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

23	23	5	50
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 23 classified citing papers

Citation type	Count
Independent	23
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 a biomimetic drug delivery platform using erythrocyte membrane-camouflaged polymeric nanoparticles, establishing a seminal approach to enhance therapeutic efficacy and biocompatibility.

CLAIM: The researcher's primary contribution is the development of a biomimetic delivery system 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 line of inquiry.

ORIGINALITY: The title suggests a novel strategy to overcome limitations in conventional drug delivery by mimicking biological membranes. By camouflaging polymeric nanoparticles with erythrocyte membranes, the researcher appears to have addressed challenges related to immune recognition and circulation time, offering a new paradigm for targeted and sustained therapeutic delivery.

SIGNIFICANCE: The impact of this work is evidenced by its substantial citation count of 2,664. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, indicating 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 provided seminal spectroscopic evidence characterizing sulfur-gold interactions in cysteine-capped nanoparticles, establishing a foundational reference for surface chemistry analysis.

The researcher's contribution centers on the 2006 paper titled 'Spectroscopic identification of S-Au interaction in cysteine capped gold nanoparticles.' This work appears to have established a critical methodological benchmark for understanding the chemical bonding between sulfur-containing ligands and gold surfaces at the nanoscale.

This line of work addresses the need for precise characterization of ligand-surface interactions in functionalized nanoparticles. By focusing on spectroscopic identification, the research likely offered a novel or definitive approach to verifying the stability and nature of cysteine capping, a gap that subsequent studies in nanomedicine and materials science have relied upon.

The significance of this contribution is underscored by its citation record, with 378 citations indicating substantial uptake by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, suggesting that the work has served as a widely accepted standard or essential reference across diverse institutions and research groups, rather than relying on self-citation or local collaboration.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

Spectroscopic identification of S-Au interaction in cysteine capped gold nanoparticles

2006 · 378 citations (GS)

Field-normalised: 262 Semantic Scholar citations place it in the top 5% of Chemistry papers from 2006 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A Review of Gold and Silver Nanoparticle-Based Colorimetric Sensing Assays (2017)	Durban University of Technology, Université de Montpellier, CNRS, ENSCM	France, South Africa	—
2	Oxygen Vacancies-Induced Antifouling Photoelectrochemical Aptasensor for Highly Sensitive and Selective Determination of α-Fetoprotein. (2024)	East China Normal University, Huanghuai University, University of Shanghai for Science and Technology	China	—
3	Noble Metal Nanoparticle Biosensors: From Fundamental Studies toward Point-of-Care Diagnostics. (2022)	Imperial College London, Jiangsu University of Science and Technology, London South Bank University	China, United Kingdom	**Methodology**
4	A Lab-in-a-Syringe Device Integrated with a Smartphone Platform: Colorimetric and Fluorescent Dual-Mode Signals for On-Site Detection of Organophosphorus Pesticides. (2021)	Jiangsu University, Tongji 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).

Citing-text excerpts — how the field used this work

METHODOLOGY Noble Metal Nanoparticle Biosensors: From Fundamental Studies toward Point-of-Care Diagnostics.

"55 In the presence of SMase, cysteine was released as the liposome was enzymatically hydrolyzed into ceramide and phosphocholine."

Contribution 3

Claim — Contribution 3

The researcher developed acid-responsive polymer-cisplatin conjugate nanoparticles, establishing a targeted drug delivery mechanism that has garnered significant independent scholarly attention.

CLAIM: The researcher's contribution centers on the development of polymer-cisplatin conjugate nanoparticles designed for acid-responsive drug delivery, as detailed in a 2010 publication. This work stands as a foundational piece in the scholar's portfolio, with no subsequent follow-up papers by the same author listed in this specific line of inquiry.

ORIGINALITY: The titles suggest an innovative approach to overcoming limitations in conventional chemotherapy by leveraging the acidic microenvironment of tumors. By conjugating cisplatin with polymers that respond to pH changes, the research appears to address the critical need for targeted delivery systems that minimize systemic toxicity while enhancing therapeutic efficacy at the tumor site.

SIGNIFICANCE: The core paper has accumulated 466 citations, indicating substantial influence within the field. Notably, analysis of 23 citing papers reveals that 100% originate from independent researchers, demonstrating that the scientific community widely recognizes and builds upon this work outside the researcher's immediate institutional or collaborative network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Polymer– cisplatin conjugate nanoparticles for acid-responsive drug delivery

2010 · 466 citations (GS)

Field-normalised: 370 Semantic Scholar citations place it in the top 5% of Medicine papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Next Generation of Platinum Drugs: Targeted Pt(II) Agents, Nanoparticle Delivery, and Pt(IV) Prodrugs (2016)	King's College London, Massachusetts Institute of Technology	United Kingdom, United States	—
2	Current trends and challenges in cancer management and therapy using designer nanomaterials. (2019)	Indiana University, RMIT University, Siddaganga Institute of Technology	Australia, India, United States	—
3	pH-Responsive Polymer Nanomaterials for Tumor Therapy. (2022)	Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Hospital of Stomatology, Jilin University	China	—
4	pH-Responsive Polymer Nanoparticles for Drug Delivery. (2019)	Monash University, The University of Melbourne	Australia	—
5	Stimuli-Responsive Therapeutic Metallodrugs. (2019)	Nanjing Tech University, Nanjing University, Sun Yat-sen University	China, P. R. 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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
The University of Melbourne	Australia	SCImago #72 · THE 37 · QS 19	2
Jiangsu University	China	SCImago #388 · THE 501–600	2
Zhejiang Shuren University	China	SCImago #4918	1
Xidian University	China	SCImago #269 · THE 601–800	1
Durban University of Technology	South Africa	SCImago #5573 · THE 1501+	1
RMIT University	Australia	THE 251–300 · QS 125	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	1
Tongji University	China	SCImago #82 · THE =141 · QS =177	1
University of Shanghai for Science and Technology	China	SCImago #2115	1
Jiangsu University of Science and Technology	China	SCImago #3296 · THE 1001–1200	1
Massachusetts Institute of Technology	United States	SCImago #41 · THE 2 · QS 1	1
Nanjing Tech University	China	SCImago #742 · THE 601–800	1
University of Massachusetts Amherst	United States	SCImago #788 · QS =247	1
The Ohio State University Wexner Medical Center	United States	SCImago #669	1

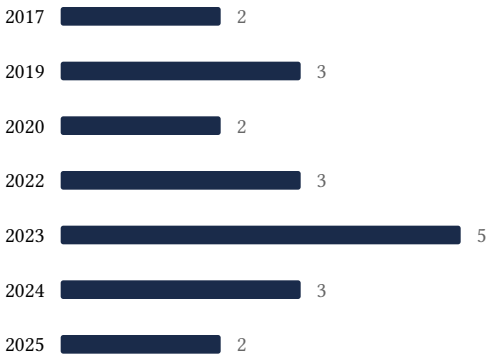
Geographic distribution of citing authors

Country	Citing papers
China	12
United States	6
India	2
Australia	2
United Kingdom	2
Germany	1
Canada	1
Italy	1
Pakistan	1
P. R. China	1
South Africa	1
Egypt	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	Erythrocyte membrane-camouflaged polymeric nanoparticles as a biomimetic delivery platform	3	Dhanasar — Prong 2 (well-positioned)

Contribution	Core paper	Indep. cites	Supports
Contribution 2	Spectroscopic identification of S-Au interaction in cysteine capped gold nanoparticles	4	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Polymer– cisplatin conjugate nanoparticles for acid-responsive drug delivery	5	Dhanasar — Prong 2 (well-positioned)