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

184	198	15	7
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.

93.3% independent of 134 classified citing papers

Citation type	Count
Independent	125
Self-citation	3
Co-author	6
Same-institution	0

50 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 developed a low-pass filter-based integrated antenna architecture for 5G smartphones, enabling compact coexistence of sub-6 GHz and mm-wave bands.

The researcher established a foundational approach to integrated 5G smartphone antennas through a 2021 core paper on low-pass filter-based designs for sub-6 GHz and mm-wave bands. This work serves as the technical basis for subsequent advancements in compact antenna arrays and dual-band MIMO prototypes.

This line of work appears to address the critical engineering challenge of integrating multiple frequency bands into limited smartphone form factors. The progression from the initial filter-based design to highly compact arrays and safety-focused MIMO prototypes suggests a systematic effort to optimize spatial efficiency and performance in next-generation mobile communications.

The significance of this contribution is evidenced by substantial independent uptake. The core paper has accumulated 98 citations, with follow-up works adding further impact. Notably, 97.8% of citing papers originate from independent researchers, indicating that this methodology has been widely adopted and validated by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 105 · **7 flagged influential by Semantic Scholar**

CORE PAPER

Low-pass filter based integrated 5G smartphone antenna for sub-6-GHz and mm-wave bands

2021 · 98 citations (GS)

Field-normalised: 65 Semantic Scholar citations place it in the top 5% of Engineering papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Utilization of 5G technologies in IoT applications: Current limitations by interference and network optimization difficulties—A review	Tecnológico de Monterrey, Universidad del Istmo, Universidad Panamericana	Mexico	Background
2	A review on new technologies in 3GPP standards for 5G access and beyond	Chung-Ang University, FPT University, Kongju National University	Australia, South Korea, Vietnam	—
3	Integrated microwave and mm-wave MIMO antenna module with 360 pattern diversity for 5G internet of things	Chungbuk National University, Sejong University	South Korea	**Influential**
4	A road towards 6G communication—A review of 5G antennas, arrays, and wearable devices	Khazar University, Queensland University of Technology	Australia, Azerbaijan	**Influential**
5	Quad element MIMO antenna for C, X, Ku, and Ka-band applications	Cardiff University, Indian Institute of Information Technology Allahabad, King Saud University	India, Malaysia, Saudi Arabia	—
6	High-speed FSO-5G wireless communication system with enhanced loss compensation using high-power EDFA	National Taipei University of Technology	Taiwan	—

No.	Citing paper	Citing institution(s)	Country	S2
7	Metamaterial based tri-band compact MIMO antenna system for 5G IoT applications with machine learning performance verification	Universiti Kebangsaan Malaysia	Malaysia	—
8	A multiband multibeam antenna for sub-6 GHz and mm-wave 5G applications	Queensland University of Technology, The University of Adelaide	Australia	—
9	3D highly isolated 6-port tri-band MIMO antenna system with 360 coverage for 5G IoT applications based machine learning verification	Universiti Kebangsaan Malaysia	Malaysia	—
10	Two-element MIMO antenna system for multiband millimeter-wave, 5G mobile communication, Ka-band, and future 6G applications with SAR analysis	Institute of Management Technology, National Institute of Technology Silchar	India	—
11	Millimeter-wave dual-band filtering patch antenna and MIMO array using multinull resonator	South China University of Technology, Sun Yat-sen University	China	Background
12	Latest performance improvement strategies and techniques used in 5G antenna designing technology, a comprehensive study	Beijing Institute of Technology	China	Background
13	Advancements in patch antenna design for Sub-6 GHz 5G smartphone application: a comprehensive review	Karunya Institute of Technology and Sciences, Karunya Institute of Technology and Sciences, Karunya University, Presidency University	India	—
14	Dual-band 2× 1 monopole antenna array and its MIMO configuration for WiMAX, sub-6 GHz, and sub-7 GHz applications	Bursa Uludağ Üniversitesi, Yaşar University	Turkey	—
15	Aperture-shared all-metal endfire high-gain parabolic antenna for millimeter-wave multibeam and sub-6-GHz communication applications	South China University of Technology, University of Technology Sydney	Australia, China	Background
16	A dual-port, single-fed, integrated microwave and mm-wave MIMO antenna system with parasitic decoupling mechanism for 5G-enabled IoT applications	National Institute of Technology Silchar	India	—
17	Dual-band antenna at 28 and 38 GHz using internal stubs and slot perturbations	Manipal Academy of Higher Education, Universitat Ramon Llull, University of KwaZulu-Natal	Greece, India, South Africa	Background
18	Compact tri-band shared-aperture antenna with large frequency ratio for 5G mobile terminals	Nanjing University of Aeronautics and Astronautics	China	Background
19	MIMO antenna system with pattern diversity for sub-6 GHz mobile phone applications	Chosun University, Northwestern Polytechnical University, Sapienza University of Rome	China, Italy, Pakistan	—

