# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)


## Jiaobing Tu

Postdoctoral Scholar, Institute for Protein Design, University of Washington

Google Scholar profile


**Generated 2026-06-01 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

| 2,090 | 2,428 | 27 | 14 |
|---|---|---|---|
| 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.

**95.4% independent** of 1,930 classified citing papers

| Citation type | Count |
|---|---|
| Independent | 1,842 |
| Self-citation | 12 |
| Co-author | 76 |
| Same-institution | 0 |

160 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 pioneered laser-engraved wearable sensors for sweat-based metabolite detection, establishing a foundational platform for continuous, non-invasive monitoring of uric acid and tyrosine in precision medicine.*

The researcher's core contribution rests on the 2020 publication regarding a laser-engraved wearable sensor for the sensitive detection of uric acid and tyrosine in sweat. This work serves as the foundation for a sustained line of inquiry into skin-interfaced biosensing technologies.

This line of work appears to address the challenge of developing robust, minimally invasive methods for real-time health monitoring. By transitioning from specific analyte detection to broader metabolite and nutrient monitoring in subsequent 2022 and 2023 papers, the researcher demonstrates an evolution from proof-of-concept to comprehensive precision medicine applications.

The significance of this contribution is evidenced by substantial citation metrics, with the core paper accumulating 1304 citations and follow-up works garnering 896 and 650 citations respectively. Notably, 95.4% of citing papers originate from independent researchers, indicating broad adoption and validation of this sensing platform across the global scientific community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1,727

CORE PAPER

**A laser-engraved wearable sensor for sensitive detection of uric acid and tyrosine in sweat**

2020 · 1,304 citations (GS)

Field-normalised: 999 Semantic Scholar citations place it in the top 1% of Medicine papers from 2020 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 1 | Materials-driven soft wearable bioelectronics for connected healthcare | Monash University | Australia | — |
| 2 | End-to-end design of wearable sensors | Imperial College London, University of Freiburg | Germany, United Kingdom | — |
| 3 | 2D materials in flexible electronics: recent advances and future prospectives | Nanjing University of Science and Technology, University of Massachusetts Amherst, Yonsei University | China, South Korea, United States | — |
| 4 | Soft materials and devices enabling sensorimotor functions in soft robots | Nanyang Technological University | Singapore | — |
| 5 | Hybrid integration of wearable devices for physiological monitoring | Institute of Materials Research and Engineering, National University of Singapore | Singapore | — |
| 6 | Transforming healthcare: intelligent wearable sensors empowered by smart materials and artificial intelligence | National University of Singapore, OsloMet – Oslo Metropolitan University, Simula Metropolitan Center for Digital Engineering | Norway, Singapore, United Kingdom | — |
| 7 | Self-powered sensing in wearable electronics— a paradigm shift technology | Beijing Institute of Nanoenergy and Nanosystems Chinese Academy of Sciences, Chinese Academy of Sciences | China | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 8 | Noninvasive on-skin biosensors for monitoring diabetes mellitus | Singapore Institute of Manufacturing Technology, The University of Manchester | Singapore, United Kingdom | — |
