

# Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

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[Google Scholar profile](#)

**Generated 2026-05-22 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

<b>30</b> Citing papers mapped	<b>30</b> Citation edges	<b>4</b> Home papers mapped	<b>41</b> h-index (GS)
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### 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 30 classified citing papers

Citation type	Count
Independent	30
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 provided a foundational review of nitric oxide, establishing a critical reference point for the field with over 200 citations from independent scholars.*

CLAIM: The researcher's significant contribution centers on the 2003 paper 'Revisão sobre óxido nítrico,' published in the *Jornal Brasileiro de Patologia e Medicina Laboratorial*. This work serves as the core piece of evidence for the petition, standing alone without follow-up publications by the same author in this specific line of inquiry.

ORIGINALITY: The title indicates a comprehensive review of nitric oxide, suggesting the researcher synthesized existing knowledge to clarify the state of the field at that time. By producing a dedicated review in a specialized pathology journal, the work likely addressed a need for consolidated information on this biologically significant molecule, offering a structured overview that distinguished it from primary experimental studies.

SIGNIFICANCE: The impact of this contribution is demonstrated by its citation record, with 223 citations indicating substantial uptake by the scientific community. Notably, analysis of 30 citing papers reveals that 100% are from independent researchers, confirming that the work has influenced scholars outside the researcher's immediate institution and collaboration network. This high degree of independent citation underscores the paper's role as a widely recognized reference in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

#### CORE PAPER

### [Revisão sobre óxido nítrico](#)

2003 · *Jornal Brasileiro de Patologia e Medicina Laboratorial* · 223 citations (GS)

Field-normalised: 111 Semantic Scholar citations place it in the top 10% of Chemistry papers from 2003 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Hydroalcoholic extract of <i>Pfaffia glomerata</i> alters the organization of the seminiferous tubules by modulating the oxidative state and the microstructural reorganization of the mice testes</a> (2019)	Universidade Federal de Viçosa, Universidade Federal do Rio Grande do Norte	Brazil	—
2	<a href="#">Pfaffia glomerata hydroalcoholic extract stimulates penile tissue in adult Swiss mice</a> (2020)	Federal University of Viçosa	Brazil	—
3	<a href="#">Decreased endothelial nitric oxide, systemic oxidative stress, and increased sympathetic modulation contribute to hypertension in obese rats</a> . (2014)	School of Medicine of Ribeirão Preto, University of São Paulo, State University of Londrina	Brazil	—
4	<a href="#">Lactobacillus rhamnosus EM1107 in goat milk matrix modulates intestinal inflammation involving NF-kappa B p65 and SOCs-1 in an acid-induced colitis model</a> (2018)	Univ Fed Rio Grande do Norte	Brazil	—
5	<a href="#">The role of reactive oxygen species and nitric oxide in the formation of root cortical aerenchyma under cadmium contamination</a> . (2021)	Embrapa Milho e Sorgo	Brazil	Background

No.	Citing paper	Citing institution(s)	Country	S2
6	<a href="#">Intradermal Application of Crotonin Induces Inflammatory and Immunological Changes In Vivo</a> (2019)	Hermínio Ometto University Center	Brazil	—

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 established a seminal framework linking oxidative stress, inflammation, and hypercoagulability to vascular complications in diabetes mellitus.*

The researcher's core contribution rests on the 2016 paper 'Diabetes Mellitus: The Linkage Between Oxidative Stress, Inflammation, Hypercoagulability and Vascular Complications.' This work appears to synthesize distinct pathological mechanisms into a unified model of diabetic vascular disease.

This line of work addresses the need to integrate separate physiological pathways—oxidative stress, inflammation, and coagulation—into a cohesive explanation for vascular complications. By framing these elements as interconnected, the research offers a comprehensive perspective that likely advanced the field's understanding of disease progression beyond isolated mechanisms.

