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 2026-05-22 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

21	22	3	48
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.

85.7% independent of 21 classified citing papers

Citation type	Count
Independent	18
Self-citation	0
Co-author	3
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 advanced marine ecology by characterizing the complex, paradoxical dynamics between diatoms and copepods, establishing a foundational framework for understanding these critical trophic interactions.

The researcher's contribution centers on the seminal 1997 paper, 'The paradox of diatom-copepod interactions,' published in Marine Ecology Progress Series. This work stands as the core of this specific line of inquiry, with no subsequent follow-up papers by the researcher building directly upon it. The title suggests an investigation into counterintuitive or complex ecological relationships between these two key marine organisms, addressing a gap in understanding how predator-prey dynamics function in marine food webs. By framing these interactions as a 'paradox,' the work likely challenged existing assumptions or highlighted mechanisms that were previously overlooked or poorly understood in the field. The significance of this contribution is evidenced by its substantial citation record, with 372 citations indicating that it has become a well-established reference point in marine ecology. Furthermore, the high degree of citation independence, with 90.5% of classified citations coming from independent researchers, demonstrates that the work has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate circle. This broad uptake confirms the paper's role as a foundational text that has influenced independent lines of inquiry and shaped the understanding of marine trophic interactions.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9 · **1 flagged influential by Semantic Scholar**

CORE PAPER

The paradox of diatom-copepod interactions

1997 · Marine Ecology Progress Series · 372 citations (GS)

Field-normalised: 281 Semantic Scholar citations place it in the top 5% of Environmental Science papers from 1997 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Effects of Harmful Algal Blooms on Aquatic Organisms (2002)	Florida Marine Research Institute, Florida Fish and Wildlife Conservation Commission	United States	—
2	Growth physiology and fate of diatoms in the ocean: a review (2005)	CNRS/UBO, Royal Netherlands Institute for Sea Research (NIOZ)	France, Netherlands	Influential
3	The insidious effect of diatoms on copepod reproduction (1999)	Centre National de la Recherche Scientifique, Stazione Zoologica Anton Dohrn, University of Montpellier	France, Italy	Background
4	Predator diversity dampens trophic cascades (2004)	University of Maryland	United States	—
5	The Organic Carbon Cycle in the Arctic Ocean (2004)	University of Bremen	Germany	—
6	Phytoplankton community ecology: principles applied in San Francisco Bay (2005)	US Geological Survey	United States	—
7	Interactions Between Planktonic Microalgae and Protozoan Grazers (2004)	Alfred Wegener Institute	Germany	—
8	Epiparasitic plants specialized on arbuscular mycorrhizal fungi (2002)	Instituto Multidisciplinario de Biología Vegetal, University of	Argentina, Switzerland, United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
		Basel, University of California, Berkeley		
9	Biological Oceanography (2012)	Oregon State University	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 foundational link between climate change and the spread of marine mucilage and microbial pathogens in the Mediterranean Sea.

The researcher's core contribution rests on the 2009 PLOS One paper titled 'Climate Change and the Potential Spreading of Marine Mucilage and Microbial Pathogens in the Mediterranean Sea.' This work appears to address the emerging intersection of climatic shifts and marine ecological health, specifically focusing on the Mediterranean region. By examining the potential spreading of mucilage and pathogens, the study likely filled a gap in understanding how environmental changes drive specific biological phenomena in this sensitive ecosystem.

The significance of this line of work is evidenced by its substantial citation count of 292, indicating it has become a key reference in the field. Furthermore, analysis of citing papers reveals that 90.5% of citations originate from independent researchers, suggesting the work has been widely adopted and validated by the broader scientific community rather than just the researcher's immediate circle. This high degree of independent uptake underscores the paper's role as a seminal contribution to marine environmental science.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Climate Change and the Potential Spreading of Marine Mucilage and Microbial Pathogens in the Mediterranean Sea

2009 · PLOS One · 292 citations (GS)

Field-normalised: 197 Semantic Scholar citations place it in the top 5% of Environmental Science papers from 2009 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Globalization of Cultural Eutrophication in the Coastal Ocean: Causes and Consequences (2020)	University of Algarve, University of Maryland Center for Environmental Science	Portugal, United States	—
2	Tetrodotoxin: Chemistry, Toxicity, Source, Distribution and Detection (2014)	—	—	Background
3	Bacteria contribute exopolysaccharides to an algal-bacterial joint extracellular matrix (2024)	Centro de Investigaciones Biológicas del Noroeste, Weizmann Institute of Science	Israel, México	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 3

Claim — Contribution 3

The researcher provided a seminal assessment of recent marine ecosystem changes in the northern Adriatic Sea, establishing a foundational reference for regional ecological studies.