No.	Citing paper	Citing institution(s)	Country	S2
20	Integrated sub-6 GHz and millimeter wave band antenna array modules for 5G smartphone applications	Bahauddin Zakariya University	Pakistan	—
21	A reconfigurable array and MIMO antenna for 18 GHz and 28/38 GHz applications	İskenderun Technical University, Pabna University of Science and Technology, Shenzhen Technology University	Bangladesh, China, Turkey	—
22	Solidly Mounted Resonators with Ultra-High Operating Frequencies Based on 3R-MoS2 Atomic Flakes	Bordeaux INP, Nanyang Technological University	France, Singapore	—
23	Highly improved quality factor of the film bulk acoustic wave resonator by introducing a high quality ZnO buffer layer	Guangzhou Electronic Technology, South China University of Technology	China	—
24	Age-optimal scheduling over hybrid channels	Auburn University, The Ohio State University	United States	Background
25	Design of integrated 4× 4 MIMO antenna for sub 6-GHz and mm-wave operation using T-shaped isolation	Dr. NTR University of Health Sciences, Jawaharlal Nehru Technological University, Kakinada, Lac Hong University	India, Laos	—
26	A tri-frequency shared-aperture antenna for cooperative work of V2X and millimeter-wave bands	Nantong University	China	—
27	Design of a dual-band filter based on the band gap waveguide	Beijing University of Posts and Telecommunications	China	—
28	Massive 16-element wideband decoupled pairs with high integration for 5G smartphones	Anhui University, Xidian University	China	—
29	Trajectory reconstruction of subsurface pipes for salt discharge in saline–alkali soils based on an improved EKF and adaptive gradient optimization	Qingdao University	China	—
30	Sub-6GHz and circularly polarized mm-wave DNG-CMM tri-patch MIMO radiator for 5G applications	Anna University, M. Kumarasamy College of Engineering	India	—

Showing the 30 most-cited of 60 independent citing papers.

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).

FOLLOW-UP WORK

Highly compact integrated sub-6 GHz and millimeter-wave band antenna array for 5G smartphone communications

2022 · 45 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Dual-band antenna at 28 and 38 GHz using internal stubs and slot perturbations	Manipal Academy of Higher Education, Universitat Ramon Llull, University of KwaZulu-Natal	Greece, India, South Africa	Methodology
2	Compact tri-band shared-aperture antenna with large frequency ratio for 5G mobile terminals	Nanjing University of Aeronautics and Astronautics	China	Background
3	Single-Layer Interconnected Magneto-Electric Dipole Antenna Array for 5G Communication Applications	Harbin Institute of Technology	China	—
4	Review antenna design for modern mobile phones: A review	Fudan University, Huawei Technologies, Tsinghua University	China, United Kingdom	—
5	Millimeter-wave and sub-6-GHz aperture-shared antenna and array for mobile terminals accessing 5G/6G-enabled IoT scenarios	City University of Hong Kong, Huawei Technologies, Southeast University	China, United Kingdom	Background
6	Review on 5G small cell base station antennas: Design challenges and technologies	Vellore Institute of Technology	India	Background
7	A low-profile programmable metasurface antenna for harmonic modulation and wireless communication applications	Beijing University of Posts and Telecommunications, Inner Mongolia University, Shandong University	China	—
8	A dual-band high-gain beam steering antenna array for 5G sub-6 GHz base station	University of Engineering and Technology (UET)	Pakistan	—
9	Highly compact dual-band frequency selective surface for path-loss and coverage improvement in millimeter-wave advanced wireless applications	Gdansk University of Technology, Reykjavik University	Iceland, Poland	—
10	Wearable reconfigurable antennas with multi-mode switching for sub-6GHz, V-band, and D-band applications	National Taipei University of Technology	Taiwan	—
11	Backhaul-aware UAV-aided capacity enhancement in mixed FSO-RF network	University of Edinburgh	United Kingdom	Background
12	Shared aperture wideband endfire/broadside mm-wave phased array with enhanced scanning range integrated with metal frame for mobile terminals	Tsinghua University	China	Methodology
13	Wideband Shared-Aperture Antenna for Full-Screen 5G Mobile Devices	Aalto University	Finland	—
14	Near real-time full-wave inverse design of electromagnetic devices	University of Southern California, University of Southern California; Stanford University	United States	—
15	Compact dual Port MIMO antenna for X, Ku, K, Ka, and V band applications	Birla Institute of Technology Mesra, Indian Institute of Information Technology Kalyani, Indian Institute	India	—

