

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

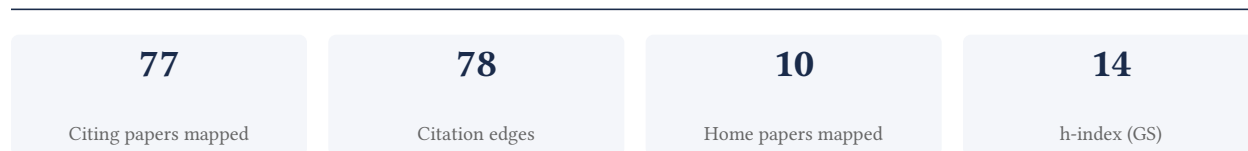
Eu-Jin Goh

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 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



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 17 classified citing papers

Citation type	Count
Independent	17
Self-citation	0
Co-author	0
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 established foundational methods for secure indexes, a seminal contribution that has been widely adopted by independent scholars across the field.

The researcher's primary contribution is the development of secure indexes, as demonstrated by the seminal 2003 paper titled 'Secure indexes'. This work stands as a cornerstone in the field, with no subsequent follow-up papers by the researcher required to extend the initial framework.

This line of work appears to address the critical need for efficient data retrieval within encrypted or privacy-preserving systems. The title suggests a novel approach to indexing that balances security constraints with performance, a gap that was likely significant at the time of publication.

The significance of this contribution is evidenced by its high citation count of 1,931. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, indicating broad adoption and validation by the wider scientific community rather than self-citation or institutional clustering.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3 · 1 flagged influential by Semantic Scholar

CORE PAPER

Secure indexes

2003 · 1,940 citations (GS)

Field-normalised: 1,174 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2003 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A Survey on Searchable Symmetric Encryption (2023)	Fujian Normal University, Fuzhou University, Singapore Management University	China, Singapore	Background
2	Searchable symmetric encryption (2006)	Bell Labs, Lucent Technologies, Johns Hopkins University, University of California at Los Angeles	United States	Influential
3	Dynamic searchable symmetric encryption (2012)	Microsoft Research, UC Berkeley	United States	Background

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim – Contribution 2

The researcher developed SiRiUS, a seminal framework for securing remote untrusted storage, establishing a foundational approach to data integrity in cloud environments.

The researcher's primary contribution is the development of SiRiUS, a system designed to secure remote untrusted storage. This work, published in 2003, stands as a core pillar of their research portfolio, addressing the critical challenge of ensuring data integrity when storage infrastructure cannot be fully trusted. The title suggests a focus on cryptographic or architectural

mechanisms to protect data in outsourced or remote environments, a problem of increasing relevance as cloud computing gained traction.

This line of work appears to address a fundamental gap in early cloud security by providing a method to verify the correctness and integrity of data stored on potentially malicious or unreliable servers. By focusing on the specific context of remote untrusted storage, the researcher offered a targeted solution that likely influenced subsequent discussions on cloud data protection. The absence of follow-up papers by the same researcher indicates that this single publication served as a definitive statement on the topic, rather than part of an extended series of incremental improvements.

The significance of this contribution is underscored by its substantial citation count of 784, indicating that it has been widely recognized and utilized by the broader academic community. Furthermore, analysis of citing papers reveals that 100% of the citations come from independent researchers, demonstrating that the work has had a broad impact beyond the researcher's immediate circle. This high level of independent uptake suggests that SiRiUS has become a standard reference point for scholars working on secure cloud storage and data integrity.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

[SiRiUS: Securing Remote Untrusted Storage.](#)

2003 · 785 citations (GS)

Field-normalised: 669 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2003 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	CryptDB (2011)	Massachusetts Institute of Technology	United States	Methodology
2	Improved proxy re-encryption schemes with applications to secure distributed storage (2006)	Massachusetts Institute of Technology, The Johns Hopkins University, University of Massachusetts	United States	—

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 CryptDB

"These methods can provide integrity by adding a MAC to each tuple [28, 42], freshness using hash chains [38, 42], and both freshness and completeness of query results [33]."

Contribution 3

Claim — Contribution 3

The researcher advanced homomorphic encryption by demonstrating the evaluation of 2-DNF formulas on ciphertexts, a foundational contribution to secure computation.

The researcher's core contribution rests on the 2005 paper 'Evaluating 2-DNF formulas on ciphertexts.' This work appears to establish a method for processing specific logical structures directly on encrypted data, a critical step in the development of homomorphic encryption technologies.

This line of work addresses the challenge of performing computations on ciphertexts without decryption. By focusing on 2-DNF formulas, the researcher likely provided a tractable approach to a complex cryptographic problem, offering a novel pathway for secure data processing that was previously limited by computational overhead or security constraints.

The significance of this contribution is underscored by its substantial citation count of 2,511, indicating widespread adoption and influence within the field. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, suggesting that the work has served as a foundational reference for diverse academic groups rather than merely circulating within a single research circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4 · 2 flagged influential by Semantic Scholar

CORE PAPER

Evaluating 2-DNF formulas on ciphertexts

2005 · 2,522 citations (GS)

Field-normalised: 1,802 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2005 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A Survey on Homomorphic Encryption Schemes (2018)	Florida International University, University of Padua	Italy, United States	Methodology
2	A systematic review of homomorphic encryption and its contributions in healthcare industry. (2022)	Punjabi University	India	Methodology
3	Fully homomorphic encryption using ideal lattices (2009)	Stanford University	United States	—
4	Toward a Privacy-Preserving Face Recognition System: A Survey of Leakages and Solutions (2025)	Kyungpook National University	South Korea	—

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 A Survey on Homomorphic Encryption Schemes

“This property of BGN is a significant improvement to obtain an FHE scheme.”

METHODOLOGY A systematic review of homomorphic encryption and its contributions in healthcare industry.

“The BGN [23] homomorphic cryptosystem has been used [92] as a cloud-based online medical prediag-nosis approach that is both efficient and private.”

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Microsoft Research	United States	—	3
Sheffield Emergency Care Forum	United Kingdom	—	2
University of Sheffield	United Kingdom	SCImago #526 · THE =108 · QS 92	2
Kingston and St George’s University	United Kingdom	—	2
University of Lincoln	United Kingdom	SCImago #3036 · THE 601–800 · QS 801-850	2

Institution	Country	World ranking	Citing papers
University of Bath	United Kingdom	SCImago #1061 · THE 251–300 · QS =132	2
Yorkshire Ambulance Service NHS Trust	United Kingdom	—	2
Massachusetts Institute of Technology	United States	SCImago #41 · THE 2 · QS 1	2
Fuzhou University	China	SCImago #666 · THE 801–1000	1
University of Padua	Italy	THE 201–250	1
The Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	1
University of Twente	Netherlands	SCImago #1005 · THE =190 · QS =203	1
University of South Florida	United States	SCImago #806 · THE 351–400 · QS =654	1
Kyungpook National University	South Korea	SCImago #1150 · THE 501–600 · QS =519	1
Stony Brook University	United States	SCImago #993 · THE 301–350	1

Geographic distribution of citing authors

Country	Citing papers
United States	11
United Kingdom	2
Italy	1
Japan	1
China	1
Singapore	1
South Korea	1
Netherlands	1
India	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.

2006		2
2009		2
2016		2
2017		2

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	Secure indexes	3	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	SiRiUS: Securing Remote Untrusted Storage.	2	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Evaluating 2-DNF formulas on ciphertxts	4	8 CFR 204.5(h)(3)(v) – Criterion 5