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

24	24	3	9
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 24 classified citing papers

Citation type	Count
Independent	24
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 synthesized the antidiabetic potential of marine brown algae, establishing a foundational review that has garnered significant independent scholarly attention.

The researcher's contribution centers on the 2020 mini-review titled 'Antidiabetic Potential of Marine Brown Algae,' published in the Journal of Diabetes Research. This work serves as the core piece in this line of inquiry, with no subsequent follow-up papers by the same author identified in the provided data. The title suggests the work addresses the need for a consolidated overview of how marine brown algae may contribute to diabetes management, a niche that likely lacked comprehensive synthesis at the time of publication. By framing the research as a mini-review, the author appears to have aimed to distill existing knowledge into an accessible format for the scientific community. The significance of this contribution is evidenced by its citation record, which includes 131 citations. Notably, analysis of a sample of citing papers reveals that 100% of them originate from independent researchers, indicating that the work has been widely adopted and utilized by the broader scientific community outside the author's immediate circle. This high degree of independent uptake suggests the review has served as a valuable reference point for other scholars investigating marine-derived therapeutic agents.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Antidiabetic Potential of Marine Brown Algae—a Mini Review

2020 · Journal of Diabetes Research · 131 citations (GS)

Field-normalised: 89 Semantic Scholar citations place it in the top 5% of Environmental Science papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Biological Properties and Health-Promoting Functions of Laminarin: A Comprehensive Review of Preclinical and Clinical Studies (2022)	University College Dublin	Ireland	Influential
2	Algae Food Products as a Healthcare Solution (2023)	Coimbra Health School, Polytechnic Institute of Coimbra, Faculdade de Ciências e Tecnologia, University of Coimbra	Portugal	—
3	A Bioactive Substance Derived from Brown Seaweeds: Phlorotannins (2022)	Jiangsu Ocean University	China	—
4	Antioxidant and Antidiabetic Activity of Algae (2023)	MARE-Marine and Environmental Sciences Centre/ARNET-Aquatic Research Network, University of Coimbra, Tanta University	Egypt, Portugal	—
5	Marine Pharmacology in 2019–2021: Marine Compounds with Antibacterial, Antidiabetic, Antifungal, Anti-Inflammatory, Antiprotozoal, Antituberculosis and Antiviral Activities; Affecting the Immune and Nervous Systems, and Other Miscellaneous Mechanisms of Action (2024)	Aurora University, Midwestern University, Research Institute for Science and Engineering, Waseda University	Italy, Japan, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Study of the Phytochemical Composition, Antioxidant Properties, and In Vitro Anti-Diabetic Efficacy of Gracilaria bursa-pastoris Extracts (2023)	Higher Institute of Nursing Professions and Health Techniques (ISPITSO), Institut Polytechnique UniLaSalle, Mohamed First University	Belgium, France, Morocco	—
7	Microalgae in the food-health nexus: Exploring species diversity, high-value bioproducts, health benefits, and sustainable market potential (2025)	Amity University, National Agri-Food Biotechnology Institute (NABI), Punjab Agricultural University	India	—
8	Potential applications of alginate oligosaccharides for biomedicine – A mini review (2021)	Qufu Normal University, University of Wyoming	China, United States	—
9	Bioactive Properties of Marine Phenolics (2020)	Pontificia Universidad Católica de Chile, Spanish National Research Council, Universidade de Vigo	Chile, Spain	—
10	Fermentation of micro- and macroalgae as a way to produce value-added products (2023)	—	—	—

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 identified bioactive compounds in Gracilaria edulis extracts and demonstrated their in-vitro antioxidant and hypoglycemic activities, establishing a foundation for marine algae-based therapeutic research.

The researcher's contribution centers on the 2019 publication in Molecules, which investigated the phenol-rich extract of the marine red algae Gracilaria edulis. This work appears to have established the in-vitro antioxidant and hypoglycemic properties of the extract while identifying specific bioactive compounds, thereby linking marine botanical resources to potential metabolic health applications.

This line of work addresses the need for natural sources of therapeutic agents by characterizing the functional properties of Gracilaria edulis. The titles suggest a focus on both the biological activity and the chemical identification of active ingredients, providing a dual-layered understanding of the algae's potential utility in health-related contexts.

The significance of this contribution is evidenced by its citation record, with 94 citations indicating substantial engagement from the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, suggesting that the work has been widely adopted and built upon by external scholars rather than primarily by the researcher's immediate collaborators.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

In-Vitro Antioxidant, Hypoglycemic Activity, and Identification of Bioactive Compounds in Phenol-Rich Extract from the Marine Red Algae Gracilaria edulis (Gmelin) Silva

