

# Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

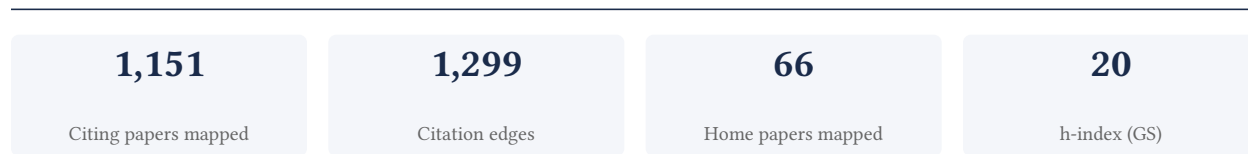
## Raju Sharma

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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 Criterion 5 (original contributions of major significance). 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.

**96.0% independent** of 101 classified citing papers

Citation type	Count
Independent	97
Self-citation	1
Co-author	3
Same-institution	0

1,050 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 advanced seismic retrofitting of RC joints using UHP-HFRC and expanded the field's understanding of advanced concrete materials through highly cited, independently recognized publications.*

The researcher's core contribution centers on the 2019 paper regarding the behavior of reinforced concrete exterior beam-column joints retrofitted with ultra-high-performance hybrid fiber-reinforced concrete. This work serves as the foundation for a broader investigation into advanced concrete materials and their engineering properties.

This line of work appears to address the need for improved seismic resilience in existing infrastructure by introducing high-performance materials. The subsequent 2022 publications suggest a logical expansion from specific joint retrofitting to a comprehensive review of mineral admixtures and fibers, as well as an exploration of phase-change materials for sustainable construction, indicating a broadening scope within advanced concrete technology.

The significance of this research is evidenced by substantial citation counts, with the core paper accumulating 119 citations and the follow-up reviews reaching 210 and 99 citations respectively. Furthermore, the high degree of citation independence, with 96% of citations originating from independent researchers, suggests that this work has been widely adopted and recognized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 30 · 1 flagged influential by Semantic Scholar

#### CORE PAPER

### [Behavior of RC exterior beam column joint retrofitted using UHP-HFRC](#)

2019 · Construction and Building Materials 195, 376-389, 2019 · 119 citations (GS)

Field-normalised: 90 Semantic Scholar citations place it in the top 5% of Engineering papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">A review of developments and challenges for UHPC in structural engineering: Behavior, analysis, and design</a>	National Cheng Kung University, University of Michigan, University of Texas at Arlington	Taiwan, United States	—
2	<a href="#">Parameters influencing fluidity of UHPC and their effect on mechanical and durability properties</a>	University of Michigan	United States	—
3	<a href="#">Effect of recycled aggregate concrete on the seismic behavior of DfD beam-column joints under cyclic loading</a>	Tongji University	China	Influential
4	<a href="#">Effect of different size of joint enlargement on seismic behavior of gravity load designed RC beam-column connections</a>	Shahrood University of Technology	Iran	—
5	<a href="#">Seismic retrofitting of nonseismically detailed exterior reinforced concrete beam-column joint by active confinement using shape memory alloy wires</a>	Queen's Univ. Belfast, Queen's University Belfast, The University of British Columbia, Okanagan Campus	Canada, Ireland, United Kingdom	—
6	<a href="#">Performance of geopolymer mortar and steel fiber reinforced geopolymer mortar on rehabilitation of seismically detailed beam-column joint</a>	National Institute of Technology, Silchar	India	—

No.	Citing paper	Citing institution(s)	Country	S2
7	<a href="#">Reinforced UHPC-ECC-SCC Shear-Critical Frames Under Lateral Cyclic Loading</a>	Toronto Metropolitan University	Canada	—
8	<a href="#">Enhancing shear behaviour of the exterior beam-column joint using sufficient reinforcement details or ultra-high-performance fiber-reinforced concrete</a>	Zagazig University	Egypt	—

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

### [A comprehensive review on effects of mineral admixtures and fibers on engineering properties of ultra-high-performance concrete](#)

2022 · Journal of Building Engineering 45, 103314, 2022 · 210 citations (GS)

