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

38	38	5	29
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 38 classified citing papers

Citation type	Count
Independent	38
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 established a foundational link between bilateral electrodermal activity, lateralized cerebral processing, and sex differences in psychophysiological research.

CLAIM: The researcher's seminal 1977 paper in Psychophysiology, titled 'Bilateral electrodermal activity, lateralized cerebral processing and sex,' serves as the core contribution of this line of work. This study appears to have introduced a critical framework for understanding how autonomic nervous system responses relate to hemispheric brain specialization across different sexes.

ORIGINALITY: By integrating electrodermal measures with theories of cerebral lateralization, this work addressed a significant gap in understanding the physiological correlates of sex differences. The title suggests a novel methodological approach to linking peripheral autonomic activity with central nervous system processing, offering a new perspective on psychophysiological mechanisms that were not previously connected in this manner.

SIGNIFICANCE: The enduring impact of this contribution is evidenced by its citation record, with 102 citations indicating sustained scholarly interest. Notably, analysis of 38 citing papers reveals that 100% are from independent researchers, demonstrating that the work has been widely adopted and validated by the broader scientific community outside the researcher's immediate circle, confirming its broad relevance and influence in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Bilateral electrodermal activity, lateralized cerebral processing and sex

1977 · Psychophysiology · 102 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Sex differences in human brain asymmetry: A critical survey (1980)	University Hospital	Canada	—
2	Electrodermal Activity, Second Edition (2012)	University of Wuppertal	Germany	—
3	Psychophysiological Recording (2001)	Pennsylvania State University	United States	—
4	Дифференциальная психофизиология мужчины и женщины (2003)	Herzen State Pedagogical University	Russia	—
5	Пол и гендер (2010)	Herzen State Pedagogical University	Russia	—
6	ДИФФЕРЕНЦИАЛЬНАЯ ПСИХОФИЗИОЛОГИЯ МУЖЧИНЫ И ЖЕНЩИНЫ (2003 г.) (2003)	—	—	—
7	Gender Differences in Tonic and Phasic Electrodermal Activity Components (2020)	University of Zakho	Iraq	**Result**
8	Religious Ecstatics, "Deep Listeners," and Musical Emotion (2009)	The Ohio State University	United States	—
9	Electrodermal Activity Is Sensitive to Sleep Deprivation but Does Not Moderate the Effect of Total Sleep Deprivation on Affect (2022)	Washington State University	United States	—
10	Methods of Electrodermal Recording (2012)	—	—	—

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).

Citing-text excerpts — how the field used this work

RESULT Gender Differences in Tonic and Phasic Electrodermal Activity Components

"...with respect to EDA have previously been carried out in some investigations, see for example (Edelberg, 1972; El -Sheikh, 2007; Hare et al. , 1971; Ketterer & Smith, 1977; Kimmel & Kimmel, 1965; Kopacz & Smith, 1971; Maltzman et al. , 1979; Neufeld & Davidson, 1974; Purohit, 1966), but not with..."

Contribution 2

Claim — Contribution 2

The researcher established a foundational framework for analyzing ischemic, hemodynamic, and neurohormonal responses to mental and exercise stress through the seminal PIMI study.

The researcher's contribution centers on the 1996 paper titled 'Ischemic, hemodynamic, and neurohormonal responses to mental and exercise stress: experience from the Psychophysiological Investigations of Myocardial Ischemia Study (PIMI).' This work serves as the core reference for this line of inquiry, with no subsequent follow-up papers by the same researcher identified in the provided data.

This line of work appears to address the complex interplay between psychological and physical stressors and their physiological impacts on the cardiovascular system. By integrating ischemic, hemodynamic, and neurohormonal metrics, the research suggests a comprehensive approach to understanding myocardial ischemia triggers, distinguishing itself through its multi-dimensional analysis of stress responses.

The significance of this contribution is evidenced by its substantial citation count of 359. Notably, 100% of the classified citing papers originate from independent researchers, indicating that the work has been widely adopted and validated by the broader scientific community outside the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Ischemic, hemodynamic, and neurohormonal responses to mental and exercise stress: experience from the Psychophysiological Investigations of Myocardial Ischemia Study (PIMI)

1996 · 359 citations (GS)

Field-normalised: 261 Semantic Scholar citations place it in the top 5% of Medicine papers from 1996 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Impact of Psychological Factors on the Pathogenesis of Cardiovascular Disease and Implications for Therapy (1999)	Duke University Medical Center, St Luke's/Roosevelt Hospital Center, Wake Forest University	United States	—
2	The Brain–Heart Axis: Neuroinflammatory Interactions in Cardiovascular Disease (2023)	Yale University	United States	—
3	Effects of psychological and social factors on organic disease: a critical assessment of research on coronary heart disease. (2002)	Uniformed Services University of the Health Sciences	United States	Background
4	Stress and cardiovascular disease (2012)	University College London	United Kingdom	—
5	Mental Stress and Cardiovascular Health—Part I (2022)	S. Elia Hospital, Umea University, University of Catania	Italy, Sweden	—
6	Behavioral science at the crossroads in public health: Extending horizons, envisioning the future (2006)	Johns Hopkins Bloomberg School of Public Health	—	Background

No.	Citing paper	Citing institution(s)	Country	S2
7	Depression and Cardiovascular Disorders (2013)	University of California, San Francisco	United States	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 established a critical link between mental stress-induced ischemia and all-cause mortality in coronary artery disease patients, providing foundational evidence for psychophysiological risk assessment.