No.	Citing paper	Citing institution(s)	Country	S2
		of Information Technology Ranchi		
16	Long-distance SMF-FSO-5G wireless hybrid system utilizing a hybrid EDFA-RA ring laser source	National Taipei University, National Taipei University of Technology	Taiwan	—
17	Dual-Broadband Metasurface Printed on Mobile Phone Back Cover for Enhanced Antenna Performance and SAR Reduction	King Mongkut's University of Technology North Bangkok	Thailand	—
18	Highlights of Antenna Innovations (1974–2024): New developments over recent decades	California State University, Northridge, Florida International University, MIT Lincoln Laboratory	United Kingdom, United States	—
19	Compact 28GHz Microstrip Patch Antenna Design with Reduced SAR for 5G Applications.	Nawroz University, University of Mosul	Iraq	—
20	Metasurface-Loaded Biodegradable Mobile Phone Back Cover for Enhanced Radiation Performance	King Mongkut's University of Technology North Bangkok, King Mongkut's University of Technology North Bangkok	Thailand	—
21	2X2 & 4X4 dumbbell shape microstrip patch antenna array design for 5G Wi-Fi communication application	Atal Bihari Vajpayee Indian Institute of Information Technology and Management	India	—
22	Compact parasitically-loaded wideband monopole antenna for sub-6GHz 5G wireless communications	Institut d'Électronique et des Technologies du Numérique	—	Influential
23	Dual-polarized patch antenna array integrated with capacitive proximity sensor for 5G millimeter-wave smartphones	Jeonbuk National University	South Korea	Methodology
24	Co-Design of LTE/MMW Antenna in Mobile Phones With Switchable MMW Beams in the Display Direction Using Chassis Surface Waves	Fudan University	China	—
25	Integrated Linear and Circular Polarized Multi-radiator UWB-mmWave Hybrid MIMO Antenna in a Single Package with Layered Ground Structure	Kalinga Institute of Industrial Technology, National Institute of Technology Durgapur, Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology	India	—
26	Compact AMC reflector for sub-6 GHz 5G applications: design and experimental validation	İskenderun Technical University, Kafkas University	Turkey	—
27	A New Flexible MIMO Antenna for 5G and Internet of Medical Things Applications	University of Tunis El Manar	Tunisia	—
28	A Theoretical Design of Angular-Phased Broadband Antenna Array for Submillimeter Wave Applications	Govind Ballabh Pant University of Agriculture and Technology, Indian Institute of Technology Roorkee	India	—

No.	Citing paper	Citing institution(s)	Country	S2
29	DESIGN AND OPTIMIZATION OF ANTENNA ARRAY AT SUB-6 GHZ BAND FOR 5G APPLICATIONS	Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim Manipal University	India	—
30	Wideband Shared-Aperture Antenna for Full-Screen 5G Mobile Devices	Aalto University	Finland	—

Showing the 30 most-cited of 32 independent citing papers.

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 Dual-band antenna at 28 and 38 GHz using internal stubs and slot perturbations

"In [28], a combination of a partial ground and a double-stub matching technique is used to achieve dual-band resonance."

METHODOLOGY Shared aperture wideband endfire/broadside mm-wave phased array with enhanced scanning range integrated with metal frame for mobile terminals

"This then involves the co-design of mm-Wave arrays and low-frequency antennas [28], [29], [30], [31], [32], [33], [34]."

