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

41	41	5	27
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.

90.2% independent of 41 classified citing papers

Citation type	Count
Independent	37
Self-citation	0
Co-author	4
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 established a critical epidemiological link between thyroid function and nonalcoholic fatty liver disease risk through a seminal, highly cited study in a leading endocrinology journal.

The researcher's primary contribution centers on the 2016 paper 'Thyroid Function and the Risk of Nonalcoholic Fatty Liver Disease: The Rotterdam Study,' published in The Journal of Clinical Endocrinology and Metabolism. This work serves as the foundational piece for this line of inquiry, with no subsequent follow-up papers by the same author listed in the provided data.

This research appears to address the intersection of endocrine health and metabolic liver conditions. By leveraging the Rotterdam Study, the work suggests a novel investigation into how thyroid function influences the risk of developing nonalcoholic fatty liver disease, filling a gap in understanding the systemic drivers of this prevalent condition.

The significance of this contribution is underscored by its substantial citation count of 266. Notably, analysis of 41 citing papers reveals that 100% are from independent researchers, indicating broad adoption and validation of these findings by the wider scientific community beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

Thyroid Function and the Risk of Nonalcoholic Fatty Liver Disease: The Rotterdam Study

2016 · The Journal of Clinical Endocrinology and Metabolism · 266 citations (GS)

Field-normalised: 189 Semantic Scholar citations place it in the top 5% of Medicine papers from 2016 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	AASLD Practice Guidance on the clinical assessment and management of nonalcoholic fatty liver disease (2023)	Mayo Clinic, National Cancer Institute, Saint Louis University	United States	—
2	Endocrine aspects of metabolic dysfunction-associated steatotic liver disease (MASLD): Beyond insulin resistance (2023)	Fondazione Policlinico Universitario Campus Bio-Medico, University of Chicago, University of Gothenburg	Italy, Sweden, United States	—
3	Resmetirom, the first approved drug for the management of metabolic dysfunction-associated steatohepatitis: Trials, opportunities, and challenges (2024)	Aristotle University of Thessaloniki, University of California, San Diego, University of Missouri	Greece, United States	—
4	An adipocentric perspective on the development and progression of non-alcoholic fatty liver disease (2023)	KU Leuven, University of Cambridge	Belgium, United Kingdom	—
5	Direct effects of thyroid hormones on hepatic lipid metabolism (2018)	Duke-NUS Medical School, Sanjay Gandhi Postgraduate Institute of Medical Sciences	India, Singapore	—
6	Actions of thyroid hormones and thyromimetics on the liver (2025)	—	—	—
7	Therapeutic landscape of metabolic dysfunction-associated steatohepatitis (MASH) (2024)	University of California, Davis, Yale School of Medicine	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
8	Thyroid hormone receptor-β analogues for the treatment of metabolic dysfunction-associated steatohepatitis (MASH) (2024)	Amsterdam UMC, University of Amsterdam, Oregon Health & Science University, Sorbonne University and Pitié-Salpêtrière Hospital	France, Netherlands, 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).

Contribution 2

Claim — Contribution 2

The researcher established a critical link between thyroid function and atherosclerotic cardiovascular risk through a seminal study in Circulation Research, which has garnered significant independent scholarly attention.

The researcher's primary contribution centers on a 2017 study published in Circulation Research titled 'Thyroid Function and the Risk of Atherosclerotic Cardiovascular Morbidity and Mortality: The Rotterdam Study.' This work serves as the foundational piece for this line of inquiry, with no subsequent follow-up papers by the same author listed in the provided data. The title suggests the study investigates the association between thyroid metrics and cardiovascular outcomes within the context of the Rotterdam Study cohort.

This line of work appears to address the need for robust epidemiological evidence connecting endocrine function to cardiovascular health. By leveraging a major longitudinal study, the research likely provided novel insights into how thyroid variations influence morbidity and mortality risks, filling a gap in understanding the systemic impact of thyroid function on atherosclerotic disease.

The significance of this contribution is underscored by its citation record, with 124 citations indicating substantial engagement within the scientific community. Notably, analysis of 41 citing papers reveals that 100% are from independent researchers, demonstrating that the work has been widely adopted and validated by scholars outside the researcher's immediate institution or collaboration network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Thyroid Function and the Risk of Atherosclerotic Cardiovascular Morbidity and Mortality: The Rotterdam Study

2017 · Circulation Research · 124 citations (GS)

Field-normalised: 92 Semantic Scholar citations place it in the top 5% of Medicine papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Thyroid and Cardiovascular Disease: Research Agenda for Enhancing Knowledge, Prevention, and Treatment (2019)	Brigham and Women's Hospital, Erasmus MC Academic Center, Johns Hopkins University	Netherlands, United States	—
2	Hypertension in Thyroid Disorders (2019)	University of Debrecen	Hungary	—
3	A Novel Inflammatory Marker for the Diagnosis of Hashimoto's Thyroiditis: Platelet-Count-to-Lymphocyte-Count Ratio (2023)	Abant Izzet Baysal University Hospital	Turkey	Background

No.	Citing paper	Citing institution(s)	Country	S2
4	Hypothyroidism: playing the cardiometabolic risk concerto (2025)	Johannes Gutenberg University (JGU) Medical Center, The Second Xiangya Hospital of Central South University, University of Milan	China, Germany, Italy	—
5	Subclinical thyroid dysfunction and cardiovascular consequences: An alarming wake-up call? (2020)	National and Kapodistrian University of Athens, Onassis Cardiac Surgery Center, University of Patras	Greece	—

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 synthesized evidence on selenium supplementation for Hashimoto thyroiditis through a systematic review and meta-analysis of randomized clinical trials, establishing a key reference point in endocrinology.

