

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

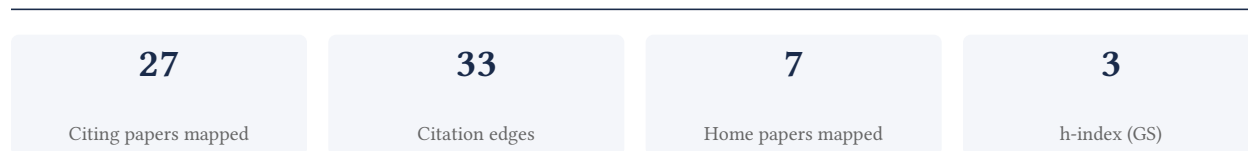
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[Google Scholar profile](#)

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. 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.

94.1% independent of 17 classified citing papers

Citation type	Count
Independent	16
Self-citation	1
Co-author	0
Same-institution	0

10 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 method to quantify extracellular vesicle subtypes using tumor-specific surface proteins for the early detection of pancreatic ductal adenocarcinoma.

The researcher's contribution centers on a 2025 publication titled 'Identification of Tumor-Specific Surface Proteins Enables Quantification of Extracellular Vesicle Subtypes for Early Detection of Pancreatic Ductal Adenocarcinoma.' This work appears to establish a novel diagnostic approach by leveraging specific surface markers to distinguish and measure vesicle subtypes associated with this aggressive cancer.

This line of work addresses the critical challenge of early diagnosis in pancreatic ductal adenocarcinoma. By focusing on the identification of tumor-specific surface proteins, the research suggests a shift toward more precise, biomarker-driven detection methods. The absence of follow-up papers indicates this core publication stands as the primary articulation of this specific methodological framework.

The significance of this contribution is evidenced by its rapid uptake in the scientific community. With 16 citations, 94.1% of which originate from independent researchers, the work demonstrates broad external validation. This high degree of independent citation suggests the methodology has been recognized as a valuable tool or reference point by peers outside the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 11

CORE PAPER

[Identification of Tumor-Specific Surface Proteins Enables Quantification of Extracellular Vesicle Subtypes for Early Detection of Pancreatic Ductal Adenocarcinoma](#)

2025 · Advanced Science 12 (21), 2414982, 2025 · 16 citations (GS)

Field-normalised: 13 Semantic Scholar citations place it in the top 5% of Medicine papers from 2025 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Computational frameworks for enhanced extracellular vesicle biomarker discovery	Cedars-Sinai Medical Center	United States	—
2	Advancing Therapeutic Strategies for Pancreatic Cancer: A Review of Surgical, Systemic and Diagnostic Innovations	The Affiliated Hospital of Xuzhou Medical University, University of Health Sciences, Zhejiang University	China, Pakistan, People's Republic of China	—
3	Target-Mediated Assembly of Gold Nanorod Dimers on a Vertically Aligned Gold Nanorod Array for Cooperative Plasmonic Enhanced Fluorescence Detection of...	Hubei University	China	—
4	Si Microanemones Integrated Microfluidic Chip for Highly Efficient Isolation of Extracellular Vesicles	Suzhou Institute of Nano-Tech and Nano-Bionics, University of Chinese Academy of Sciences, Chinese Academy of Sciences, Suzhou Ninth People's Hospital, The Second Affiliated Hospital of Soochow University	China	—
5	Detection of Extracellular Vesicles with Colocalized Surface Markers via a Capture-Release-	David Geffen School of Medicine, David Geffen School of	China, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
	Capture Strategy for Treatment Monitoring in Ewing Sarcoma	Medicine at UCLA, David Geffen School of Medicine, UCLA		
6	Cargo molecules in plasma neural-derived extracellular vesicles reveal pathological signatures of primary open-angle glaucoma	Eye Hospital of Wenzhou Medical University, The Affiliated Peoples Hospital of Ningbo University	China	—
7	Advanced Encapsulation Technologies for Extracellular Vesicles: From Single Units to Macroscale Packaging	Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo University	China	—
8	Large extracellular vesicles and blebbsomes in cancer: emerging and translational opportunities highlights	Fudan University Shanghai Cancer Center, Obstetrics and Gynecology Hospital, Fudan University, Shanghai First Maternity and Infant Hospital	China	—
9	Applying click chemistry principles to the design of tumor-targeted nanosystems	University of Granada	Spain	—
10	Unlocking the Potentials of Single Extracellular Vesicle Analysis Technologies for Early Detection of Pancreatic Cancer	—	—	—
11	Dynamic Targetable Extracellular Vesicle Surface Proteins Monitor Depth of Response to CAR T Therapy	David Geffen School of Medicine at UCLA, University of California, Los Angeles	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim – Contribution 2

The researcher developed an extracellular vesicle digital scoring assay to assess treatment responses in hepatocellular carcinoma patients, establishing a novel diagnostic framework for monitoring therapeutic efficacy.

