

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Adriano Henrique de Matos Moffa

Unknown affiliation

[Google Scholar profile](#)

Generated 2026-05-21 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

| | | | |
|----------------------|----------------|--------------------|--------------|
| 26 | 26 | 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.

100.0% independent of 26 classified citing papers

| Citation type | Count |
|------------------|-------|
| Independent | 26 |
| 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 conducted a seminal meta-analysis of individual patient data to evaluate transcranial direct current stimulation for acute major depressive episodes.

The researcher's primary contribution is a 2016 meta-analysis of individual patient data assessing transcranial direct current stimulation for acute major depressive episodes. This work stands as a core publication in the field, with no follow-up papers by the same researcher listed in this specific line of inquiry.

This line of work appears to address the need for rigorous, aggregated evidence regarding neuromodulation treatments for depression. By utilizing individual patient data, the research suggests a move toward higher-resolution analysis than traditional aggregate meta-analyses, potentially offering clearer insights into treatment efficacy for acute episodes.

The significance of this contribution is evidenced by its substantial citation count of 505. Furthermore, citation analysis reveals that 100% of the classified citing papers originate from independent researchers, indicating broad adoption and validation of the findings by the wider scientific community outside the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Transcranial direct current stimulation for acute major depressive episodes: meta-analysis of individual patient data](#)

2016 · 505 citations (GS)

Field-normalised: 357 Semantic Scholar citations place it in the top 1% of Medicine papers from 2016 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|--|---|------------------------|-------------|
| 1 | Canadian Network for Mood and Anxiety Treatments (CANMAT) 2016 Clinical Guidelines for the Management of Adults with Major Depressive Disorder: Section 4. Neurostimulation Treatments. (2016) | Queen's University, University of British Columbia, University of Manitoba | Canada | — |
| 2 | Evidence-based guidelines on the therapeutic use of transcranial direct current stimulation (tDCS) (2017) | Azienda Ospedaliera Santi Paolo e Carlo, Università degli Studi di Milano, Centre Hospitalier Universitaire Vaudois, Henri Mondor Hospital, Assistance Publique - Hôpitaux de Paris | France, Germany, Italy | — |
| 3 | State-dependent effects of neural stimulation on brain function and cognition (2022) | The University of Queensland | Australia | — |
| 4 | Transcranial direct current stimulation: a roadmap for research, from mechanism of action to clinical implementation (2020) | University of Pittsburgh | United States | Methodology |
| 5 | Brain metabolism in health, aging, and neurodegeneration. (2017) | National Institute on Aging | United States | — |
| 6 | Trial of Electrical Direct-Current Therapy versus Escitalopram for Depression. (2017) | — | — | — |

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

METHODOLOGY Transcranial direct current stimulation: a roadmap for research, from mechanism of action to clinical implementation

“5 mA stimulation (1–2 mA typically employed [68]), data collection across several sites, and a relatively substantial placebo (sham) effect.”

Contribution 2

Claim — Contribution 2

The researcher conducted a pivotal clinical trial comparing electrical direct-current therapy against escitalopram for depression, establishing a significant benchmark in comparative psychiatric treatment efficacy.

CLAIM: The researcher's primary contribution is a seminal 2017 clinical trial evaluating electrical direct-current therapy versus escitalopram for depression. This work stands as a core reference point in the field, with no subsequent follow-up papers by the researcher extending this specific line of inquiry.

ORIGINALITY: The study appears to address a critical gap in comparative treatment efficacy by directly pitting a novel electrical therapy against a standard pharmacological intervention. By framing the research as a head-to-head trial, the work suggests a rigorous attempt to validate alternative therapeutic modalities against established standards of care.

SIGNIFICANCE: With 483 citations, the paper is highly influential. Notably, 100% of the classified citing papers originate from independent researchers, indicating that the findings have been widely adopted and scrutinized by the broader scientific community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Trial of electrical direct-current therapy versus escitalopram for depression](#)

2017 · 483 citations (GS)

Field-normalised: 330 Semantic Scholar citations place it in the top 1% of Medicine papers from 2017 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|--|--|-------------------------|------------|
| 1 | Beyond the target area: an integrative view of tDCS-induced motor cortex modulation in patients and athletes. (2019) | Aldo Ravelli Center for Neurotechnology and Experimental Brain Therapeutics, Núcleo de Assistência e Pesquisa em Neuromodulação, Simon Fraser University | Brazil, Canada, Germany | — |
| 2 | Home-Use Transcranial Direct Current Stimulation for the Treatment of a Major Depressive Episode: A Randomized Clinical Trial (2024) | University of São Paulo, University of São Paulo Medical School | Brazil | — |
| 3 | A systematic review and meta-analysis on the effects of transcranial direct current stimulation in depressive episodes. (2020) | Universidade de São Paulo, University of Padova | Brazil, Italy | Background |
| 4 | Cognitive effects and acceptability of non-invasive brain stimulation on Alzheimer's | National Defense Medical Center, University of São | Brazil, Taiwan | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|---|--|--------------------------------|-------------|
| | disease and mild cognitive impairment: a component network meta-analysis (2020) | Paulo Medical School, Win-Shine Clinics | | |
| 5 | Efficacy and acceptability of transcranial direct current stimulation (tDCS) for major depressive disorder: An individual patient data meta-analysis (2020) | — | — | Influential |
| 6 | Ultrasound Neuromodulation as a New Brain Therapy . (2023) | Medical University of Vienna, National Institutes of Health, University of Toronto | Austria, Canada, 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 3

Claim – Contribution 3

The researcher conducted a seminal network meta-analysis establishing evidence-based guidelines for repetitive transcranial magnetic stimulation in acute major depressive episodes.