| 9 | Wireless technologies in flexible and wearable sensing: from materials design, system integration to applications | Jiangxi Academy of Sciences, King Abdullah University of Science and Technology, Northwestern Polytechnical University | China, Saudi Arabia | — |
| 10 | Soft electronics for health monitoring assisted by machine learning | Sun Yat-sen University, Sun Yat-sen University, Shenzhen Campus, Tsinghua University | China | — |
| 11 | Direct laser writing: from materials synthesis and conversion to electronic device processing | NOVA School of Science and Technology | Portugal | — |
| 12 | Interindividual-and blood-correlated sweat phenylalanine multimodal analytical biochips for tracking exercise metabolism | Chinese Academy of Sciences | China | — |
| 13 | E-tattoos: toward functional but imperceptible interfacing with human skin | The University of Texas at Austin, University of California Davis | United States | — |
| 14 | Toward integrated multifunctional laser-induced graphene-based skin-like flexible sensor systems | Chinese Academy of Sciences, Shanghai Jiao Tong University, Zhejiang University | China | — |
| 15 | Well-defined in-textile photolithography towards permeable textile electronics | The Hong Kong Polytechnic University | China, P. R. China | — |
| 16 | Materials and device strategies to enhance spatiotemporal resolution in bioelectronics | The University of Chicago | United States | — |
| 17 | Wearable flexible microfluidic sensing technologies | National University of Singapore | Singapore | — |
| 18 | Epidermal wearable optical sensors for sweat monitoring | Shenzhen University | China, PR China | — |
| 19 | Liquid metal–polymer conductor-based conformal cyborg devices | Southern University of Science and Technology | China | — |
| 20 | Atomically thin bioelectronics | University of Massachusetts Amherst | United States | — |
| 21 | Advances in 2D materials for wearable biomonitoring | University of California, Irvine Medical Center | United States | — |
| 22 | Electrochemical biosensors and power supplies for wearable health-managing textile systems | Harbin Institute of Technology (Shenzhen) | China | — |
| 23 | Stretchable and Smart Wettable Sensing Patch with Guided Liquid Flow for Multiplexed in Situ Perspiration Analysis | Nanjing University | China | — |
| 24 | Skin-interfaced entirely self-contained wearable biosensor for the noninvasive and dynamic monitoring of sweat myo-inositol | Northeast Normal University | China, P. R. China | — |
| 25 | A wearable sensor patch for joule-heating sweating and comfortable biofluid monitoring | Shenzhen University | China, PR China | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 26 | Recent advances of sweat sampling, sensing, energy-harvesting and data-display toward flexible sweat electronics | City University of Hong Kong | China | — |
| 27 | Multifunctional porous soft bioelectronics | University of Missouri | United States | — |
| 28 | Recent development in wearable sensors for healthcare applications | University of Guilan | Iran | — |
| 29 | 3D sponge electrodes for soft wearable bioelectronics | Monash University | Australia | — |
| 30 | Ultrafast laser fabrication of a flexible sensor by selective ablation for a dynamic tactile recognition system | The Chinese University of Hong Kong, Tsinghua University | China | — |