Field-normalised: 152 Semantic Scholar citations place it in the top 1% of Engineering papers from 2022 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Improved forecasting of the compressive strength of ultra-high-performance concrete (UHPC) via the CatBoost model optimized with different algorithms</a>	Bitlis Eren University, Inonu University	Turkey	—
2	<a href="#">Prediction of mechanical properties of high-performance concrete and ultrahigh-performance concrete using soft computing techniques: a critical review</a>	National Institute of Technology Patna	India	—
3	<a href="#">Effect of hybrid steel, polypropylene, polyvinyl alcohol, and jute fibers on the properties of ultra-high performance fiber reinforced concrete exposed to elevated ...</a>	Fayoum University, Islamic University of Gaza, Najran University	Egypt, Palestine, Saudi Arabia	—
4	<a href="#">Application of cellulose fibre in ultra-high-performance concrete to mitigate autogenous shrinkage</a>	China Construction Industrial Engineering and Technology Research Academy Co.Ltd, Harbin Institute of Technology	China	—
5	<a href="#">Applications of laser-induced breakdown spectroscopy in corrosion detection in reinforced concrete materials: a critical review</a>	Islamic University of Madinah, King Fahd University of Petroleum and Minerals, King Fahd University of Petroleum & Minerals	Kingdom of Saudi Arabia, Saudi Arabia	—
6	<a href="#">Investigating the effect of steel micro-and macro-fibers on the bond behavior of steel rebar embedded in ultra-high performance concrete</a>	Tabriz Branch Islamic Azad University, Texas State University	Iran, United States	—
7	<a href="#">Properties of ultra-high-performance self-compacting fiber-reinforced concrete modified with nanomaterials</a>	Erbil Polytechnic University, Gheorghe Asachi Technical University of Iasi, Jouf University	Iraq, Ireland, Pakistan	—
8	<a href="#">The effect of JKR surface energy on the flowing property of fresh concrete in DEM simulation</a>	University of South China	China	—

No.	Citing paper	Citing institution(s)	Country	S2
9	<a href="#">Effect of volcanic pumice powder on the properties of fiber-reinforced cement mortars in aggressive environments</a>	Jazan University	Saudi Arabia	—
10	<a href="#">Recent trends in rubberized and non-rubberized ultra-high performance geopolymer concrete for sustainable construction: A review</a>	Imam Mohammad Ibn Saud Islamic University (IMSIU), Islamic University of Madinah, King Faisal University	Chile, Malaysia, Saudi Arabia	—
11	<a href="#">Optimizing rice husk ash for ultra-high-performance concrete: a comprehensive review of mechanical properties, durability, and environmental benefits</a>	Hourani Center for Applied Scientific Research (HCASR), Al-Ahliyya Amman University, Islamic University of Gaza, Prince Sattam Bin Abdulaziz University	Iraq, Jordan, Malaysia	—

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

### **Phase-change materials in concrete: Opportunities and challenges for sustainable construction and building materials**

2022 · Materials 15 (1), 335, 2022 · 99 citations (GS)

Field-normalised: 77 Semantic Scholar citations place it in the top 5% of Engineering papers from 2022 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Assessment of thermal comfort and its potential for energy efficiency in low-income tropical buildings: a review</a>	Busitema University, Makerere University, University of Leeds	Uganda, United Kingdom	—
2	<a href="#">A roadmap for biomass-driven development of sustainable phase change materials</a>	Monash University, Poznan University of Technology, Silesian University of Technology	Australia, France, Poland	—
3	<a href="#">Shape-Stabilization of Phase Change Materials with Carbon-Conscious Poly (hydroxy) Urethane Foams</a>	National Renewable Energy Laboratory	United States	—
4	<a href="#">Thermal energy management in buildings and constructions with phase change material-epoxy composites: a review</a>	Institute of Chemical Technology	India	—
5	<a href="#">Greening the Nigerian construction sector: stakeholder reflection on smart materials advancements</a>	Engineering Education Transformations Institute, Federal University of Technology Akure, Lakehead University	United States	—
6	<a href="#">Preparation and characterization of shape-stable bio-based composite phase change materials for thermal energy storage: coconut oil/activated carbon from cherry ...</a>	Yalova University	Turkey	—
7	<a href="#">Nanoencapsulated Phase-Change Materials with a Hybrid DOPO/SiO2 Shell for Integrated Ther-</a>	University of Jinan	China	—

No.	Citing paper	Citing institution(s)	Country	S2
	<a href="#">mal Regulation and Flame Retardancy in Building Materials</a>			
8	<a href="#">Phase change materials embedded in expanded clay aggregates to develop energy storage concrete: A review</a>	Politecnico di Milano	Italy	—
9	<a href="#">Microencapsulation of polymeric phase change materials (MPCM) for thermal energy storage in industrial coating applications</a>	Institute of Chemical Technology	India	—
10	<a href="#">Fabrication of sound absorption gypsum/hempcrete composite with robust antistatic electricity by Taguchi optimization method</a>	Wuhan Textile University	China	—
11	<a href="#">Investigations on the Thermal Performance of Mortar Boards Incorporated with Macroencapsulated Phase Change Materials</a>	Indian Institute of Technology Guwahati, Indian Institute of Technology Tirupati, Veermata Jijabai Technological Institute	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.