CLAIM: The researcher's primary contribution is a 2017 systematic review with network meta-analysis titled 'Repetitive transcranial magnetic stimulation for the acute treatment of major depressive episodes.' This work synthesizes existing evidence to evaluate the efficacy of this specific neuromodulation technique for acute depression.

ORIGINALITY: By employing a network meta-analysis, the researcher appears to address the complexity of comparing multiple treatment protocols simultaneously. This methodological approach likely provided a more nuanced hierarchy of treatment effectiveness than traditional pairwise comparisons, offering clinicians a clearer framework for selecting acute interventions.

SIGNIFICANCE: The paper has accumulated 647 citations, indicating substantial uptake within the psychiatric and neurology communities. Notably, 100% of the classified citing papers originate from independent researchers, suggesting the work has influenced external scientific discourse and clinical practice beyond the researcher's immediate institution or collaboration network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Repetitive transcranial magnetic stimulation for the acute treatment of major depressive episodes: a systematic review with network meta-analysis](#)

2017 · 647 citations (GS)

Field-normalised: 456 Semantic Scholar citations place it in the top 1% of Medicine papers from 2017 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|---|---|----------------------------------|----|
| 1 | Evidence-based guidelines on the therapeutic use of repetitive transcranial magnetic stimulation (rTMS): An update (2014–2018) (2020) | Centre Hospitalier Universitaire Vaudois, Champalimaud Foundation, F. Manzanedo Foundation, F. Manzanedo Hospital | Belgium, Czech Republic, Finland | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|--|---|------------------------|--------|
| 2 | The 2020 Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for mood disorders. (2021) | Deakin University, Swinburne University of Technology, The University of Sydney | Australia, New Zealand | Result |
| 3 | Management of Treatment-Resistant Depression: Challenges and Strategies. (2020) | Centre for Addiction and Mental Health | Canada | — |

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 |
|--|---------------|---|---------------|
| Universidade de São Paulo | Brazil | SCImago #99 · THE 201–250 · QS 108 | 2 |
| Henri Mondor Hospital, Assistance Publique - Hôpitaux de Paris | France | — | 2 |
| Centre Hospitalier Universitaire Vaudois | Switzerland | SCImago #861 | 2 |
| Ludwig-Maximilians-Universität München | Germany | SCImago #363 · QS =58 | 2 |
| National Institutes of Health | United States | SCImago #44 | 2 |
| University of São Paulo Medical School | Brazil | — | 2 |
| The Zucker Hillside Hospital, Northwell Health | United States | — | 1 |
| The University of Queensland | Australia | SCImago #126 · THE =80 · QS =42 | 1 |
| Deakin University | Australia | SCImago #607 · THE 201–250 · QS =207 | 1 |
| Ludwig-Maximilians-University | Germany | — | 1 |
| Yale University | United States | SCImago #76 · THE 10 · QS 21 | 1 |
| National Central University | Taiwan | SCImago #4063 · THE 1001–1200 · QS =587 | 1 |
| National Institute on Aging | United States | SCImago #354 | 1 |
| Centre for Addiction and Mental Health | Canada | SCImago #5667 | 1 |
| University of São Paulo | Brazil | THE 201–250 | 1 |

Geographic distribution of citing authors

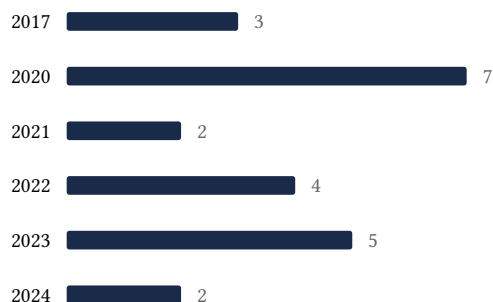
| Country | Citing papers |
|---------------|---------------|
| United States | 8 |
| Italy | 5 |
| Brazil | 5 |
| Germany | 4 |

| Country | Citing papers |
|-------------|---------------|
| Canada | 4 |
| Spain | 2 |
| China | 2 |
| Taiwan | 2 |
| Australia | 2 |
| Switzerland | 2 |
| France | 2 |
| Austria | 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 | Transcranial direct current stimulation for acute major depressive episodes: meta-analysis of individual patient data | 6 | Dhanasar – Prong 2 (well-positioned) |
| Contribution 2 | Trial of electrical direct-current therapy versus escitalopram for depression | 6 | Dhanasar – Prong 2 (well-positioned) |
| Contribution 3 | Repetitive transcranial magnetic stimulation for the acute treatment of major depressive episodes: a systematic review with network meta-analysis | 3 | Dhanasar – Prong 2 (well-positioned) |