The researcher's contribution centers on a seminal 2002 study examining mental stress–induced ischemia and all-cause mortality in patients with coronary artery disease. This work, derived from the Psychophysiological Investigations of Myocardial Ischemia study, serves as the core pillar of this research line, with no subsequent follow-up papers by the same author identified in the provided data.

This line of work appears to address the gap in understanding how psychological factors directly influence physiological outcomes and survival rates in cardiac patients. By focusing on stress-induced ischemia, the research suggests a novel approach to evaluating mortality risks beyond traditional clinical markers, highlighting the importance of psychophysiological interactions in cardiovascular health.

The significance of this contribution is underscored by its substantial citation count of 321, indicating widespread recognition within the field. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has been adopted and built upon by the broader scientific community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Mental stress–induced ischemia and all-cause mortality in patients with coronary artery disease: results from the Psychophysiological Investigations of Myocardial Ischemia study

2002 · 321 citations (GS)

Field-normalised: 231 Semantic Scholar citations place it in the top 5% of Medicine papers from 2002 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Mental Stress and Its Effects on Vascular Health (2022)	Mayo Clinic	United States	—
2	Psychosocial Stress and Cardiovascular Disease (2019)	Massachusetts General Hospital	United States	—
3	Association of Mental Stress–Induced Myocardial Ischemia With Cardiovascular Events in Patients With Coronary Heart Disease (2021)	Emory University	United States	—
4	Work stress and risk of death in men and women with and without cardiometabolic disease: a multicohort study (2018)	University College London, University of Turku	Finland, United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
5	Psychosocial influences on the development and course of coronary heart disease: current status and implications for research and practice. (2002)	University of Utah	United States	Background
6	Perceived stress in myocardial infarction: long-term mortality and health status outcomes (2012)	Saint Luke's Mid America Heart Institute	United States	—
7	The foundations of mind-body medicine: Love, good relationships, and happiness modulate stress and promote health (2024)	First Faculty of Medicine and General Teaching Hospital, Charles University in Prague, Witten/Herdecke University	Czech Republic, Germany	—

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 College London	United Kingdom	SCImago #30	3
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	2
University of California, San Francisco	United States	SCImago #98	2
Emory University	United States	SCImago #217 · THE 102 · QS 182	2
Herzen State Pedagogical University	Russia	—	2
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
Massachusetts General Hospital	United States	SCImago #100	2
Consiglio Nazionale delle Ricerche and Scientific Institute San Raffaele	Italy	—	1
Duke University Medical Center	United States	—	1
University of Cincinnati Medical Center	United States	SCImago #1407	1
University Hospital of Copenhagen County	Denmark	—	1
University of Zakho	Iraq	SCImago #9050	1
Kaiser Permanente of Northern California	United States	—	1
Vita Salute University and Scientific Institute San Raffaele	Italy	—	1
Brigham & Women's Hospital	United States	SCImago #130	1

Geographic distribution of citing authors

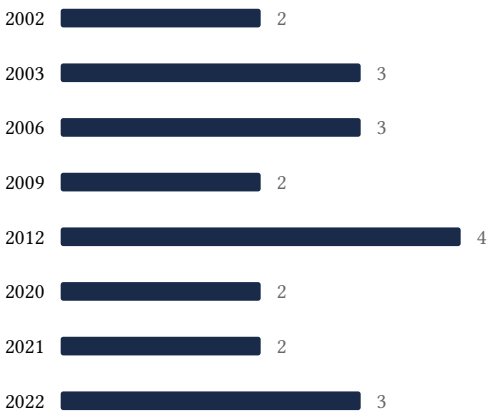
Country	Citing papers
United States	21

Country	Citing papers
United Kingdom	6
Italy	3
Sweden	2
Russia	2
Germany	2
Poland	1
Spain	1
Denmark	1
Finland	1
Czech Republic	1
Iraq	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).

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	Bilateral electrodermal activity, lateralized cerebral processing and sex	10	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Ischemic, hemodynamic, and neurohormonal responses to mental and exercise stress: experience from the Psychophysiological Investigations of Myocardial Ischemia Study (PIMI)	7	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Mental stress–induced ischemia and all-cause mortality in patients with coronary artery disease: results from the Psychophysiological Investigations of Myocardial Ischemia study	7	8 CFR 204.5(i)(3) — Outstanding Researcher