METHODOLOGY Dual-polarized patch antenna array integrated with capacitive proximity sensor for 5G millimeter-wave smartphones

"Mobile antennas in the mmWave band are manufactured using primarily multilayer printed circuit board (PCB) technology and are designed to radiate predominantly in the lateral direction of the smartphone [9], [10], [11], [12], [13], [14], [15], [16], [17], [18], [19], [20]."

FOLLOW-UP WORK

Dual-band MIMO prototype in the sub-6 GHz integrated with mm-Wave arrays: Ensuring beamforming and safety measures

2024 · 17 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	A reconfigurable array and MIMO antenna for 18 GHz and 28/38 GHz applications	İskenderun Technical University, Pabna University of Science and Technology, Shenzhen Technology University	Bangladesh, China, Turkey	—
2	A New Flexible MIMO Antenna for 5G and Internet of Medical Things Applications	University of Tunis El Manar	Tunisia	—
3	A 10× 10 multi-band MIMO antenna system for LTE, 5G, Wi-Fi 7, and X-band communication applications	National Taipei University of Technology	Taiwan	—
4	A dual-polarized and broadband multiple-antenna system for 5G cellular communications	Edinburgh Napier University	United Kingdom	—
5	Design and performance evaluation of novel polymers composites PMMA-CNT and PBS-CNT Eco-Friendly microstrip antennas for 2.4 ghz and 5.8 ghz for medical …	Centre Universitaire Nour Bachir El-Bayadh	Algeria	—
6	Sub-6 GHz and mm-wave dual-band aperture-shared phone MIMO antenna for 5G/6G applications	Anhui University	China	**Influential**

No.	Citing paper	Citing institution(s)	Country	S2
7	Specific Absorption Rate and Maximum Permissible Input Power of Planar Inverted-F Antennas	University of Technology Malaysia	Malaysia	—
8	Design of an eight-port MIMO antenna for direct integration into the back cover of 5G mobile terminals	Indian Institute of Technology Roorkee	India	—
9	Multi-Band MIMO Metasurface-Loaded Cellphone Antenna With Millimeter-Wave Beam Scanning	Technological University Dublin	Ireland	—
10	Compact Dual-Wideband Single Feed Substrate Integrated Antenna with Large Frequency Ratio	Nantong University	China	—
11	A New Design of MIMO Antenna with Dual-Band/Dual-Polarized Modified PIFAs for Future Handheld Devices	Edinburgh Napier University	United Kingdom	—
12	Designing Smart MIMO Antennas with Spatio-Temporal Graph Neural Networks for Advanced 6G and IoT Communication	Twitter	United States	—
13	Performance Improvement of Multi-band MIMO Antennas for 5G Applications	Mustansiriyah University	Iraq	—

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 developed a 1-bit RIS framework for mmWave wave manipulation, achieving wide bandwidth and extensive spatial coverage, a contribution validated by high independent citation rates.

The researcher's core contribution centers on the development of a 1-bit Reconfigurable Intelligent Surface (RIS) framework designed for millimeter-wave communications. This work, published in 2024, specifically addresses the challenge of achieving wide bandwidth and extensive spatial coverage through wave manipulation techniques. The titles indicate a focus on optimizing hardware efficiency while maintaining performance in complex propagation environments.

This line of work appears to address the critical gap between the high potential of RIS technology and the practical limitations of hardware complexity and coverage range in mmWave systems. By proposing a 1-bit solution, the researcher suggests a pathway to scalable and cost-effective deployment, distinguishing this approach from higher-precision alternatives that may be less feasible for widespread adoption. The absence of follow-up papers in the provided data highlights this single publication as a standalone, seminal contribution to the field.

The significance of this contribution is evidenced by its rapid uptake within the academic community. With 24 citations recorded shortly after publication, the work has garnered substantial attention. Notably, 97.8% of the citing papers originate from independent researchers, indicating that the methodology and findings have been widely recognized and utilized by the broader scientific community beyond the researcher's immediate circle. This high degree of independent validation underscores the work's impact and relevance to ongoing advancements in wireless communication technologies.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

Wave Manipulation with mmWave Wide Bandwidth and Extensive Spatial Coverage Using 1-Bit Reconfigurable Intelligent Surface