## Contribution 2

### Claim – Contribution 2

*The researcher established a foundational framework for utilizing waste plastics in concrete, subsequently expanding this expertise to investigate sustainable cementitious systems involving belite-rich cement and carbonation curing.*

The researcher’s contribution centers on advancing sustainable construction materials, anchored by the seminal 2016 review on using waste plastic in concrete. This core work, which has accumulated 544 citations, appears to have defined key parameters for integrating plastic waste into concrete matrices, establishing a baseline for subsequent research in the field.

Originality in this line of work is suggested by the chronological progression from general plastic waste utilization to more specialized investigations. The follow-up papers indicate a shift toward novel binder systems, specifically exploring the influence of hygiene tissue paper additives and carbonation curing on belite-rich cement. This trajectory suggests an effort to address broader sustainability challenges by combining waste valorization with low-carbon cement technologies.

The significance of this research is evidenced by the high citation count of the core paper and the independent uptake of the work. With 96.0% of citing papers originating from independent researchers, the field appears to have widely adopted these findings. The continued citation of the follow-up studies further indicates that the researcher’s expanded focus on belite-rich cement and carbonation curing remains relevant to the broader scientific community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 29 · 1 flagged influential by Semantic Scholar

### CORE PAPER

#### [Use of different forms of waste plastic in concrete—a review](#)

2016 · Journal of cleaner production 112, 473-482, 2016 · 544 citations (GS)

Field-normalised: 381 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2016 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">The past and future of sustainable concrete: A critical review and new strategies on cement-based materials</a>	Instituto Superior Técnico, Universidade de Lisboa, Technical Engineering College	Portugal	—
2	<a href="#">Plastic waste as a significant threat to environment—a systematic literature review</a>	University of Peshawar, University of Swabi, University of Swat	Pakistan	—
3	<a href="#">Current options for characterizing, sorting, and recycling polymeric waste</a>	University of São Paulo	Brazil	—
4	<a href="#">A Review on formulation of polyester resin from recycled PET and its composite with the incorporation of metallic fillers: Utilization of recycled PET products</a>	CIPET: IPT	India	—
5	<a href="#">Versatile imidazole-anion-derived ionic liquids with unparalleled activity for alcoholysis of polyester wastes under mild and green conditions</a>	Qingdao University of Science and Technology, Shandong University of Science and Technology	China, PR China	—
6	<a href="#">Cascading polymer macro-debris upcycling and microparticle removal as an effective life cycle plastic pollution mitigation strategy</a>	Cornell University	United States	—
7	<a href="#">Strategy for repurposing of disposed PPE kits by production of biofuel: Pressing priority amidst COVID-19 pandemic</a>	University of Petroleum and Energy Studies	India	—
8	<a href="#">Thermodynamic properties of aggregate coated by different types of waste plastic: adhesion and moisture resistance of asphalt-aggregate systems</a>	Oak Ridge National Laboratory, University of Tennessee, Knoxville	United States	—
9	<a href="#">Waste plastic powder coating on acidic aggregates: A new hydrophobic coating technology to build Moisture-Resistant asphalt mixtures</a>	Massachusetts Institute of Technology, Paragon Technical Service, Inc, The University of Tennessee	United States	—
10	<a href="#">Synthesis and characterization of flame-retardant polyurethane based on new chain extenders</a>	South China University of Technology	China	—
11	<a href="#">Using recycled coarse aggregate and ceramic waste to produce sustainable economic concrete</a>	Asayesh Construction Safety, Heriot-Watt University, Khatib & Alami	United Kingdom	—
12	<a href="#">The mechanical and durability behaviour of sustainable self-compacting concrete partially contained waste plastic as fine aggregate</a>	High Institute of Engineering, University of Fallujah, University of Garmian	Egypt, Iraq	—
13	<a href="#">Combined effects of biochar and recycled plastic aggregates on mechanical behavior of concrete</a>	University of Parma	Italy	—
14	<a href="#">Recycling fresh concrete waste: A review</a>	University of New South Wales Canberra	Australia	—
15	<a href="#">Flexural behavior of sustainable reinforced concrete beams containing HDPE plastic waste as coarse aggregate</a>	University of Technology, Wasit University	Iraq	—

