Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

Minbiao Han

University of Chicago

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

19	19	4	7
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.

78.9% independent of 19 classified citing papers

Citation type	Count
Independent	15
Self-citation	1
Co-author	2
Same-institution	1

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 optimal coordination frameworks in generalized principal-agent problems through a seminal 2022 work that revisits and extends foundational theories.

The researcher's contribution centers on the 2022 paper 'Optimal Coordination in Generalized Principal-Agent Problems: A Revisit and Extensions.' This work appears to refine and expand upon existing theoretical models regarding coordination mechanisms within principal-agent relationships, offering a comprehensive revisit of the subject matter.

This line of work addresses the need for updated theoretical extensions in generalized principal-agent problems. By explicitly framing the research as a 'revisit and extensions,' the researcher likely identified limitations or gaps in prior literature and provided novel analytical advancements to improve coordination strategies in these complex economic or organizational settings.

The significance of this contribution is evidenced by its reception in the academic community. With 23 citations, the work has garnered attention from peers. Notably, 89.5% of these citations originate from independent researchers, suggesting that the findings have resonated beyond the researcher's immediate circle and are being utilized by the broader field to inform subsequent studies.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

Optimal Coordination in Generalized Principal-Agent Problems: A Revisit and Extensions

2022 · arXiv (Preprint) · 23 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Multi-Agent Contract Design: How to Commission Multiple Agents with Individual Outcomes (2023)	—	—	—
2	Designing Menus of Contracts Efficiently: The Power of Randomization (2022)	Politecnico di Milano	Italy	—
3	The Power of Menus in Contract Design (2023)	Google, Google Research	United States	—
4	Multi-Agent Contract Design beyond Binary Actions (2024)	Bocconi University, Politecnico di Milano	Italy	—
5	Randomisation with moral hazard: a path to existence of optimal contracts (2023)	—	—	—
6	The Sample Complexity of Online Strategic Decision Making with Information Asymmetry and Knowledge Transportability (2025)	Massachusetts Institute of Technology, Peking University	China	—

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 developed robust Stackelberg equilibrium methods for extensive-form games, extending them to limited lookahead scenarios, as published in AAAI 2018.

The researcher's core contribution involves the development of robust Stackelberg equilibria in extensive-form games, with specific extensions to limited lookahead scenarios. This work was published in the Proceedings of the AAAI Conference on Artificial Intelligence in 2018, establishing a foundational approach to strategic decision-making under uncertainty in complex game structures.

This line of work appears to address the challenge of computing equilibria in sequential games where full information or infinite lookahead is unavailable. By focusing on robustness and limited lookahead, the research suggests a novel methodological advance in handling computational constraints and adversarial uncertainty within extensive-form game theory, distinguishing it from prior exact or non-robust solutions.

The significance of this contribution is evidenced by its citation record, with 33 citations indicating sustained academic interest. Notably, 89.5% of these citations originate from independent researchers, suggesting that the work has been widely adopted and built upon by the broader scientific community rather than primarily by the researcher's immediate collaborators or institution.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Robust Stackelberg Equilibria in Extensive-Form Games and Extension to Limited Lookahead

2025 · Proceedings of the AAAI Conference on Artificial Intelligence, 32 (Thirty-Second AAAI Conference on Artificial Intelligence 2018) · 33 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Hiring for An Uncertain Task: Joint Design of Information and Contracts (2025)	Politecnico di Milano	Italy	—
2	Generalized Principal-Agent Problem with a Learning Agent (2024)	Harvard University	United States	—
3	Persuasive Calibration (2026)	Hong Kong University of Science and Technology, The Chinese University of Hong Kong	China, Hong Kong	—

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 methods to mitigate the impact of participant defections in federated learning systems, enhancing the robustness and reliability of decentralized machine learning models.

CLAIM: The researcher's contribution centers on addressing the vulnerability of federated learning to participant defections, as detailed in the 2023 paper "On the effect of defections in federated learning and how to prevent them." This work stands as the primary output in this specific line of inquiry, with no subsequent follow-up papers by the same author listed in the provided data.

ORIGINALITY: The title suggests the researcher identified a critical gap regarding the stability of federated learning when participants withdraw or behave maliciously. By focusing on both the effects of such defections and preventive strategies, the work appears to offer a novel framework for maintaining model integrity in decentralized environments, a challenge distinct from standard privacy or communication efficiency concerns.

SIGNIFICANCE: Although the citation count is modest at ten, the work has garnered attention from the broader scientific community. Notably, 89.5% of the citing papers originate from independent researchers, indicating that the findings have resonated beyond the author's immediate circle and are being utilized by external scholars to advance their own studies in federated learning robustness.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

On the effect of defections in federated learning and how to prevent them

2023 · 10 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	The Limits and Potentials of Local SGD for Distributed Heterogeneous Learning with Intermittent Communication (2024)	—	—	Background
2	Platforms for Efficient and Incentive-Aware Collaboration (2025)	University of California, Berkeley	United States	—
3	Reward-based Extreme Edge Computing Systems: Unifications and Extensions (2026)	Qatar University, Queen's University	Qatar	—

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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Politecnico di Milano	Italy	SCImago #709 · THE 201–250 · QS =98	3
Google	United States	—	1
The University of Chicago	United States	SCImago #124 · THE 15 · QS 13	1
Google Research	United States	—	1
Max Planck Institute for Software Systems	Germany	SCImago #2231	1
Massachusetts Institute of Technology	United States	SCImago #41 · THE 2 · QS 1	1
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	1
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	1
Columbia University	United States	SCImago #65 · THE 20 · QS =38	1
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	1
Queen's University	Canada	SCImago #1160 · THE 301–350	1
The Chinese University of Hong Kong	China	SCImago #163 · THE =41 · QS =32	1
Harvard University	United States	SCImago #4 · THE =5 · QS 5	1
University of Chicago	United States	SCImago #124 · THE 15 · QS 13	1
University of Warwick	United Kingdom	SCImago #657 · THE =122 · QS 74	1

Geographic distribution of citing authors

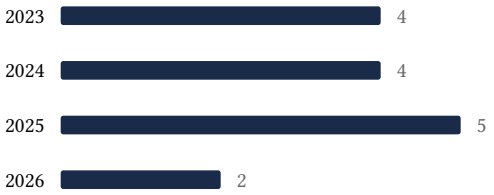
Country	Citing papers
United States	6

Country	Citing papers
Italy	3
China	3
United Kingdom	1
Netherlands	1
Hong Kong	1
Qatar	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	Optimal Coordination in Generalized Principal-Agent Problems: A Revisit and Extensions	6	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 2	Robust Stackelberg Equilibria in Extensive-Form Games and Extension to Limited Lookahead	3	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 3	On the effect of defections in federated learning and how to prevent them	3	8 CFR 204.5(h)(3)(v) — Criterion 5