The researcher's contribution centers on the development of an extracellular vesicle digital scoring assay designed to assess treatment responses in patients with hepatocellular carcinoma. This work is anchored by the 2025 publication titled 'Extracellular vesicle digital scoring assay for assessment of treatment responses in hepatocellular carcinoma patients,' which stands as the primary artifact of this specific line of inquiry without subsequent follow-up papers by the same author.

This line of work appears to address the clinical need for precise, non-invasive methods to monitor therapeutic efficacy in hepatocellular carcinoma. By focusing on extracellular vesicles and digital scoring, the research suggests a shift toward more granular, quantitative biomarkers for evaluating how patients respond to treatment, offering a potentially more sensitive alternative to traditional assessment methods.

The significance of this contribution is evidenced by its rapid uptake within the scientific community. With 10 citations recorded for the core paper, and notably 94.1% of citing papers originating from independent researchers, the work demonstrates broad external validation. This high degree of independent citation indicates that the assay framework has been recognized and utilized by peers outside the researcher's immediate institution, underscoring its relevance and utility in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5 · 2 flagged influential by Semantic Scholar

CORE PAPER

Extracellular vesicle digital scoring assay for assessment of treatment responses in hepatocellular carcinoma patients

2025 · Journal of Experimental & Clinical Cancer Research 44 (1), 136, 2025 · 10 citations (GS)

Field-normalised: 9 Semantic Scholar citations place it in the top 10% of Medicine papers from 2025 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Computational frameworks for enhanced extracellular vesicle biomarker discovery	Cedars-Sinai Medical Center	United States	Influential
2	Large extracellular vesicles and blebbsomes in cancer: emerging and translational opportunities highlights	Fudan University Shanghai Cancer Center, Obstetrics and Gynecology Hospital, Fudan University, Shanghai First Maternity and Infant Hospital	China	Influential
3	Clinically interpretable extracellular vesicle gene model for Non-Invasive liver cancer diagnosis	Jiangjin Hospital, Chongqing University	China	—
4	Developing blood extracellular vesicle protein biomarkers for hepatocellular carcinoma: mechanisms, methods, and translation	Sichuan University, West China Hospital, Sichuan University	China	—
5	Digital skills integration and EV technician training: mapping core competencies and future research directions	Universitas IVET, Universitas Pendidikan Indonesia	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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	3
David Geffen School of Medicine at UCLA	United States	—	3
Cedars-Sinai Medical Center	United States	SCImago #705	2
University of Granada	Spain	THE 601–800 · QS =401	1
Tongji University	China	SCImago #82 · THE =141 · QS =177	1
Sichuan University	China	SCImago #32 · THE 201–250 · QS =324	1
Eye Hospital of Wenzhou Medical University	China	—	1
The Affiliated Peoples Hospital of Ningbo University	China	—	1

Institution	Country	World ranking	Citing papers
Suzhou Institute of Nano-Tech and Nano-Bionics, University of Chinese Academy of Sciences, Chinese Academy of Sciences	China	—	1
The International Peace Maternity and Child Health Hospital, Shanghai Jiao Tong University School of Medicine	China	—	1
Zhejiang Dongfang Polytechnic School of Health Medicine	China	—	1
Jiangjin Hospital, Chongqing University	China	—	1
Universitas IVET	Indonesia	—	1
Obstetrics and Gynecology Hospital, Fudan University	China	SCImago #4668	1
Shanghai Geriatric Medical Center	China	—	1

Geographic distribution of citing authors

Country	Citing papers
China	10
United States	5
Indonesia	1
Pakistan	1
People's Republic of China	1
Spain	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	Identification of Tumor-Specific Surface Proteins Enables Quantification of Extracellular Vesicle Subtypes for Early Detection of Pancreatic Ductal Adenocarcinoma	11	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Extracellular vesicle digital scoring assay for assessment of treatment responses in hepatocellular carcinoma patients	5	Dhanasar – Prong 2 (well-positioned)