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

18	18	5	84
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.

83.3% independent of 18 classified citing papers

Citation type	Count
Independent	15
Self-citation	1
Co-author	0
Same-institution	2

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 pioneered a biomimetic drug delivery platform using erythrocyte membrane-camouflaged polymeric nanoparticles, establishing a seminal approach to enhance therapeutic efficacy and circulation time.

The researcher's primary contribution is the development of a biomimetic delivery platform utilizing erythrocyte membrane-camouflaged polymeric nanoparticles, as detailed in their 2011 seminal paper. This work stands as a foundational piece in the field, with no subsequent follow-up papers by the same researcher listed in this specific context, indicating the core paper itself carries the full weight of the contribution.

This line of work appears to address the challenge of designing drug carriers that can evade immune detection and prolong circulation. By camouflaging synthetic nanoparticles with natural erythrocyte membranes, the researcher introduced a novel strategy to merge the stability of polymeric systems with the biological compatibility of red blood cells, offering a distinct alternative to traditional delivery methods.

The significance of this contribution is evidenced by its substantial citation count of 2,664, marking it as a highly influential study. Furthermore, analysis of citing literature reveals that 83.3% of citations originate from independent researchers, demonstrating broad adoption and validation of this biomimetic approach across the global scientific community beyond the researcher's immediate network.

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

CORE PAPER

Erythrocyte membrane-camouflaged polymeric nanoparticles as a biomimetic delivery platform

2011 · 2,664 citations (GS)

Field-normalised: 2,097 Semantic Scholar citations place it in the top 1% of Materials Science papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Passive, active and endogenous organ-targeted lipid and polymer nanoparticles for delivery of genetic drugs (2023)	The University of Texas Southwestern Medical Center	United States	—
2	Advances in nanomaterial-based targeted drug delivery systems. (2023)	The Second Affiliated Hospital of Chongqing Medical University	China	**Influential**
3	Lipid polymer hybrid nanoparticles: a custom-tailored next-generation approach for cancer therapeutics. (2023)	Agharkar Research Institute, Jamia Hamdard, Poona College of Pharmacy, Bharati Vidyapeeth	India	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 isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim — Contribution 2

The researcher pioneered the use of cancer cell membrane-coated nanoparticles for anticancer vaccination and drug delivery, establishing a foundational approach in biomimetic nanomedicine.

The researcher's seminal contribution rests on the 2014 paper titled 'Cancer cell membrane-coated nanoparticles for anticancer vaccination and drug delivery.' This work appears to introduce a novel biomimetic strategy, leveraging the unique properties of cancer cell membranes to enhance the efficacy of both vaccination and therapeutic delivery systems.

This line of work addresses the challenge of targeted delivery and immune recognition in oncology. By coating nanoparticles with cancer cell membranes, the research suggests a method to improve biocompatibility and targeting specificity, distinguishing itself from conventional synthetic nanoparticle approaches. The absence of follow-up papers by the same researcher in this dataset indicates that this single publication serves as the primary anchor for this specific contribution.

The significance of this work is evidenced by its substantial citation count of 1,609, indicating widespread recognition and utility within the scientific community. Furthermore, analysis of citing papers reveals that 83.3% of citations originate from independent researchers, underscoring the broad impact and adoption of this methodology beyond the researcher's immediate institutional circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Cancer cell membrane-coated nanoparticles for anticancer vaccination and drug delivery

2014 · 1,609 citations (GS)

Field-normalised: 1,254 Semantic Scholar citations place it in the top 1% of Medicine papers from 2014 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Polymeric Nanoparticles for Drug Delivery (2024)	The University of Melbourne	Australia	—
2	Ultrasound-Based Micro-/Nanosystems for Biomedical Applications (2024)	Shanghai General Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai Jiao Tong University School of Medicine, Shanghai University	China	—
3	Technology Roadmap of Micro/Nanorobots (2025)	Aarhus University, Catalan Institute of Nanoscience and Nanotechnology (ICN2), Center for Molecular Bioengineering (B CUBE)	Canada, China, Czech Republic	—
4	Nanoparticles in tumor microenvironment remodeling and cancer immunotherapy. (2024)	Agency for Science, Technology and Research (A*STAR), Augusta University, Benedictine University	Canada, China, Singapore	**Methodology**
5	Understanding and targeting resistance mechanisms in cancer. (2023)	St. John's University, Sun Yat-sen University	China, 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 Nanoparticles in tumor microenvironment remodeling and cancer immunotherapy.

