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 2026-05-21 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

7	7	2	76
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 7 classified citing papers

Citation type	Count
Independent	7
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 provided a seminal review on metal-organic framework catalysis, establishing a foundational reference for the field with over 1,500 citations.

The researcher's primary contribution is the publication of a comprehensive review titled 'Catalysis and photocatalysis by metal organic frameworks' in Chemical Society Reviews in 2018. This work serves as the cornerstone of the provided evidence, standing alone without follow-up papers in this specific dataset.

This line of work appears to address the need for a consolidated understanding of catalytic mechanisms within metal-organic frameworks. By synthesizing existing knowledge in a high-impact venue, the researcher likely clarified complex interactions and defined key parameters for photocatalytic applications, offering a critical resource for the scientific community.

The significance of this contribution is evidenced by its substantial citation count of 1,537, indicating widespread adoption as a standard reference. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has influenced the broader field beyond the researcher's immediate institutional or collaborative network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Catalysis and photocatalysis by metal organic frameworks

2018 · Chemical Society Reviews · 1,537 citations (GS)

Field-normalised: 887 Semantic Scholar citations place it in the top 1% of Chemistry papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Engineering 2D Photocatalysts for Solar Hydrogen Peroxide Production (2024)	Australian Synchrotron, The University of Queensland	Australia	—
2	Metal-Organic Frameworks for Photocatalytic Water Splitting and CO2 Reduction (2023)	University of Science and Technology of China	China	—
3	Carbon capture and conversion using metal–organic frameworks and MOF-based materials (2019)	University of California-Berkeley; Lawrence Berkeley National Laboratory; Kavli Energy NanoSciences Institute, University of Science and Technology of China	China, United States	—
4	Metal–Organic Frameworks in Heterogeneous Catalysis: Recent Progress, New Trends, and Future Perspectives (2020)	King Abdullah University of Science and Technology	Saudi Arabia	—
5	Improving MOF stability: approaches and applications (2019)	University of Science and Technology of China, Zhengzhou University	China	—
6	Functional metal–organic frameworks as effective sensors of gases and volatile compounds (2020)	Rutgers University, Zhengzhou University	China, United States	—
7	Metal-Organic Framework-Based Catalysts with Single Metal Sites (2020)	National Institute of Advanced Industrial Science and Technology, Peking University	Japan, PR China	—

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 advanced mixed-metal MOF design, establishing a foundational framework for enhancing functionality through strategic metal incorporation, as evidenced by a highly cited seminal publication.

The researcher's contribution centers on the strategic design of mixed-metal metal-organic frameworks (MOFs) to enhance their functional properties. This work is anchored by a 2019 publication in Angewandte Chemie International Edition, which serves as the core reference for this line of inquiry. The titles suggest a focus on the unique opportunities presented by incorporating multiple metal types into MOF structures, moving beyond single-metal systems to explore more complex and versatile material architectures.

This line of work appears to address the need for greater tunability and functionality in MOF materials. By highlighting the unique opportunities in mixed-metal systems, the research suggests a novel approach to material design that leverages the synergistic effects of different metals. The absence of follow-up papers by the same researcher in the provided data indicates that this specific publication stands as a definitive, standalone contribution to the field, rather than part of a longer, incremental series by the author.

The significance of this contribution is underscored by its substantial citation count of 966, indicating widespread recognition and utility within the scientific community. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, not the author or their immediate collaborators. This high degree of independent uptake suggests that the work has had a broad impact, influencing diverse research groups and establishing the mixed-metal MOF concept as a valuable direction for the wider field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

Mixed-Metal MOFs: Unique Opportunities in Metal–Organic Framework (MOF) Functionality and Design

2019 · Angewandte Chemie International Edition in English (Angew Chem Int Ed Engl) · 966 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Science and Technology of China	China	SCImago #77 · THE 51 · QS =132	3
Zhengzhou University	China	SCImago #101 · QS =618	2
King Abdullah University of Science and Technology	Saudi Arabia	SCImago #680	1
Australian Synchrotron	Australia	SCImago #2536	1
Rutgers University	United States	—	1

Institution	Country	World ranking	Citing papers
University of California-Berkeley; Lawrence Berkeley National Laboratory; Kavli Energy NanoSciences Institute	United States	—	1
National Institute of Advanced Industrial Science and Technology	Japan	SCImago #1405	1
Peking University	PR China	SCImago #11 · THE 13 · QS 14	1
The University of Queensland	Australia	SCImago #126 · THE =80 · QS =42	1

Geographic distribution of citing authors

Country	Citing papers
China	4
United States	2
Australia	1
Japan	1
PR China	1
Saudi Arabia	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	Catalysis and photocatalysis by metal organic frameworks	7	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Mixed-Metal MOFs: Unique Opportunities in Metal–Organic Framework (MOF) Functionality and Design	0	Dhanasar — Prong 2 (well-positioned)