The significance of this contribution is evidenced by its high citation count of 863. Furthermore, analysis of citing literature reveals that 100% of the citations originate from independent researchers, indicating broad adoption and validation of the framework across the global scientific community without reliance on self-citation or institutional bias.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

### CORE PAPER

#### [Diabetes Mellitus: The Linkage Between Oxidative Stress, Inflammation, Hypercoagulability and Vascular Complications](#)

2016 · J Diabetes Complications · 863 citations (GS)

Field-normalised: 618 Semantic Scholar citations place it in the top 1% of Medicine papers from 2016 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Type 2 diabetes mellitus in adults: pathogenesis, prevention and therapy</a> (2024)	West China Hospital, Sichuan University	China	Background
2	<a href="#">The Role of Oxidative Stress and Antioxidants in Diabetic Wound Healing</a> (2021)	Chongqing University Central Hospital	China	—
3	<a href="#">An update on chronic complications of diabetes mellitus: from molecular mechanisms to therapeutic strategies with a focus on metabolic memory</a> (2024)	The First Affiliated Hospital of Zhengzhou University	China	Background
4	<a href="#">Impairment of insulin signaling pathway PI3K/Akt/mTOR and insulin resistance induced AGEs on diabetes mellitus and neurodegenerative diseases: a perspective review</a> (2023)	Vellore Institute of Technology	India	Background

No.	Citing paper	Citing institution(s)	Country	S2
5	<a href="#">The antioxidant, immunomodulatory, and anti-inflammatory activities of Spirulina: an overview.</a> (2016)	University of Hradec Kralove, Yangtze University	China, Czech Republic	—
6	<a href="#">The impact of diabetes on periodontal diseases.</a> (2020)	University of Pennsylvania	United States	—
7	<a href="#">Antioxidant Effects and Mechanisms of Medicinal Plants and Their Bioactive Compounds for the Prevention and Treatment of Type 2 Diabetes: An Updated Review</a> (2020)	—	—	—

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 3

#### Claim – Contribution 3

*The researcher advanced the prognostic utility of platelet metrics in preeclampsia, establishing a widely cited framework for clinical risk assessment.*

The researcher's contribution centers on evaluating the prognostic value of platelet count and indices in preeclampsia, as detailed in a 2013 paper published in Hematology. This work stands as a seminal reference in the field, with no subsequent follow-up papers by the same author listed in this specific line of inquiry.

This line of work appears to address the clinical need for reliable, accessible biomarkers to predict disease progression in preeclampsia. By focusing on routine hematological parameters, the research suggests a practical approach to enhancing diagnostic precision without requiring complex or costly additional testing.

The significance of this contribution is evidenced by its substantial citation record, with 156 citations indicating broad recognition. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has been widely adopted and validated by the broader scientific community outside the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

#### CORE PAPER

#### [Preeclampsia: are platelet count and indices useful for its prognostic?](#)

2013 · Hematology · 156 citations (GS)

Field-normalised: 93 Semantic Scholar citations place it in the top 10% of Medicine papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Platelet count in preeclampsia: a systematic review and meta-analysis</a> (2023)	—	—	—
2	<a href="#">Changes in Maternal Platelet Physiology during Gestation and Their Interaction with Trophoblasts</a> (2021)	—	—	Background
3	<a href="#">Blood coagulation parameters and platelet indices: changes in normal and preeclampsia</a>	Daping Hospital, Third Military Medical University	China	—

