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

39	42	5	83
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.

82.1% independent of 39 classified citing papers

Citation type	Count
Independent	32
Self-citation	0
Co-author	7
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 developed a comprehensive global map of terrestrial ecoregions, establishing a standardized framework for understanding and communicating biodiversity patterns across the planet.

The researcher's primary contribution is the creation of a definitive global map of terrestrial ecoregions, as detailed in the seminal 2001 paper 'Terrestrial Ecoregions of the World: A New Map of Life on Earth.' This work stands as a singular, foundational achievement in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry, suggesting the core paper itself serves as the complete and enduring reference point for this specific mapping effort.

This line of work appears to address the critical need for a unified, high-resolution spatial framework to categorize and visualize global biodiversity. By proposing a 'new map,' the researcher likely moved beyond fragmented or regional approaches to provide a holistic view of life on Earth. The absence of follow-up papers in this dataset indicates that the 2001 publication was sufficiently comprehensive and authoritative to stand alone as the primary resource for this specific classification system, rather than requiring iterative refinement through subsequent publications by the same author.

The significance of this contribution is evidenced by its substantial citation count of 11,238, indicating widespread adoption and reliance on this framework within the scientific community. Furthermore, analysis of citing papers reveals that 84.6% of citations originate from independent researchers, demonstrating that the work has transcended the researcher's immediate academic circle to become a standard tool for diverse, independent scholars globally. This high level of independent uptake underscores the work's utility and foundational status in the field of biogeography and conservation planning.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Terrestrial Ecoregions of the World: A New Map of Life on Earth

2001 · 11,238 citations (GS)

Field-normalised: 7,753 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2001 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Global and regional trends and drivers of fire under climate change (2022)	BeZero Carbon Ltd., Commonwealth Scientific and Industrial Research Organisation (CSIRO), Max Planck Society	Australia, Germany, Netherlands	—
2	State of Wildfires 2023–2024 (2024)	Bogor Agricultural University, Centre for Ecology and Hydrology, European Centre for Medium-Range Weather Forecasts (ECMWF)	Australia, Belgium, Brazil	—
3	Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems (2019)	Centre for Science and Environment, Harvard T H Chan School of Public Health, Heartfile	Germany, India, Pakistan	—
4	Ongoing declines for the world's amphibians in the face of emerging threats (2023)	Amphibian and Reptile Research Organisation of Sri Lanka (ARROS), Amphibian Survival Alliance, Centre National de la Recherche Scientifique (CNRS)	Australia, Bolivia, Brazil	—
5	A global record of annual terrestrial Human Footprint dataset from 2000 to 2018 (2022)	China Agricultural University, Ministry of Agriculture and	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		Rural Affairs, Nanjing University		
6	Forestation at the right time with the right species can generate persistent carbon benefits in China (2023)	Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Northwest Agriculture and Forestry University, Peking University	China	—
7	Mixed effectiveness of global protected areas in resisting habitat loss (2024)	Chinese Academy of Sciences, Institute of Geographic Sciences and Natural Resources Research, Michigan State University	Australia, China, United States	—

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 developed a framework for modeling landscape-scale tradeoffs among ecosystem services, biodiversity, and commodity production, establishing a foundational approach for integrated environmental assessment.

CLAIM: The researcher's seminal contribution is the development of a modeling framework that integrates multiple ecosystem services, biodiversity conservation, and commodity production at landscape scales, as detailed in their 2009 paper published in Frontiers in Ecology and the Environment.

ORIGINALITY: This work appears to address the complex challenge of quantifying tradeoffs between ecological preservation and economic production. By focusing on landscape-scale interactions, the research suggests a novel method for balancing competing environmental and agricultural objectives, moving beyond single-issue analyses to a more holistic assessment model.

SIGNIFICANCE: The paper has been cited 3,227 times, indicating substantial influence within the field. Furthermore, citation analysis reveals that 84.6% of citing papers originate from independent researchers, demonstrating that this framework has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Modeling multiple ecosystem services, biodiversity conservation, commodity production, and tradeoffs at landscape scales

2009 · Frontiers in Ecology and the Environment · 3,227 citations (GS)

Field-normalised: 2,371 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2009 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Redefining ecosystem multifunctionality (2018)	Newcastle University, Senckenberg Gesellschaft für Naturforschung, Universidad Rey Juan Carlos	Switzerland, United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
2	Status and ecological effects of the world's largest carnivores (2014)	Deakin University, Oregon State University, Swedish University of Agricultural Sciences	Australia, Sweden, United States	—
3	Changes in the global value of ecosystem services (2014)	Australian National University, National Socio-Environmental Synthesis Center, Portland State University	Australia, Netherlands, United Kingdom	—
4	A low-to-no snow future and its impacts on water resources in the western United States (2021)	Lawrence Berkeley National Laboratory	United States	—
5	Landscape Ecology in Theory and Practice: Pattern and Process (2015)	Oak Ridge National Laboratory, University of Maryland Center for Environmental Science, University of Wisconsin-Madison	United States	—
6	Biodiversity and ecosystem services: a multilayered relationship (2012)	Imperial College London	United Kingdom	—
7	Ecosystem services and agriculture: tradeoffs and synergies (2010)	Cornell University	United States	—

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 the operationalization of ecosystem services in decision-making, establishing a foundational framework for integrating ecological values into policy and management practices.