No.	Citing paper	Citing institution(s)	Country	S2
16	<a href="#">Mortar with substituted recycled PET powder: Experimental characterization and data-driven strength predictive models</a>	Politecnico di Torino	Italy	—
17	<a href="#">Experimental studies on coal mine overburden incorporated concrete as a sustainable substitute for fine aggregate in concrete construction</a>	National Institute of Technology, National Institute of Technology, Rourkela	India	—
18	<a href="#">Effect of temperature and thermal shock on concrete containing hazardous electronic waste</a>	National Institute of Technology, National Institute of Technology, Tiruchirappalli	India	—
19	<a href="#">Plastic waste particles in mortar composites: sulfate resistance and thermal coefficients</a>	ENPO, University of Oran 1, Ahmed Benbella	Algeria	<b>Influential</b>
20	<a href="#">Molecular dynamics study on improvement effect of polyethylene terephthalate on adhesive properties of asphalt and cement-based composite interface</a>	Henan University of Technology	China	—
21	<a href="#">Plastic waste management, a concern for community</a>	SRM University	—	—
22	<a href="#">Physical and durability properties of recycled polyethylene terephthalate (PET) fibre reinforced concrete</a>	Eastern Mediterranean University	Turkey	—
23	<a href="#">A review of the valorization and management of industrial spent catalyst waste in the context of sustainable practice: The case of the State of Kuwait in parallel to ...</a>	Kuwait Institute for Scientific Research, London South Bank University, University College London	Italy, Kuwait, United Kingdom	—
24	<a href="#">Investigation of fresh state, mechanical and durability properties of cementitious systems reinforced with different plastic waste fiber materials: an experimental study</a>	Bursa Uludag University, Ege University, Yüzüncü Yıl University	Turkey	—
25	<a href="#">Influence of recycled plastic on the thermal transmittance and sustainable assessment of concrete mixes</a>	Cyprus International Univ., Cyprus International University	Cyprus	—
26	<a href="#">Sulfuric acid resistance of quartz sandstone aggregate concrete</a>	Malaviya National Institute of Technology, University of Dundee	India, United Kingdom	—
27	<a href="#">A Study of Reinforced Cement Paste Properties with Woven Fabrics from Poly (ethylene Terephthalate) Bottle Yarn</a>	Kasetsart University, Rajamangala University of Technology Isan, Rajamangala University of Technology Krungthep	Thailand	—
28	<a href="#">Performance of lightweight peach-shell concrete with optimal substitution ratio</a>	Sichuan College of Architectural Technology, Sichuan University, Xihua Univ.	China	—
29	<a href="#">PPE kit to bio-oil: an experimental investigation</a>	University of Petroleum and Energy Studies	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.

FOLLOW-UP WORK

**Influence of hygiene tissue paper used as an additive on the physicochemical and mechanical properties of CO2-cured belite-rich cement paste**

2024 · Cement and Concrete Composites 145, 105317, 2024 · 13 citations (GS)

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

FOLLOW-UP WORK

**Effect of carbonation curing on physicochemical properties of mineral admixture blended belite-rich cement**

2022 · Journal of Building Engineering 56, 104771, 2022 · 36 citations (GS)

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

**Contribution 3**

**Claim – Contribution 3**

*The researcher advanced sustainable concrete technology by pioneering bagasse ash utilization in self-compacting mixes and expanding into microstructural and thermal performance studies of alternative cementitious systems.*

The researcher’s contribution centers on developing sustainable concrete materials, anchored by a 2018 core paper on utilizing bagasse ash as a partial cement replacement in self-compacting concrete. This foundational work established a framework for integrating agricultural waste into high-performance concrete mixes.

This line of work appears to address the need for eco-friendly construction materials by exploring alternative binders and curing regimes. The progression from the 2018 core study to 2023 follow-ups on belite-rich cement and alkali-activated slag suggests a deliberate expansion into complex microstructural evolution and thermal resistance properties, indicating a deepening technical scope beyond initial material substitution.