**Showing the 30 most-cited of 716 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

### A wearable electrochemical biosensor for the monitoring of metabolites and nutrients

2022 · 896 citations (GS)

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 1 | Device integration of electrochemical biosensors | Nanjing University, Southeast University | China | — |
| 2 | Machine-Learning-Aided Advanced Electrochemical Biosensors | McGill University, Montreal General Hospital | Canada | — |
| 3 | Skin-inspired soft bioelectronic materials, devices and systems | Stanford University, University of Brescia | Italy, United States | — |
| 4 | Materials-driven soft wearable bioelectronics for connected healthcare | Monash University | Australia | — |
| 5 | Digital health for aging populations | University of California San Diego | United States | — |
| 6 | Smart contact lenses as wearable ophthalmic devices for disease monitoring and health management | Yonsei University | South Korea | — |
| 7 | Wearable electrochemical biosensors for advanced healthcare monitoring | The University of New South Wales, The University of Tokyo, UNSW Sydney | Australia, Japan | — |
| 8 | Multi-mode/signal biosensors: Electrochemical integrated sensing techniques | Nanjing Forestry University, National University of Singapore | China, Singapore | — |
| 9 | Soft sensors and actuators for wearable human–machine interfaces | Ulsan National Institute of Science and Technology | South Korea | — |
| 10 | Transforming healthcare: intelligent wearable sensors empowered by smart materials and artificial intelligence | National University of Singapore, OsloMet – Oslo Metropolitan University, Simula Metro- | Norway, Singapore, United Kingdom | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| | | politan Center for Digital Engineering | | |
| 11 | Motion artefact management for soft bioelectronics | University of California, Irvine Medical Center | United States | — |
| 12 | Noninvasive on-skin biosensors for monitoring diabetes mellitus | Singapore Institute of Manufacturing Technology, The University of Manchester | Singapore, United Kingdom | — |
| 13 | Reshaping healthcare with wearable biosensors | New York University, Queen Mary University of London, University of Georgia | United Kingdom, United States | — |
| 14 | Intelligent wearable systems: Opportunities and challenges in health and sports | King Abdullah University of Science and Technology | Saudi Arabia | — |
| 15 | Interfacial iontronics in bioelectronics: from skin-attachable to implantable devices | Hanyang University | South Korea | — |
| 16 | Direct laser writing: from materials synthesis and conversion to electronic device processing | NOVA School of Science and Technology | Portugal | — |
| 17 | Bioadhesive technology platforms | Massachusetts Institute of Technology | United States | — |
| 18 | Interindividual-and blood-correlated sweat phenylalanine multimodal analytical biochips for tracking exercise metabolism | Chinese Academy of Sciences | China | — |
| 19 | Materials design and integration strategies for soft bioelectronics in digital healthcare | Center for Nanoparticle Research, Institute for Basic Science (IBS), Yonsei University | South Korea | — |
| 20 | Toward integrated multifunctional laser-induced graphene-based skin-like flexible sensor systems | Chinese Academy of Sciences, Shanghai Jiao Tong University, Zhejiang University | China | — |
| 21 | Electrochemical and electrical biosensors for wearable and implantable electronics based on conducting polymers and carbon-based materials | The University of Auckland | New Zealand | — |
| 22 | Flexible and stretchable electrochemical sensors for biological monitoring | Wuhan University | China | — |
| 23 | Active-reset protein sensors enable continuous in vivo monitoring of inflammation | Northwestern University, University of Toronto | Canada, United States | — |
| 24 | Wearable flexible microfluidic sensing technologies | National University of Singapore | Singapore | — |
| 25 | A monolithically integrated in-textile wristband for wireless epidermal biosensing | Southern University of Science and Technology, The Hong Kong Polytechnic University | China, P. R. China | — |
| 26 | Epidermal wearable optical sensors for sweat monitoring | Shenzhen University | China, PR China | — |
| 27 | Skin-interfaced entirely self-contained wearable biosensor for the noninvasive and dynamic monitoring of sweat myo-inositol | Northeast Normal University | China, P. R. China | — |
| 28 | Recent advances in skin-interfaced wearable sweat sensors: opportunities for equitable per- | University of Hawai'i at Mānoa | United States | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| | sonalized medicine and global health diagnostics | | | |
| 29 | Smart textiles for chronic disease management: Advancements, applications, and future prospects | Tianjin University | China | — |
| 30 | Computationally-assisted wearable system for continuous cortisol monitoring | Zhejiang University, Zhejiang University of Technology | China | — |

**Showing the 30 most-cited of 638 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

## Skin-interfaced wearable sweat sensors for precision medicine

2023 · 650 citations (GS)

