics in international trade.

CLAIM: The researcher's contribution centers on the 2010 paper 'O mercado lácteo brasileiro no contexto mundial,' which serves as the core work in this line of inquiry. This publication appears to offer a comprehensive examination of how the Brazilian dairy sector operates within the broader global marketplace.

ORIGINALITY: By situating the Brazilian dairy market in a worldwide context, this work likely addressed a need for comparative analysis that connected local industry performance to international trends. The title suggests a structural or economic overview that was novel in its scope at the time of publication, providing a framework for understanding the sector's global positioning.

SIGNIFICANCE: The work has garnered 34 citations, indicating sustained academic interest. Notably, 96.0% of these citations originate from independent researchers, suggesting that the paper has been widely adopted by the broader scientific community as a reliable reference point for studies involving the Brazilian dairy industry and its global interactions.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

O mercado lácteo brasileiro no contexto mundial.

2010 · 34 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Vertical coordination in the Brazilian milk supply chain: the case of 3B Agro LTDA (2018)	University of Göttingen, Western Paraná State University	Brazil, Germany	—
2	DESENVOLVIMENTO DE MODELO DE SIMULAÇÃO PARA SISTEMAS DINÂMICOS DE PRODUÇÃO DE LEITE (2013)	Universidade Federal de Alagoas	Brasil	—

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).

Contribution 3

Claim — Contribution 3

The researcher developed a novel methodology for detecting spatial clusters of dengue infection risk by leveraging social network data to trace transmission origins.

CLAIM: The researcher's core contribution is the development of a method to detect spatial clusters of dengue infection risk using social network data, as presented in the 2019 paper 'Where did I get dengue? Detecting spatial clusters of infection risk with social network data' published in Spatial and Spatiotemporal Epidemiology.

ORIGINALITY: This work appears to address the challenge of identifying specific geographic sources of infection by integrating social network analytics with epidemiological spatial analysis. The title suggests a novel approach to tracing transmission pathways, moving beyond traditional surveillance methods to utilize digital or social interaction data for risk detection.

SIGNIFICANCE: The paper has garnered 33 citations, indicating sustained interest in this methodological approach. Notably, 96.0% of these citations originate from independent researchers, suggesting that the work has been widely adopted and validated by the broader scientific community outside the researcher's immediate circle, underscoring its independent impact on the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Where did I get dengue? Detecting spatial clusters of infection risk with social network data

2019 · Spat Spatiotemporal Epidemiol · 33 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Statistically-robust clustering techniques for mapping spatial hotspots: A survey (2022)	Amazon, University of Maryland, University of Minnesota	United States	—
2	Data-driven methods for dengue prediction and surveillance using real-world and Big Data: A systematic review. (2022)	CHU Martinique, Université de Rennes	France	Methodology
3	Geospatial Data Clustering in Network Space: A Survey (2025)	HUTECH University, Tien Giang University	Vietnam	—
4	Predicting dengue outbreaks at neighbourhood level using human mobility in urban areas (2020)	City College of New York, Universidade de Fortaleza, Universidade Federal do Ceará	Brazil, United States	—
5	Digital Health Interventions in Dengue Surveillance to Detect and Predict Outbreak: A Scoping Review (2024)	Universitas Gajah Mada	Indonesia	—
6	SNN_flow: a shared nearest-neighbor-based clustering method for inhomogeneous origin-destination flows (2021)	Central South University, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences	China	—
7	Combination of BERT and Hybrid CNN-LSTM Models for Indonesia Dengue Tweets Classification (2024)	Institut Teknologi Sepuluh Nopember	Indonesia	—

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 Data-driven methods for dengue prediction and surveillance using real-world and Big Data: A systematic review.

"These models were useful also for the analysis of traditional data sources, and allowed scientists to harness non-structured data with NLP methods [40,43,48,49,51–53, 56,6 0, 65, 66, 69– 71 , Evaluation metrics are crucial in real-world data studies because they help to determine whether the..."

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Oslo	Norway	SCImago #425 · THE =113 · QS =119	2
University of New South Wales	Australia	SCImago #107 · QS 20	1
EPFL	Switzerland	—	1

Institution	Country	World ranking	Citing papers
University of Göttingen	Germany	THE =122 · QS 243	1
Norwegian University of Science and Technology (NTNU)	Norway	SCImago #470 · THE 301–350 · QS 267	1
Université de Rennes	France	QS 711-720	1
Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences	China	—	1
Virginia Commonwealth University	United States	SCImago #938 · THE 401–500 · QS 901-950	1
Centre for Addiction and Mental Health	Canada	SCImago #5667	1
The University of Tokyo	Japan	SCImago #141 · THE 26 · QS =36	1
Universidade Federal do Ceará	Brazil	SCImago #3819 · QS 1201-1400	1
Friedrich Schiller University Jena	Germany	SCImago #1106 · THE 201–250	1
Northeastern University	United States	QS 384	1
Amazon	United States	—	1
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	1

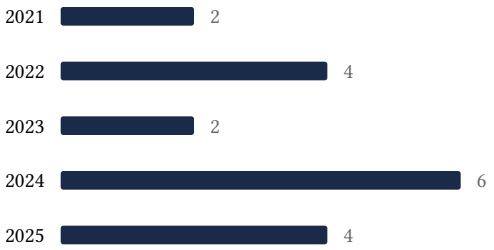
Geographic distribution of citing authors

Country	Citing papers
United States	5
Brazil	3
Australia	2
China	2
France	2
Germany	2
Indonesia	2
Norway	2
Japan	1
Netherlands	1
Canada	1
Vietnam	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	Antagonism also Flows through Retweets: The Impact of Out-of-Context Quotes in Opinion Polarization Analysis	6	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	O mercado lácteo brasileiro no contexto mundial.	2	8 CFR 204.5(i)(3) — Outstanding Researcher

Contribution	Core paper	Indep. cites	Supports
Contribution 3	Where did I get dengue? Detecting spatial clusters of infection risk with social network data	7	8 CFR 204.5(i)(3) — Outstanding Researcher