The significance of this research is evidenced by substantial independent uptake. With 96% of citations originating from independent researchers, the work has clearly influenced the broader scientific community. The core paper’s 19 citations, combined with the higher citation counts of the subsequent 2023 studies, demonstrate growing recognition and sustained relevance in the field of sustainable construction materials.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

**Utilization of bagasse ash as a partial replacement of cement in self-compacting concrete**

2018 · International Journal of Civil Engineering and Technology (IJCIET) 9 (7 ...), 2018 · 19 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Strength and durability study of low-fines self-consolidating concrete as a pavement material using fly ash and bagasse ash</a>	Dr. B. R. Ambedkar National Institute of Technology	—	—

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

## **Microstructural evolution of belite-rich cement mortar subjected to water, carbonation, and hybrid curing regime**

2023 · Cement and Concrete Composites 139, 105028, 2023 · 44 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Research progress on carbon dioxide curing of cementitious materials: a review</a>	Northeast Forestry University, University of Science and Technology Beijing	China	—
2	<a href="#">Steelmaking slag recycling as raw material and its effect on burning temperature of Portland cement clinker production</a>	Badji Mokhtar-Annaba Univ.	Algeria	—

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**

## **Effect of sillimanite sand on the mechanical property and thermal resistance of alkali-activated slag mortar**

2023 · Construction and Building Materials 370, 130654, 2023 · 20 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Manufacturing non-sintered ceramsite from dredged sediment, steel slag, and fly ash for lightweight aggregate: Production and characterization</a>	Wuhan Textile University	China	—
2	<a href="#">A critical review of alkali-activated metakaolin/blast furnace slag-based cementitious materials: Reaction evolution and mechanism</a>	Anhui Construction Engineering SanJian Group Co., Ltd, Anhui University of Technology, China Railway No.4 Engineering Group Co., Ltd	China	—
3	<a href="#">Exploring the potential and strength characteristics of waste sodium silicate-bonded sand for sustainable application in alkali-activated slag concrete</a>	National Pingtung University of Science and Technology	Taiwan	—
4	<a href="#">Microstructure of alkali-activated slag in ultralow temperature environments</a>	Guangxi University, Nanning Normal Univ., Nanning Normal University	China, PR China	—

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**

<b>Institution</b>	<b>Country</b>	<b>World ranking</b>	<b>Citing papers</b>
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	3
Prince Sattam Bin Abdulaziz University	Saudi Arabia	SCImago #2777 · THE 401–500 · QS 721-730	2
University of Dundee	United Kingdom	SCImago #1248 · THE 301–350 · QS =428	2
Necmettin Erbakan University	Turkey	SCImago #5551 · THE 1201–1500	2
King Khalid University	Saudi Arabia	SCImago #2170 · THE 251–300 · QS =535	2
University College Dublin	Ireland	SCImago #647 · THE 201–250 · QS 118	2
Thapar Institute of Engineering and Technology	India	SCImago #4045 · THE 601–800 · QS 771-780	2
Islamic University of Gaza	Palestine	SCImago #6256	2
Silesian University of Technology	Poland	SCImago #2757 · THE 1001–1200 · QS 1001-1200	2
University of Birmingham	United Kingdom	SCImago #369 · THE =98 · QS 76	2
University of Petroleum and Energy Studies	India	SCImago #4950 · THE 501–600 · QS 901-950	2
Najran University	Saudi Arabia	SCImago #4276 · THE 801–1000	2
Chulalongkorn University	Thailand	SCImago #1201 · THE 501–600 · QS 221	2
Wuhan Textile University	China	SCImago #3807 · THE 1201–1500	2
Korea Advanced Institute of Science and Technology (KAIST)	South Korea	SCImago #366 · THE =70	2

### Geographic distribution of citing authors

<b>Country</b>	<b>Citing papers</b>
China	23
India	21
United States	14
Saudi Arabia	10
United Kingdom	7
Turkey	7
Italy	5
Pakistan	4
Iraq	4
Thailand	4
Egypt	4
Canada	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.

## F. AAO Precedent Considerations

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### 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

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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	Behavior of RC exterior beam column joint retrofitted using UHP-HFRC	30	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Use of different forms of waste plastic in concrete—a review	29	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Utilization of bagasse ash as a partial replacement of cement in self-compacting concrete	7	8 CFR 204.5(h)(3)(v) – Criterion 5