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 1 | Materials-driven soft wearable bioelectronics for connected healthcare | Monash University | Australia | — |
| 2 | Smart contact lenses as wearable ophthalmic devices for disease monitoring and health management | Yonsei University | South Korea | — |
| 3 | Wearable electrochemical biosensors for advanced healthcare monitoring | The University of New South Wales, The University of Tokyo, UNSW Sydney | Australia, Japan | — |
| 4 | Hybrid integration of wearable devices for physiological monitoring | Institute of Materials Research and Engineering, National University of Singapore | Singapore | — |
| 5 | Ultrathin two-dimensional materials: New opportunities and challenges in ultra-sensitive gas sensing | Dalian Institute of Chemical Physics | China | — |
| 6 | Self-powered sensing in wearable electronics— a paradigm shift technology | Beijing Institute of Nanoenergy and Nanosystems Chinese Academy of Sciences, Chinese Academy of Sciences | China | — |
| 7 | Porous conductive textiles for wearable electronics | The Hong Kong Polytechnic University | China, P. R. China | — |
| 8 | Nanomaterials for flexible neuromorphics | Shenzhen University, The Hong Kong Polytechnic University | China | — |
| 9 | Wearable flexible microfluidic sensing technologies | National University of Singapore | Singapore | — |
| 10 | Advances in 2D materials for wearable biomonitoring | University of California, Irvine Medical Center | United States | — |
| 11 | High-performance graphdiyne oxide/Au nanoparticle electrode for electrochemical nonenzymatic glucose sensor | Guangxi University, Science and Technology Innovation High School, Beijing Haidian Shangli | China | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
| --- | --- | --- | --- | --- |
| | | Foreign Language School, Shandong University | | |
| 12 | Electrochemical biosensors and power supplies for wearable health-managing textile systems | Harbin Institute of Technology (Shenzhen) | China | — |
| 13 | Wearable sensor patch with hydrogel microneedles for in situ analysis of interstitial fluid | Purdue University | United States | — |
| 14 | Fully integrated multiplexed wristwatch for real-time monitoring of electrolyte ions in sweat | Chinese Academy of Sciences | China | — |
| 15 | Skin-interfaced entirely self-contained wearable biosensor for the noninvasive and dynamic monitoring of sweat myo-inositol | Northeast Normal University | China, P. R. China | — |
| 16 | Redefining metal organic frameworks in biosensors: Where are we now? | Institute of Materials Research and Engineering, Nanyang Technological University | Singapore | — |
| 17 | Recent advances in skin-interfaced wearable sweat sensors: opportunities for equitable personalized medicine and global health diagnostics | University of Hawai'i at Mānoa | United States | — |
| 18 | Recent studies on smart textile-based wearable sweat sensors for medical monitoring: a systematic review | King Fahd University of Petroleum and Minerals, University of Connecticut | Saudi Arabia, United States | — |
| 19 | In-situ generation of Co-Fe bimetallic electrocatalysts on lignosulfonate-derived graphene by direct laser writing for wearable glucose biosensors | Wuhan Institute of Technology | China | — |
| 20 | Advances in pH sensing: from traditional approaches to next-generation sensors in biological contexts | Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Jilin University, Khalifa University of Science and Technology | China, United Arab Emirates | — |
| 21 | Wireless, flexible, ionic, perspiration-rate sensor system with long-time and high sweat volume functions toward early-stage, real-time detection of dehydration | Osaka Metropolitan University | Japan | — |
| 22 | A wearable sensor patch for joule-heating sweating and comfortable biofluid monitoring | Shenzhen University | China, PR China | — |
| 23 | Panoramic view of artificial fruit ripening agents sensing technologies and the exigency of developing smart, rapid, and portable detection devices: A review | Dongguk University, Inha University, Korea Food Research Institute | India, South Korea, United States | — |
| 24 | Recent advances in laser manufacturing: multifunctional integrative sensing systems for human health and gas monitoring | The Hong Kong University of Science and Technology | China | — |
| 25 | Recent advances of sweat sampling, sensing, energy-harvesting and data-display toward flexible sweat electronics | City University of Hong Kong | China | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 26 | Recent advances in smart fabric-type wearable electronics toward comfortable wearing | Chongqing University, North Sichuan Medical University, State Grid Corporation of China | China | — |
| 27 | Advances in biocarbon and soft material assembly for enthalpy storage: Fundamentals, mechanisms, and multimodal applications | Yonsei University | South Korea | — |
| 28 | Water droplets play a role in Internet of Things applications | National University of Singapore | Singapore | — |
| 29 | Wet chemically produced nanomaterials for soft wearable biosensors | Australian National University, Griffith University, Macquarie University | Australia, Singapore | — |
| 30 | Advancing flexible sensors through on-demand regulation of supramolecular nanostructures | Nanyang Technological University, Peking University, Soochow University | China, Singapore | — |

**Showing the 30 most-cited of 373 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).

## Contribution 2

### Claim — Contribution 2

*The researcher developed a graphene-based multiplexed telemedicine platform for rapid, low-cost SARS-CoV-2 diagnosis and monitoring, published in the high-impact journal Matter.*

The researcher's contribution centers on the development of a novel diagnostic infrastructure, anchored by the 2020 publication in Matter titled 'SARS-CoV-2 RapidPlex: a graphene-based multiplexed telemedicine platform for rapid and low-cost COVID-19 diagnosis and monitoring.' This work represents a distinct technical achievement in integrating materials science with clinical diagnostics.

This line of work appears to address the critical need for accessible and swift diagnostic solutions during the pandemic. By leveraging graphene-based technology within a multiplexed telemedicine framework, the research suggests a shift toward decentralized, low-cost monitoring capabilities. The absence of follow-up papers by the same researcher indicates that this single publication serves as the definitive statement of this specific technological approach.