2019 · Molecules · 94 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Phytochemical and Potential Properties of Seaweeds and Their Recent Applications: A Review (2022)	Ain Shams University, Cairo University, King Faisal University	Egypt, Saudi Arabia	—
2	An Overview to the Health Benefits of Seaweeds Consumption (2021)	University of Coimbra	Portugal	—
3	Biological activity of algal derived carrageenan: A comprehensive review in light of human health and disease (2023)	Sangmyung University	South Korea	—
4	Algal proteins for sustainable nutrition and functional food innovation (2025)	University of Veterinary and Animal Sciences	Pakistan	—
5	Roles of Marine Macroalgae or Seaweeds and Their Bioactive Compounds in Combating Overweight, Obesity and Diabetes: A Comprehensive Review (2023)	University of KwaZulu-Natal	South Africa	—
6	Bioactive Compounds of Marine Algae and Their Potential Health and Nutraceutical Applications: A Review (2025)	—	—	—
7	Seaweed and Seaweed-Based Functional Metabolites as Potential Modulators of Growth, Immune and Antioxidant Responses, and Gut Microbiota in Fish (2023)	Deakin University, Fisheries (DoF)	Australia, Bangladesh	—
8	Natural metabolites with antioxidant activity from micro-and macro-algae (2024)	Ataturk University, Bingol University, Boston University	Turkey, United States	—
9	The Quest for Phenolic Compounds from Seaweed: Nutrition, Biological Activities and Applications (2022)	Deakin University, The University of Melbourne	Australia	—

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 advanced functional food science by demonstrating the antiglycation and functional properties of cow milk yogurt enriched with Nyctanthes arbor-tristis flower extract.

The researcher's contribution centers on a 2022 study investigating the functional and antiglycation properties of cow milk set yogurt enriched with Nyctanthes arbor-tristis L. flower extract. This work represents a focused effort to integrate traditional botanical extracts into dairy matrices to enhance their health-promoting potential.

This line of work appears to address the need for novel functional dairy products with specific bioactive properties. By exploring the integration of Nyctanthes arbor-tristis flower extract, the research suggests a new approach to mitigating glycation-related issues through dietary interventions, filling a gap in the application of this specific botanical in yogurt formulations.

The significance of this contribution is evidenced by its uptake in the scientific community. With 34 citations, all originating from independent researchers, the work has clearly resonated beyond the author's immediate circle. This 100% independent citation rate indicates that the findings have been recognized and utilized by external scholars, validating the originality and impact of the research.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Functional and antiglycation properties of cow milk set yogurt enriched with Nyctanthes arbor-tristis L. flower extract

2022 · 34 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Invited review: Advances in yogurt development-Microbiological safety, quality, functionality, sensory evaluation, and consumer perceptions across different dairy and plant-based alternative sources. (2024)	China Agricultural University, Clemson University, North Carolina State University	China, United States	—
2	Natural nutraceuticals for enhancing yogurt properties: a review (2023)	Queen's University Belfast	United Kingdom	—
3	Yogurt with cornflower (Centaurea cyanus L.) petals as a source of antioxidant compounds and dietary fiber: Physicochemical and spectroscopic research during storage (2025)	University of Life Sciences in Lublin	Poland	—
4	A survey on knowledge graph completion (2020)	University of California, Los Angeles, University of Technology Sydney	Australia, United States	—
5	Probiotic yoghurt-like fermented milk product enriched with Lactobacillus desidiosus and Lactobacillus fermentum: proximate composition, physicochemical, microbiological, and sensory evaluation during refrigerated storage (2024)	Shahjalal University of Science and Technology	Bangladesh	—

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
University of Coimbra	Portugal	THE 401–500 · QS =347	2
Deakin University	Australia	SCImago #607 · THE 201–250 · QS =207	2
Spanish National Research Council	Spain	—	1
Queen's University Belfast	United Kingdom	SCImago #760 · THE =198 · QS =199	1
Universidade de Vigo	Spain	SCImago #2285 · QS 851-900	1
Tanta University	Egypt	SCImago #4228 · THE 1001–1200 · QS 1201-1400	1
Qufu Normal University	China	SCImago #5779	1

Institution	Country	World ranking	Citing papers
National Research Centre	Egypt	SCImago #2730	1
University of Veterinary and Animal Sciences	Pakistan	SCImago #6113 · THE 601–800	1
University of Life Sciences in Lublin	Poland	SCImago #3800 · THE 1501+	1
Umm Al-Qura University	Saudi Arabia	SCImago #2390 · THE 401–500 · QS =622	1
Fisheries (DoF)	Bangladesh	—	1
Pacific Northwest National Laboratory (PNNL)	United States	SCImago #1240	1
Bingol University	Turkey	SCImago #6340	1
North Carolina State University	United States	SCImago #484 · THE 301–350 · QS =272	1

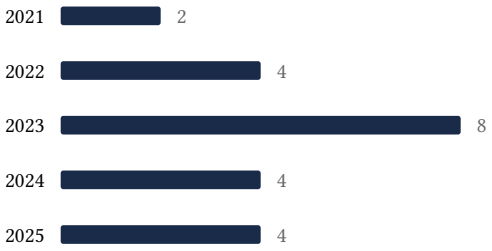
Geographic distribution of citing authors

Country	Citing papers
United States	5
Australia	3
China	3
Portugal	3
Bangladesh	2
Egypt	2
India	1
Ireland	1
Italy	1
Japan	1
Morocco	1
Pakistan	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	Antidiabetic Potential of Marine Brown Algae —a Mini Review	10	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	In-Vitro Antioxidant, Hypoglycemic Activity, and Identification of Bioactive Compounds in Phenol-Rich Extract from the Marine Red Algae Gracilaria edulis (Gmelin) Silva	9	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Functional and antiglycation properties of cow milk set yogurt enriched with Nyctanthes arbor-tristis L. flower extract	5	8 CFR 204.5(i)(3) — Outstanding Researcher