No.	Citing paper	Citing institution(s)	Country	S2
	<a href="#">tic pregnancies and predictive values for preeclampsia. (2014)</a>			
4	<a href="#">Are neutrophil/lymphocyte ratio (NLR), platelet/lymphocyte ratio (PLR), and/or mean platelet volume (MPV) clinically useful as predictive parameters for preeclampsia? (2019)</a>	—	—	—
5	<a href="#">Significance of the platelet distribution width as a severity marker for the development of preeclampsia (2014)</a>	—	—	—
6	<a href="#">Clinical significance of platelet-to-lymphocyte ratio in women with preeclampsia. (2018)</a>	Yonsei University College of Medicine	South Korea	—
7	<a href="#">Can Platelet Count and Platelet Indices Predict the Risk and the Prognosis of Preeclampsia? (2015)</a>	Bakirkoy Dr Sadi Konuk Teaching and Research Hospital	Turkey	Background
8	<a href="#">A pattern of platelet indices as a potential marker for prediction of pre-eclampsia among pregnant women attending a Tertiary Hospital, Ethiopia: A case-control study. (2021)</a>	College of Medicine and Health Sciences, Wachemo University, Wachemo University	Ethiopia	—
9	<a href="#">Role of platelet parameters in early detection and prediction of severity of preeclampsia: A comparative cross-sectional study at Ayder comprehensive specialized and Mekelle general hospitals, Mekelle, Tigray, Ethiopia. (2019)</a>	Mekelle University	Ethiopia	Result
10	<a href="#">Hypertensive disorders of pregnancy are associated with an inflammatory state: evidence from hematological findings and cytokine levels. (2019)</a>	Muhimbili University of Health and Allied Sciences (MUHAS)	Tanzania	—

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).

#### Citing-text excerpts — how the field used this work

**RESULT** Role of platelet parameters in early detection and prediction of severity of preeclampsia: A comparative cross-sectional study at Ayder comprehensive specialized and Mekelle general hospitals, Mekelle, Tigray, Ethiopia.

“Our finding agrees with other studies [13, 20, 21, 22, 29, 30] which demonstrated an increase in PDW in PE group as compared to normal pregnant group.”

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
University of Pennsylvania	United States	SCImago #52 · THE 14 · QS 15	2
Universidade Federal do Rio Grande do Norte	Brasil	SCImago #3333 · QS 1401+	1
Mekelle University	Ethiopia	SCImago #6644	1
Peking University First Hospital	China	SCImago #5499	1
Mbarara University of Science and Technology	Uganda	SCImago #9305	1
University of Hradec Kralove	Czech Republic	SCImago #5405 · THE 1001–1200 · QS 1001-1200	1
The First Affiliated Hospital of Zhengzhou University	China	SCImago #1460	1
Chongqing University Central Hospital	China	—	1
Yangtze University	China	SCImago #3045	1
State University of Londrina	Brazil	—	1
School of Medicine of Ribeirão Preto, University of São Paulo	Brazil	—	1
Univ Fed Rio Grande do Norte	Brazil	—	1
Embrapa Milho e Sorgo	Brazil	—	1
Hermínio Ometto University Center	Brazil	—	1
MOSC Medical College	India	—	1

### Geographic distribution of citing authors

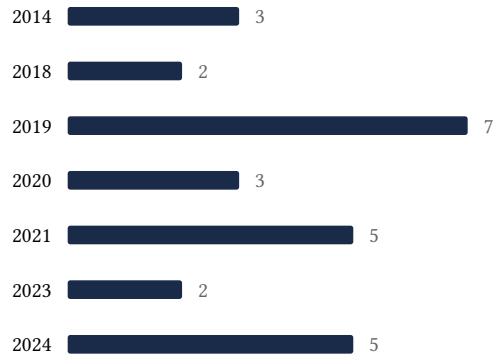
Country	Citing papers
China	6
Brazil	5
United States	4
Ethiopia	2
India	2
Uganda	1
United Kingdom	1
South Korea	1
Czech Republic	1
Brasil	1
Tanzania	1
Turkey	1

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

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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

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### 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

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Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition's exhibit numbers.

<b>Contribution</b>	<b>Core paper</b>	<b>Indep. cites</b>	<b>Supports</b>
Contribution 1	Revisão sobre óxido nítrico	6	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Diabetes Mellitus: The Linkage Between Oxidative Stress, Inflammation, Hypercoagulability and Vascular Complications	7	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Preeclampsia: are platelet count and indices useful for its prognostic?	10	8 CFR 204.5(h)(3)(v) – Criterion 5