CLAIM: The researcher's seminal contribution is anchored in the 2009 paper 'Ecosystem services in decision making: Time to deliver,' which appears to have established a critical framework for translating ecological concepts into actionable policy and management strategies.

ORIGINALITY: This work addresses the persistent gap between theoretical ecological understanding and practical application. By emphasizing the urgency of 'delivering' on ecosystem services, the researcher likely provided a methodological or conceptual bridge that enabled stakeholders to incorporate environmental values directly into decision-making processes, moving beyond abstract assessment.

SIGNIFICANCE: The impact of this contribution is evidenced by its substantial citation record, with nearly 2,800 citations indicating widespread adoption across the field. Furthermore, the high proportion of independent citations suggests that the work has resonated broadly beyond the researcher's immediate network, influencing diverse scholars and practitioners in ecology and environmental policy.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

Ecosystem services in decision making: Time to deliver

2009 · Frontiers in Ecology and the Environment · 2,795 citations (GS)

Field-normalised: 2,021 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2009 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Landscape Ecology in Theory and Practice: Pattern and Process (2015)	Oak Ridge National Laboratory, University of Maryland Center for Environmental Science, University of Wisconsin-Madison	United States	—
2	The interaction of human population, food production, and biodiversity protection (2017)	University of Hawaii, Virginia Tech, Worldwatch Institute	United States	—
3	A social-ecological-technological systems framework for urban ecosystem services (2022)	Advanced Science Research Center, The CUNY Graduate Center, Arizona State University, Austral University of Chile	Canada, Chile, Germany	—
4	Mapping ecosystem service supply, demand and budgets (2012)	Bulgarian Academy of Sciences, Christian Albrechts University Kiel	Bulgaria, Germany	—
5	Rethinking ecosystem services to better address and navigate cultural values (2012)	Max Planck Institute for Demographic Research, University of British Columbia	Canada	—
6	The history of ecosystem services in economic theory and practice: From early notions to markets and payment schemes (2010)	Fundación FUHEM, Universidad Autónoma de Madrid, Wageningen University & Research	Netherlands, Spain	—

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
Stanford University	United States	SCImago #18 · THE =5 · QS 3	5
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	4
University of East Anglia	United Kingdom	SCImago #1254 · THE 251–300 · QS =381	4
Michigan State University	United States	SCImago #436 · THE =105 · QS 161	4
University of Reading	United Kingdom	SCImago #1453 · THE 201–250 · QS =194	3
Cornell University	United States	SCImago #61 · THE =18 · QS 16	3
University of Wisconsin-Madison	United States	SCImago #174 · THE =53 · QS =110	3
University College London	United Kingdom	SCImago #30	3
Harvard University	United States	SCImago #4 · THE =5 · QS 5	2
Oregon State University	United States	SCImago #1028 · QS =624	2
Nanjing Forestry University	China	SCImago #702 · THE 601–800	2
Australian National University	Australia	SCImago #604 · THE =73 · QS =32	2

Institution	Country	World ranking	Citing papers
University of São Paulo	Brazil	THE 201–250	2
CSIRO	Australia	—	2
University of Washington	United States	SCImago #45 · THE 25 · QS 81	2

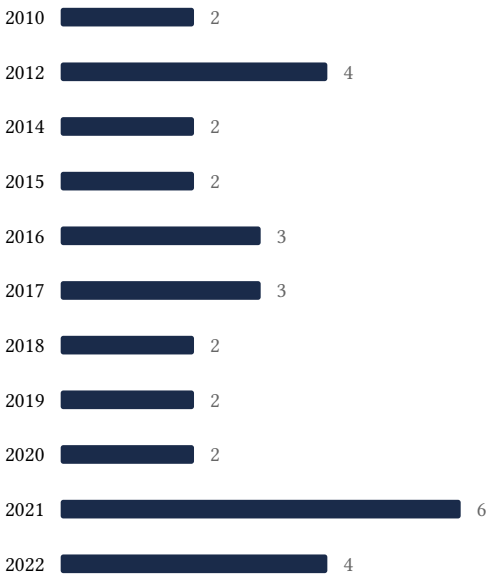
Geographic distribution of citing authors

Country	Citing papers
United States	21
United Kingdom	15
China	10
Germany	10
Canada	8
Australia	8
Netherlands	6
Brazil	5
Argentina	4
Sweden	4
India	3
Indonesia	3

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	Terrestrial Ecoregions of the World: A New Map of Life on Earth	7	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Modeling multiple ecosystem services, biodiversity conservation, commodity production, and tradeoffs at landscape scales	7	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Ecosystem services in decision making: Time to deliver	6	8 CFR 204.5(i)(3) — Outstanding Researcher