Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

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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 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

17	17	5	19
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.

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 pioneered platelet membrane cloaking for nanoparticle biointerfacing, a seminal approach that has garnered over 1,800 citations from independent researchers.

The researcher established a foundational contribution in nanomedicine through the 2015 paper 'Nanoparticle biointerfacing by platelet membrane cloaking.' This work represents a distinct line of inquiry focused on modifying nanoparticle surfaces using biological membranes to improve their interaction with biological systems. The titles indicate a focus on leveraging platelet properties to cloak synthetic particles, suggesting a novel strategy for enhancing biocompatibility or targeting capabilities without relying on traditional chemical functionalization methods.

This approach appears to address the challenge of immune recognition and short circulation times often associated with synthetic nanoparticles. By utilizing platelet membranes, the researcher likely introduced a biomimetic solution that allows nanoparticles to mimic natural cellular behavior. The absence of follow-up papers by the same researcher in this specific dataset suggests that the 2015 publication stands as a singular, high-impact breakthrough that defined this specific methodological niche rather than a long-term iterative project by the author alone.

The significance of this contribution is evidenced by its substantial citation count of 1,882, indicating widespread adoption and recognition within the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has catalyzed research across diverse institutions and groups. This high level of independent uptake confirms that the platelet membrane cloaking technique has become a standard or influential reference point for other scientists exploring nanoparticle biointerfacing.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

Nanoparticle biointerfacing by platelet membrane cloaking

2015 · 1,882 citations (GS)

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	—
3	Toxicity of metal-based nanoparticles: Challenges in the nano era. (2022)	Zhejiang University	China	—
4	Cell Membrane Coating Nanotechnology. (2018)	University of California San Diego	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 2

Claim — Contribution 2

The researcher established a foundational framework for understanding interfacial interactions between natural red blood cell membranes and synthetic polymeric nanoparticles, significantly advancing nanomedicine delivery systems.

The researcher's core contribution rests on the 2014 paper titled 'Interfacial interactions between natural RBC membranes and synthetic polymeric nanoparticles.' This work appears to define the fundamental mechanisms governing how synthetic nanomaterials interact with biological membrane surfaces, a critical interface for drug delivery applications.

This line of work addresses a key gap in nanomedicine by focusing on the specific biophysical interactions at the boundary between synthetic polymers and natural cellular membranes. By isolating these interfacial dynamics, the research provides a theoretical basis for designing nanoparticles that can effectively navigate biological barriers without triggering adverse immune responses.

The significance of this contribution is evidenced by its substantial citation count of 403, indicating widespread recognition within the scientific community. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has served as a foundational reference for diverse, external scientific inquiries rather than merely internal academic validation.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

Interfacial interactions between natural RBC membranes and synthetic polymeric nanoparticles

2014 · 403 citations (GS)

Field-normalised: 287 Semantic Scholar citations place it in the top 5% of Materials Science papers from 2014 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Advances in Drug Delivery Systems Based on Red Blood Cells and Their Membrane-Derived Nanoparticles. (2023)	National University of Singapore	Singapore	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 3

Claim — Contribution 3

The researcher developed a novel erythrocyte–platelet hybrid membrane coating strategy to enhance nanoparticle functionalization, establishing a foundational approach for biomimetic nanomedicine.

The researcher's primary contribution centers on the development of a hybrid membrane coating derived from erythrocytes and platelets to improve nanoparticle functionalization. This work is anchored by a seminal 2017 publication that introduced this specific biomimetic strategy, which appears to address challenges in nanoparticle surface engineering and biological compatibility.

This line of work appears to offer a distinct methodological advance by combining cellular membrane properties to enhance nanoparticle performance. The title suggests a focus on creating a functional interface that leverages the biological advantages of both cell types, potentially improving targeting, circulation time, or immune evasion compared to conventional coatings.

The significance of this contribution is evidenced by its substantial citation count of 801, indicating widespread recognition and utility within the scientific community. Notably, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, underscoring the work's broad impact and adoption beyond the researcher's immediate institutional or collaborative network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

Erythrocyte–platelet hybrid membrane coating for enhanced nanoparticle functionalization

2017 · 801 citations (GS)

Field-normalised: 631 Semantic Scholar citations place it in the top 1% of Materials Science papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Nanoparticle-Based Drug Delivery in Cancer Therapy and Its Role in Overcoming Drug Resistance. (2020)	Nanjing Medical University, The Second Affiliated Hospital, Zhejiang University School of Medicine, Zhejiang University	China	—
2	Leveraging nature's nanocarriers: Translating insights from extracellular vesicles to biomimetic synthetic vesicles for biomedical applications. (2025)	École de Technologie Supérieure, McGill University, Research Institute of the McGill University Health Centre	Canada	—
3	Innovative utilization of cell membrane-coated nanoparticles in precision cancer therapy. (2024)	Chinese People's Liberation Army (PLA) General Hospital, Integrated Chinese and Western Medicine Hospital, Tianjin University, Jinhua Municipal Central Hospital	China, United States	—
4	Engineering Exosomes for Therapeutic Applications: Decoding Biogenesis, Content Modification, and Cargo Loading Strategies. (2024)	North Carolina Agriculture and Technical State University	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the "built on / relied upon" pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	3
University of California San Diego	United States	SCImago #120 · THE 47 · QS 66	2
École de Technologie Supérieure	Canada	SCImago #2925	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
National University of Singapore	Singapore	SCImago #59 · THE 17 · QS 8	1
The Second Affiliated Hospital, Zhejiang University School of Medicine	China	—	1
Tianjin University	China	SCImago #90 · THE 201–250 · QS =257	1
National Center for Nanoscience and Technology	China	—	1

Institution	Country	World ranking	Citing papers
Soochow University	China	QS 801-850	1
The University of Texas Southwestern Medical Center	United States	SCImago #562	1
National Institutes of Health	United States	SCImago #44	1
Research Institute of the McGill University Health Centre	Canada	—	1
Beijing Institute of Radiation Medicine	China	—	1
Silesian University of Technology	Poland	SCImago #2757 · THE 1001–1200 · QS 1001-1200	1
Southwest Medical University	China	SCImago #2757	1

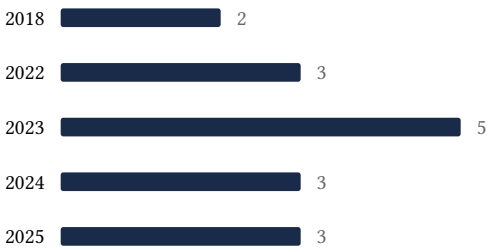
Geographic distribution of citing authors

Country	Citing papers
China	11
United States	5
Canada	1
Poland	1
Singapore	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	Nanoparticle biointerfacing by platelet membrane cloaking	4	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Interfacial interactions between natural RBC membranes and synthetic polymeric nanoparticles	1	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Erythrocyte–platelet hybrid membrane coating for enhanced nanoparticle functionalization	4	8 CFR 204.5(i)(3) — Outstanding Researcher