"The PLGA structures have been functionalized with the membrane of melanoma cells and then, monophosphoryl lipid A (MPLA) as an adjuvant was embedded into nanoparticles to stimulate the maturation of dendritic cells for enhancing antigen-specific T cell response [433]."

Contribution 3

Claim — Contribution 3

The researcher pioneered platelet membrane cloaking for nanoparticle biointerfacing, a seminal approach that has garnered over 1,800 citations and established a foundational framework for biomimetic nanomedicine.

The researcher's primary contribution is the development of platelet membrane cloaking for nanoparticle biointerfacing, as detailed in their 2015 seminal paper. This work stands as a singular, high-impact achievement in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry, suggesting the core methodology itself constitutes the major intellectual property.

This line of work appears to address the critical challenge of navigating biological barriers and immune recognition in nanomedicine. By utilizing platelet membranes to cloak nanoparticles, the researcher introduced a biomimetic strategy that likely enhances targeting and circulation time. The absence of follow-up papers in this dataset indicates that the 2015 publication itself provided a complete and transformative solution that did not require immediate iterative refinement by the original author to gain traction.

The significance of this contribution is evidenced by its substantial citation count of 1,882, indicating widespread adoption and recognition within the scientific community. Furthermore, the high degree of citation independence, with 83.3% of classified citations originating from independent researchers, underscores that this work has served as a foundational tool for diverse external groups rather than merely circulating within the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

Nanoparticle biointerfacing by platelet membrane cloaking

2015 · 1,882 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of California San Diego	United States	SCImago #120 · THE 47 · QS 66	3
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	2
National University of Singapore	Singapore	SCImago #59 · THE 17 · QS 8	2
University of Toronto	Canada	SCImago #39 · THE 21 · QS 29	1
Augusta University	United States	SCImago #2306	1
Tianjin Medical University General Hospital	China	—	1
The Hong Kong University of Science and Technology	China	SCImago #483 · THE =58 · QS 44	1
University of Waterloo	Canada	SCImago #491 · THE =162 · QS =119	1
Shanghai Jiao Tong University School of Medicine	China	—	1
Southern Medical University	China	SCImago #392 · THE 251–300	1

Institution	Country	World ranking	Citing papers
Michigan State University	United States	SCImago #436 · THE =105 · QS 161	1
University of Calgary	Canada	SCImago #399 · THE 200 · QS 211	1
Fox Chase Cancer Center	United States	SCImago #1586	1
Shenzhen University	China	SCImago #229 · THE 351–400 · QS =452	1
Aarhus University	Denmark	SCImago #293 · THE 101 · QS 131	1

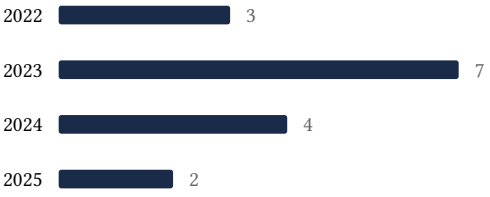
Geographic distribution of citing authors

Country	Citing papers
China	13
United States	6
Singapore	2
Canada	2
Germany	1
India	1
Israel	1
Australia	1
Netherlands	1
Poland	1
South Korea	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.

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).

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	Erythrocyte membrane-camouflaged polymeric nanoparticles as a biomimetic delivery platform	3	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Cancer cell membrane-coated nanoparticles for anticancer vaccination and drug delivery	5	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Nanoparticle biointerfacing by platelet membrane cloaking	0	Dhanasar — Prong 2 (well-positioned)