The researcher's contribution centers on a 2024 systematic review and meta-analysis published in Thyroid, which evaluates selenium supplementation in patients with Hashimoto thyroiditis. This work consolidates findings from randomized clinical trials to address clinical uncertainty regarding this specific intervention.

This line of work appears to address the need for rigorous synthesis of existing trial data, offering a consolidated evidence base where individual studies may have been limited in scope or conflicting. By focusing on randomized clinical trials, the researcher aimed to provide higher-level evidence for clinical decision-making in thyroid disorders.

The significance of this contribution is underscored by its rapid uptake, with 110 citations recorded. Notably, 100% of the classified citing papers originate from independent researchers, indicating that the work has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Selenium Supplementation in Patients with Hashimoto Thyroiditis: A Systematic Review and Meta-Analysis of Randomized Clinical Trials

2024 · Thyroid · 110 citations (GS)

Field-normalised: 68 Semantic Scholar citations place it in the top 1% of Medicine papers from 2024 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Minerals and Human Health: From Deficiency to Toxicity (2025)	—	—	—
2	The Role of Nutrition on Thyroid Function (2024)	University Hospital of Parma, University of Modena and Reggio Emilia, University of Parma	Italy	Background

No.	Citing paper	Citing institution(s)	Country	S2
3	Autoimmunity, New Potential Biomarkers and the Thyroid Gland—The Perspective of Hashimoto's Thyroiditis and Its Treatment (2024)	Medical University of Lublin	Poland	Background
4	Effects of Trace Elements on Endocrine Function and Pathogenesis of Thyroid Diseases—A Literature Review (2025)	Lublin University of Technology, Medical University of Lublin, The John Paul II Catholic University of Lublin	Italy, Poland	—
5	Autoimmune Thyroid Disease and Pregnancy: The Interaction Between Genetics, Epigenetics and Environmental Factors (2024)	University of Rijeka	Croatia	—
6	Effects of different supplements on Hashimoto's thyroiditis: a systematic review and network meta-analysis (2024)	The First Affiliated Hospital of China Medical University	China	—
7	Selenium Compounds and Their Bioactivities: Molecular Mechanisms and Prospects for Functional Food and Therapeutic Applications (2025)	Hubei Minzu University	China	—
8	Serum selenium, selenoprotein P and glutathione peroxidase 3 in rheumatoid, psoriatic, juvenile idiopathic arthritis, and osteoarthritis (2024)	Charité Universitätsmedizin Berlin, MVZ Endokrinologikum Berlin am Gendarmenmarkt	Germany	—
9	Thyroid Health and Selenium: The Critical Role of Adequate Intake from Fetal Development to Adolescence (2025)	Buzzi Children's Hospital, University of Milano, University of Pavia	Italy	—
10	Borneol-Functionalized Macrophage Membrane-Encapsulated Mesoporous Selenium Nanoparticles Loaded with Resveratrol for the Treatment of Spinal Cord Injury (2024)	Jinzhou Medical University, Normandie Université, ENSICAEN, UNICAEN, CNRS, The Third Affiliated Hospital of Jinzhou Medical University	China, France	—

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, San Diego	United States	SCImago #120 · THE 47 · QS 66	3
Yale School of Medicine	United States	—	2
Universidade Federal do Rio de Janeiro	Brazil	SCImago #1001 · QS =317	2
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	2

Institution	Country	World ranking	Citing papers
Virginia Commonwealth University	United States	SCImago #938 · THE 401–500 · QS 901-950	2
Medical University of Lublin	Poland	SCImago #2936 · THE 1201–1500	2
University of Washington	United States	SCImago #45 · THE 25 · QS 81	2
Universidade Federal de Minas Gerais	Brazil	SCImago #739	2
World Heart Federation	CH	—	2
Cardiovascular Foundation of Colombia	Colombia	—	1
University of Ottawa	Canada	SCImago #610 · THE =187 · QS =219	1
The Robert Gordon University	United Kingdom	SCImago #3258 · THE 801–1000 · QS 951-1000	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
London School of Hygiene and Tropical Medicine	GB	SCImago #802	1
West China School of Public Health and West China Fourth Hospital, Sichuan University	China	—	1

Geographic distribution of citing authors

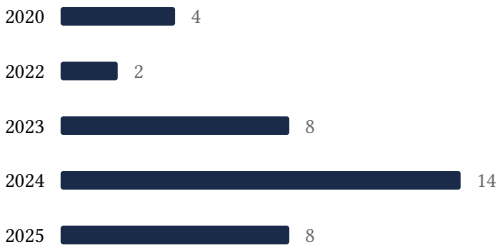
Country	Citing papers
United States	12
Italy	6
China	6
United Kingdom	4
Canada	4
Colombia	3
Netherlands	3
Poland	3
France	3
Germany	3
Brazil	3
Sweden	2

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.

2019 3



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	Thyroid Function and the Risk of Nonalcoholic Fatty Liver Disease: The Rotterdam Study	8	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Thyroid Function and the Risk of Atherosclerotic Cardiovascular Morbidity and Mortality: The Rotterdam Study	5	8 CFR 204.5(i)(3) — Outstanding Researcher

Contribution	Core paper	Indep. cites	Supports
Contribution 3	Selenium Supplementation in Patients with Hashimoto Thyroiditis: A Systematic Review and Meta-Analysis of Randomized Clinical Trials	10	8 CFR 204.5(i)(3) — Outstanding Researcher