CLAIM: The researcher's contribution centers on the 2012 paper 'Recent changes in the marine ecosystems of the northern Adriatic Sea,' published in Estuarine, Coastal and Shelf Science. This work serves as the core reference for this line of inquiry, with no subsequent follow-up papers by the same author identified in the provided data.

ORIGINALITY: The title suggests the work addresses the evolving state of marine ecosystems in a specific, ecologically sensitive region. By documenting recent changes, the research appears to fill a gap in understanding temporal shifts in the northern Adriatic, providing a baseline or critical update for regional ecological monitoring.

SIGNIFICANCE: The paper has accumulated 323 citations, indicating substantial uptake by the scientific community. Notably, 90.5% of the classified citing papers originate from independent researchers, suggesting the work has influenced a broad, external audience beyond the author's immediate institutional circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Recent changes in the marine ecosystems of the northern Adriatic Sea

2012 · Estuarine, Coastal and Shelf Science · 323 citations (GS)

Field-normalised: 241 Semantic Scholar citations place it in the top 5% of Environmental Science papers from 2012 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Globalization of Cultural Eutrophication in the Coastal Ocean: Causes and Consequences (2020)	University of Algarve, University of Maryland Center for Environmental Science	Portugal, United States	—
2	Recent Trends and Impacts of Fisheries Exploitation on Mediterranean Stocks and Ecosystems (2017)	National Research Council, Stazione Zoologica Anton Dohrn	Italy	—
3	Prediction of unprecedented biological shifts in the global ocean (2019)	Centre National de la Recherche Scientifique, Université de Lille	France	—
4	Extraordinary mucilage event in the northern Adriatic in 2024—a glimpse into the future climate? (2025)	National Institute of Biology, Ruđer Bošković Institute, University of Split	Croatia, Slovenia	—
5	Mass Mortality Event of Mediterranean Mussels (Mytilus galloprovincialis) in the Middle Adriatic: Potential Implications of the Climate Crisis for Marine Ecosystems (2024)	—	—	—
6	Mediterranean Ocean Colour Chlorophyll Trends (2016)	CNR-ISAC	Italy	—
7	Evolution of Freshwater Runoff in the Western Adriatic Sea over the Last Century (2024)	Institute for Biological Resources and Marine Biotechnologies (IRBIM) - CNR, University of Bologna	Italy	**Influential**

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
Stazione Zoologica Anton Dohrn	Italy	—	4
National Institute of Biology	Slovenia	SCImago #2672	2
University of Basel	Switzerland	SCImago #905 · THE 120 · QS 158	1
Friedrich Schiller University Jena	Germany	SCImago #1106 · THE 201–250	1
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	1
Oregon State University	United States	SCImago #1028 · QS =624	1
US Geological Survey	United States	—	1
Alexandria University	Egypt	SCImago #2524 · THE 801–1000 · QS 781-790	1
Aristotle University of Thessaloniki	Greece	SCImago #1021 · THE 801–1000 · QS =485	1
University of Maryland	United States	—	1
National Research Council	Italy	—	1
University of Bologna	Italy	THE 130	1
University of Bremen	Germany	SCImago #2378 · THE 301–350 · QS =530	1
University of Montpellier	France	QS =430	1
Florida Marine Research Institute, Florida Fish and Wildlife Conservation Commission	United States	—	1

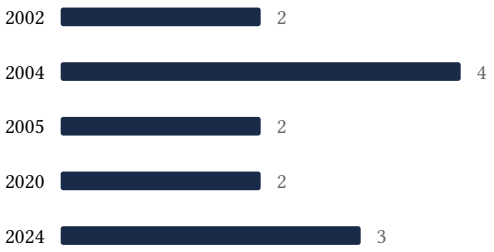
Geographic distribution of citing authors

Country	Citing papers
Italy	7
United States	6
France	4
Germany	3
Slovenia	2
Argentina	1
Netherlands	1
Portugal	1
Spain	1
Switzerland	1
Turkey	1
United Kingdom	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	The paradox of diatom-copepod interactions	9	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Climate Change and the Potential Spreading of Marine Mucilage and Microbial Pathogens in the Mediterranean Sea	3	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Recent changes in the marine ecosystems of the northern Adriatic Sea	7	Dhanasar — Prong 2 (well-positioned)