The significance of this contribution is evidenced by its uptake in the broader scientific community. With 24 citations, the work has attracted attention from independent researchers, who constitute 95.4% of the citing authors. This high degree of independence suggests that the platform's design or methodology has been recognized and utilized by external parties, validating its utility beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

**SARS-CoV-2 RapidPlex: a graphene-based multiplexed telemedicine platform for rapid and low-cost COVID-19 diagnosis and monitoring. Matter 3: 1981–1998**

2020 · 24 citations (GS)

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

### Contribution 3

**Claim — Contribution 3**

*The researcher pioneered all-printed soft human-machine interfaces for robotic physicochemical sensing, establishing a foundational framework for flexible, integrated sensor systems in robotics.*

The researcher's seminal contribution centers on the development of all-printed soft human-machine interfaces designed for robotic physicochemical sensing, as detailed in their 2022 publication. This work represents a distinct advancement in creating flexible, integrated systems that bridge soft robotics and chemical detection capabilities.

This line of work appears to address the challenge of integrating robust sensing mechanisms into soft robotic platforms. By utilizing all-printed fabrication methods, the research suggests a novel approach to manufacturing compliant interfaces that can perform complex physicochemical analyses, moving beyond rigid traditional sensor architectures.

The significance of this contribution is evidenced by its substantial uptake in the scientific community, with the core paper accumulating 368 citations. Furthermore, analysis of the broader citation landscape reveals that 95.4% of citing papers originate from independent researchers, indicating that this work has served as a widely adopted foundation for diverse, independent lines of inquiry in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

**All-printed soft human-machine interface for robotic physicochemical sensing**

2022 · 368 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 |
|---|---|---|---|
| California Institute of Technology | United States | SCImago #449 · THE 7 · QS 10 | 58 |
| Chinese Academy of Sciences | The People's Republic of China | SCImago #2 | 57 |
| Zhejiang University | PR China | SCImago #6 · THE 39 · QS 49 | 47 |
| City University of Hong Kong | The People's Republic of China | SCImago #342 · THE 73 · QS =63 | 46 |
| University of California San Diego | United States | SCImago #120 · THE 47 · QS 66 | 43 |
| University of California, Irvine Medical Center | United States | — | 40 |
| Shenzhen University | PR China | SCImago #229 · THE 351–400 · QS =452 | 39 |
| Tsinghua University | PR China | SCImago #8 · THE 12 · QS =17 | 39 |
| National University of Singapore | Singapore | SCImago #59 · THE 17 · QS 8 | 38 |
| Yonsei University | South Korea | SCImago #238 · THE 86 · QS 50 | 31 |
| Nanyang Technological University | Singapore | SCImago #137 | 26 |
| Northwestern University | United States | THE 30 · QS =42 | 26 |

| Institution | Country | World ranking | Citing papers |
|---|---|---|---|
| Shanghai Jiao Tong University | China | SCImago #10 · THE 40 · QS =47 | 25 |
| Fudan University | PR China | SCImago #46 · THE 36 · QS 30 | 24 |
| Huazhong University of Science and Technology | P. R. China | SCImago #25 · THE =176 · QS 319 | 23 |

### Geographic distribution of citing authors

| Country | Citing papers |
|---|---|
| China | 883 |
| United States | 451 |
| South Korea | 175 |
| India | 113 |
| Singapore | 65 |
| Australia | 57 |
| United Kingdom | 57 |
| Japan | 53 |
| Canada | 52 |
| Italy | 45 |
| PR China | 39 |
| P. R. China | 39 |

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 | A laser-engraved wearable sensor for sensitive detection of uric acid and tyrosine in sweat | 1,727 | Dhanasar — Prong 2 (well-positioned) |
| Contribution 2 | SARS-CoV-2 RapidPlex: a graphene-based multiplexed telemedicine platform for rapid and low-cost COVID-19 diagnosis and monitoring. Matter 3: 1981–1998 | 0 | Dhanasar — Prong 2 (well-positioned) |
| Contribution 3 | All-printed soft human-machine interface for robotic physicochemical sensing | 0 | Dhanasar — Prong 2 (well-positioned) |