

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

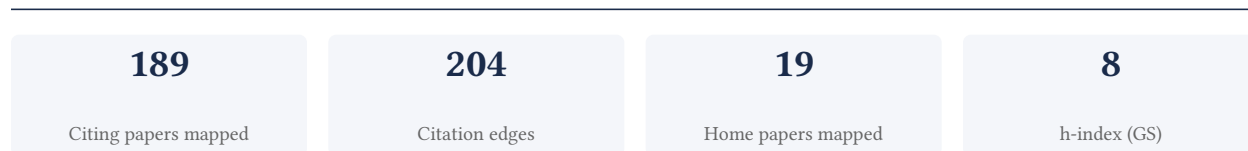
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[Google Scholar profile](#)

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



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.

94.0% independent of 67 classified citing papers

Citation type	Count
Independent	63
Self-citation	0
Co-author	4
Same-institution	0

122 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 identified MAPKAPK2 as a master regulator of RNA-binding proteins and subsequently developed novel MK2 inhibitors to target this pathway in head and neck squamous cell carcinoma.

The researcher established MAPKAPK2 as a critical regulator of transcript stability and tumor progression, as detailed in a 2019 core paper. This foundational work was extended in 2023 with the synthesis and evaluation of novel pyrrolone-fused benzosuberene MK2 inhibitors, suggesting a translational approach to targeting this mechanism in HNSCC cells.

This line of work appears to bridge the gap between identifying a molecular regulator and developing specific pharmacological interventions. By moving from the characterization of MAPKAPK2's role in tumor progression to the design of targeted inhibitors, the researcher addresses the need for precise therapeutic agents that modulate RNA-binding protein stability.

The significance of this contribution is evidenced by the core paper's 160 citations, with 94% originating from independent researchers. This high level of independent uptake indicates that the identification of MAPKAPK2 as a master regulator has become a recognized reference point in the field, validating the originality and impact of the researcher's findings.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 47 · 6 flagged influential by Semantic Scholar

CORE PAPER

[MAPKAPK2: the master regulator of RNA-binding proteins modulates transcript stability and tumor progression](#)

2019 · Journal of Experimental & Clinical Cancer Research 38 (1), 121, 2019 · 160 citations (GS)

Field-normalised: 103 Semantic Scholar citations place it in the top 5% of Medicine papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A review of cytokine-based pathophysiology of Long COVID symptoms	Retired	—	Influential
2	Evaluation of Pyrrolone-Fused Benzo-suberene MK2 Inhibitors as Promising Therapeutic Agents for HNSCC: In Vitro Efficacy, In-Vivo Safety, and Pharmacokinetic ...	Academy of Scientific and Innovative Research, CSIR-Institute of Himalayan Biore-source Technology (CSIR-IHBT), King's College London	India, United Kingdom	Influential
3	MAP kinase signaling at the crossroads of inflammasome activation	Ghent University	Belgium	—
4	Regulation of senescence traits by MAPKs	National Institutes of Health	United States	—
5	Proteomics, human environmental exposure, and cardiometabolic risk	Beth Israel Deaconess Medical Center, Boston University School of Medicine, Brigham and Women's Hospital	United States	—
6	The p38MAPK-MK2 Signaling Axis as a Critical Link Between Inflammation and Synaptic Transmission	Manchester Metropolitan University	United Kingdom	—
7	Molecular mechanisms of extracellular-ATP-mediated colorectal cancer progression: Implication of purinergic receptors-mediated nucleocytoplasmic shuttling of HuR	Al-Azhar University	Egypt	—