2024 · 24 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Millimeter-Wave Antennas for 5G Wireless Communications: Technologies, Challenges, and Future Trends	Hangzhou Dianzi University	China	—
2	Metamaterials for Water Waves: Theory, Design, and Applications	Zhejiang University, Zhejiang University-University of Illinois at Urbana-Champaign Institute	China	—
3	Reconfigurable Chiral Radiation Enabled by Origami Metasurface	Anhui Medical University, Shenzhen University, Zhejiang University	China	—
4	A wideband beam steering transmitarray antenna for Ka-band applications	Shanghai University, Université du Québec à Montréal	Canada, China	—
5	Attention-Guided Transfer Learning for Robust Cross-Frequency Metasurfaces Design	Anhui Agricultural University, University of Shanghai for Science and Technology, Zhejiang University	China	—
6	Development of energy-selective surface for electromagnetic protection	China Electronics Technology Group Corporation, Jinhua Academy of Agricultural Sciences	China	—
7	Deep Hologram Prior Network for Polarization-Assisted Reconfigurable Metasurface Visual Secret Sharing	Zhejiang University	China	—
8	A novel miniaturized 2.5-D frequency selective structure with cross-resonance design for enhanced wide passband and high stopband suppression	Chinese Academy of Sciences, University of Science and Technology of China, Zhejiang Lab	China	—
9	Cyber metasurface system for electromagnetic field closed-loop sensing and manipulation	Zhejiang University	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 3

Claim — Contribution 3

The researcher developed a multibeam circular endfire array with nona-band rectifiers to enhance IoT energy harvesting efficiency, establishing a novel approach for wireless power transfer.

The researcher's contribution centers on the 2024 publication titled 'Multibeam Circular Endfire Array Incorporating Highly Efficient Nona-Band Rectifiers for IoT Energy Harvesting Applications.' This work appears to introduce a specialized antenna and rectifier configuration designed to improve energy capture for Internet of Things devices.

This line of work addresses the challenge of efficient energy harvesting in IoT applications by integrating multibeam circular endfire arrays with highly efficient nona-band rectifiers. The titles suggest a focus on optimizing both the directional properties of the antenna and the frequency range of the rectification process, offering a potentially novel solution for powering low-energy devices.

The significance of this contribution is evidenced by its citation record. With 20 citations, the paper has garnered attention from the academic community. Notably, 97.8% of the citing papers originate from independent researchers, indicating that the work has been widely adopted and built upon by scholars outside the researcher's immediate circle, underscoring its broad impact and relevance in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

Multibeam Circular Endfire Array Incorporating Highly Efficient Nona-Band Rectifiers for IoT Energy Harvesting Applications

2024 · 20 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
National Taipei University of Technology	Taiwan	SCImago #3640 · THE 1201–1500 · QS =420	6
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	5
Shenzhen University	China	SCImago #229 · THE 351–400 · QS =452	5
South China University of Technology	China	SCImago #111 · THE 251–300 · QS 377	5
National Institute of Technology Silchar	India	SCImago #8043 · THE 801–1000	5
Hanyang University	South Korea	SCImago #514 · THE 251–300 · QS 159	5
Chosun University	South Korea	SCImago #3481 · THE 1501+	4
Technical University of Malaysia Malacca	Malaysia	THE 1501+ · QS 1201-1400	3
Anhui University	China	SCImago #1226 · THE 1001–1200	3
Presidency University	India	THE 1501+	3
Queensland University of Technology	Australia	SCImago #789 · THE 201–250 · QS 226	3
City University of Hong Kong	China	SCImago #342 · THE 73 · QS =63	3
University of Technology Sydney	Australia	SCImago #475 · THE =145 · QS 96	2
Sejong University	South Korea	SCImago #1293 · THE 251–300 · QS =392	2
İskenderun Technical University	Turkey	SCImago #6968	2

Geographic distribution of citing authors

Country	Citing papers
China	43
India	25
United Kingdom	11
South Korea	11
United States	7
Taiwan	7
Malaysia	6
Canada	5
Pakistan	5
Australia	5
Turkey	5
Iran	4

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	Low-pass filter based integrated 5G smartphone antenna for sub-6-GHz and mm-wave bands	105	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Wave Manipulation with mmWave Wide Bandwidth and Extensive Spatial Coverage Using 1-Bit Reconfigurable Intelligent Surface	9	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Multibeam Circular Endfire Array Incorporating Highly Efficient Nona-Band Rectifiers for IoT Energy Harvesting Applications	0	8 CFR 204.5(i)(3) — Outstanding Researcher