No.	Citing paper	Citing institution(s)	Country	S2
8	Synthesis and biological evaluation of halogenated phenoxchalcones and their corresponding pyrazolines as cytotoxic agents in human breast cancer	Cairo University, Modern University for Technology and Information, National Research Centre	Egypt	—
9	Integrated analysis of the functions and prognostic values of RNA binding proteins in lung squamous cell carcinoma	Lanzhou University Second Hospital	China	—
10	Kinetics of osmotic stress regulate a cell fate switch of cell survival	Vanderbilt University	United States	—
11	Mitogen-activated protein kinase-activated protein kinase-2 (MK2) and its role in cell survival, inflammatory signaling, and migration in promoting cancer	The University of New Mexico, University of Kansas Medical Center	United States	—
12	Acute contractile activity induces the activation of the mitochondrial integrated stress response and the transcription factor ATF4	York University	Canada	—
13	Long non-coding RNA MAGEA4-AS1 binding to p53 enhances MK2 signaling pathway and promotes the proliferation and metastasis of oral squamous cell carcinoma	Anhui Medical University, Peking University Shenzhen Hospital	China	Influential
14	Lactobacillus acidophilus ATCC 4356 Exopolysaccharides Suppresses Mediators of Inflammation through the Inhibition of TLR2/STAT-3/P38-MAPK Pathway in DEN ...	Ain Shams University, National Centre for Radiation Research and Technology	Egypt	—
15	Integrated analysis of the prognosis-associated RNA-binding protein genes and candidate drugs in renal papillary cell carcinoma	The First Affiliated Hospital of Nanjing Medical University	China	—
16	Rapamycin, Acarbose and 17α-estradiol share common mechanisms regulating the MAPK pathways involved in intracellular signaling and inflammation	University of Michigan College of Literature Science and The Arts, University of Michigan School of Medicine	United States	—
17	Mechanism and research progress of MAPK signaling pathway in myocardial fibrosis	Heilongjiang University of Chinese Medicine, The First Affiliated Hospital of Heilongjiang University of Chinese Medicine	China	Influential
18	Comprehensive characterization of pathogenic missense CTRP6 variants and their association with cancer	Oklahoma State University, University of Bonn	Germany, United States	—
19	The MK2 cascade mediates transient alteration in mGluR-LTD and spatial learning in a murine model of Alzheimer's disease	Hannover Medical University, University of Bradford, University of Warwick	Germany, United Kingdom	—
20	Therapeutic potential of MK2 kinase inhibition in pathogenesis of Parkinson's disease	National Institute of Pharmaceutical Education and Research (NIPER) - Raebareli	India	—
21	ΔNp63α promotes Epstein-Barr virus latency in undifferentiated epithelial cells	The University of Hong Kong, University of Wisconsin-Madison	China, United States	Influential

No.	Citing paper	Citing institution(s)	Country	S2
22	Small molecule targeting of the p38/Mk2 stress signaling pathways to improve cancer treatment	Cardiff University, Greehey Children's Cancer Research Institute, UT Health San Antonio, Nazarbayev University	Kazakhstan, United Kingdom, United States	—
23	Exploring MAP3K genes in gastric cancer: biomarkers, tumor microenvironment dynamics, and chemotherapy resistance	Shenzhen Guangming District People's Hospital	China	—
24	Establishment and characterization of six canine hepatocellular carcinoma cell lines	Konkuk University	South Korea	—
25	Epstein-Barr virus infectious particles initiate B cell transformation and modulate cytokine response	German Cancer Research Center	Germany	—
26	Integrated analysis of RNA-binding proteins associated with the prognosis and immunosuppression in squamous cell carcinoma of head and neck	The First Affiliated Hospital of University of South China	China	—
27	Enhancing Skin Repair and Photodamage Reversal With 755-nm Picosecond Laser and Bioactive Polymer Dots in a Nude Mouse Model	China Medical University, China Medical University Hospital, MacKay Memorial Hospital	Taiwan	—
28	MK2 deficiency decreases mortality in male mice during the inflammatory phase after myocardial infarction	Hannover Medical School, Montreal Heart Institute	Canada, Germany	Influential
29	MK2 nonenzymatically promotes nuclear translocation of caspase-3 and resultant apoptosis	Johns Hopkins University School of Medicine, Uniformed Services University of the Health Sciences, University of Louisville School of Medicine	United States	—
30	Activation of the MKK3-p38-MK2-ZFP36 Axis by coronavirus infection restricts the upregulation of AU-rich element-containing transcripts in proinflammatory responses	Guangdong Laboratory for Lingnan Modern Agricultural Science and Technology, South China Agricultural University, Zhaoqing Institute of Biotechnology Co., Ltd.	China	—

Showing the 30 most-cited of 42 independent citing papers.

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.

FOLLOW-UP WORK

[Novel pyrrolone-fused benzosuberene MK2 inhibitors: synthesis, pharmacophore modelling, molecular docking, and anti-cancer efficacy evaluation in HNSCC cells](#)

2023 · Journal of Biomolecular Structure and Dynamics 41, 1-22, 2023 · 8 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Evaluation of Pyrrolone-Fused Benzosuberene MK2 Inhibitors as Promising Therapeutic Agents for HNSCC: In Vitro Efficacy, In-Vivo Safety, and Pharmacokinetic ...	Academy of Scientific and Innovative Research, CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT), King's College London	India, United Kingdom	—
2	Bosutinib Restores the Sensitivity of Colistin against Mcr-1-Positive E. coli	—	—	—
3	Molecular Docking and Target-Specific Binding Profiles of Benzosuberane-Based Compounds	—	—	—
4	Nasogastric tube nutrition support enhances chemoradiotherapy compliance and alleviates mucosal reactions in nasopharyngeal carcinoma: a 856-case ...	—	—	—
5	Pd-Catalyzed Tandem Approach for 1, 2, 3-Triazolo-azepine Fused Benzosuberenes and 1, 2, 3-Triazolobenzazepines Synthesis	—	—	—

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 an amorphous solid dispersion strategy to enhance phloretin bioavailability and therapeutic efficacy against NAFLD by targeting the mTOR/SREBP-1c axis.

The researcher’s contribution centers on a 2023 study demonstrating that amorphous solid dispersion augments the bioavailability of phloretin and its therapeutic efficacy in NAFLD mice via the mTOR/SREBP-1c axis. This work stands as a core publication in this specific 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 challenge of improving the delivery and effectiveness of phloretin for treating non-alcoholic fatty liver disease. By focusing on the mTOR/SREBP-1c axis, the research suggests a targeted mechanistic approach to overcoming bioavailability limitations, representing a novel formulation strategy inferred from the title.

The significance of this contribution is evidenced by its citation record, with 17 citations indicating peer engagement. Notably, 94.0% of the 67 citing papers classified for this scholar originate from independent researchers, suggesting that the work has resonated beyond the researcher’s immediate circle and influenced broader scientific discourse.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

[Amorphous solid dispersion augments the bioavailability of phloretin and its therapeutic efficacy via targeting mTOR/SREBP-1c axis in NAFLD mice](#)

2023 · Biomaterials Advances 154, 213627, 2023 · 17 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	The synergistic effect of α-tocopherol and phloretin-loaded nanoemulsions on improve-	Food Processing Institute, Heilongjiang Academy of Agricul-	China	—

No.	Citing paper	Citing institution(s)	Country	S2
	ment of the stability, antioxidant, and tyrosinase inhibitory potentiality	tural Sciences, Shenyang Pharmaceutical University		
2	Inhibitory Effects and the Potential Mechanism of Phloretin on Animal Fatty Acid Synthase	University of Chinese Academy of Sciences	China	—
3	Electrospinning to prepare water dispersible diniconazole/hydroxypropyl-γ-cyclodextrin nanofibers: increased bioavailability of diniconazole	Northeast Agricultural University	China	—
4	Amorphous solid dispersions as a strategy to enhance the bioavailability and stability of formulations containing plant active ingredients: An integrative review	Federal University of Pernambuco	Brazil	—
5	Phytomedicine in the Battle Against Liver Cancer: The Impact of Phytochemical mTOR Inhibition	Amrita Vishwa Vidyapeetham, ARKA JAIN University, Chitkara University	India	—

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
Academy of Scientific and Innovative Research	India	SCImago #2675	3
University of Wisconsin-Madison	United States	SCImago #174 · THE =53 · QS =110	2
Sun Yat-sen University	China	SCImago #40 · THE 201–250 · QS =276	2
CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT)	India	—	2
Vanderbilt University	United States	SCImago #613 · THE =92 · QS 250	2
Boise State University	United States	SCImago #5216	1
University of Chinese Academy of Sciences	China	SCImago #5 · QS =362	1
Cardiff University	United Kingdom	SCImago #664 · THE 201–250 · QS 181	1
University at Albany, State University of New York	United States	QS 901-950	1
Chitkara University	India	THE 601–800 · QS 1201-1400	1
The First Affiliated Hospital of Nanjing Medical University	China	—	1
German Cancer Research Center	Germany	—	1

Institution	Country	World ranking	Citing papers
Case Western Reserve University School of Medicine	United States	—	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
Amrita Vishwa Vidyapeetham	India	SCImago #3193 · QS 1001-1200	1

Geographic distribution of citing authors

Country	Citing papers
China	17
United States	13
India	7
Germany	4
United Kingdom	4
Canada	3
Egypt	3
Belgium	1
Uruguay	1
Brazil	1
Chile	1
Kazakhstan	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.

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	MAPKAPK2: the master regulator of RNA-binding proteins modulates transcript stability and tumor progression	47	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Amorphous solid dispersion augments the bioavailability of phloretin and its therapeutic efficacy via targeting mTOR/SREBP-1c axis in NAFLD mice	5	Dhanasar — Prong 2 (well-positioned)