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 2026-06-08 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

2,811	2,817	30	128
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.

94.0% independent of 1,856 classified citing papers

Citation type	Count
Independent	1,745
Self-citation	74
Co-author	37
Same-institution	0

955 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 established a foundational framework for biomass torrefaction and densification, significantly advancing the scientific understanding of biomass processing technologies through highly cited, independent scholarly reviews.

The researcher's contribution centers on defining the state of the art in biomass torrefaction, densification, and applications, anchored by a seminal 2015 review. This core work serves as the primary reference point for understanding these specific biomass processing techniques.

This line of work appears to address the need for comprehensive synthesis in a rapidly evolving field. The progression from the 2015 core paper to a 2021 follow-up on principles and challenges suggests an ongoing effort to refine and update the theoretical foundations of biomass torrefaction as the technology matures.

The significance of this contribution is evidenced by substantial citation counts, with the core paper accumulating 1,491 citations and the follow-up reaching 1,027. Notably, 94.0% of citations originate from independent researchers, indicating that this work has been widely adopted and relied upon by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 634 · **16 flagged influential by Semantic Scholar**

CORE PAPER

A state-of-the-art review of biomass torrefaction, densification and applications

2015 · 1,491 citations (GS)

Field-normalised: 1,087 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2015 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Cadmium toxicity in plants: Impacts and remediation strategies	Gansu Agricultural University, Sultan Qaboos University, University of Agriculture Faisalabad	China, Oman, Pakistan	—
2	Thermochemical conversion of biomass: Potential future prospects	Durham University	United Kingdom	—
3	Lignocellulosic biomass pyrolysis mechanism: A state-of-the-art review	Huazhong University of Science and Technology, State Key Laboratory of Clean Energy Utilization, Zhejiang University	China	—
4	New horizon in C1 chemistry: breaking the selectivity limitation in transformation of syngas and hydrogenation of CO 2 into hydrocarbon chemicals and fuels	Collaborative Innovation Center of Chemistry for Energy Materials, Wuhan University	China	—
5	Advances in biomass torrefaction: Parameters, models, reactors, applications, deployment, and market	Indian Institute of Technology Roorkee, Massachusetts Institute of Technology, Universidad de Sevilla	Canada, India, Spain	—
6	Walking a tightrope: the complex balancing act of R-loops in genome stability	Stanford University	United States	—
7	Progress in biofuel production from gasification	Cranfield University, Imperial College London, Ministry of Ecology and Environment	China, United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
8	Biomass pre-treatment techniques for the production of biofuels using thermal conversion methods–a review	Institute of Mechanical Engineering and Industrial Mangement	Portugal	—
9	A review of thermochemical conversion of waste biomass to biofuels	University of Saskatchewan	Canada	—
10	Biomass pretreatment for steam gasification toward H2-rich syngas production–An overview	Nanjing University of Information Science and Technology	China	—
11	Review of biochar for the management of contaminated soil: Preparation, application and prospect	Hebei University of Technology, Queen's University Belfast	China, United Kingdom	—
12	Production and utilization of fuel pellets from biomass: A review	Indian Institute of Technology Bombay	India	—
13	Densification of raw and torrefied biomass: A review	Gulu University, Mbarara University of Science and Technology	Uganda	—
14	A comprehensive review on the similarity and disparity of torrefied biomass and coal properties	Bells University of Technology, Ladoke Akintola University of Technology, Landmark University	Nigeria, United States	—
15	Biochar-based nanocomposites for industrial wastewater treatment via adsorption and photocatalytic degradation and the parameters affecting these processes	Egyptian Petroleum Research Institute	Egypt	—
16	Investigation of biomass torrefaction based on three major components: Hemicellulose, cellulose, and lignin	Nanjing Forestry University, Zhejiang A & F University	China	—
17	A comprehensive review on physical activation of biochar for energy and environmental applications	SUNY College of Environmental Science and Forestry, University of Mississippi	United States	—
18	Biomass torrefaction: properties, applications, challenges, and economy	Xi'an Jiaotong University	China	—
19	Effects of torrefaction pretreatment on fuel quality and combustion characteristics of biomass: A review	Anhui Special Equipment Inspection Institute, Harbin Institute of Technology, Hebei University of Technology	China	—
20	Lignocellulosic biomass carbonization for biochar production and characterization of biochar reactivity	Hunan University	China	—
21	Recent advances in carbon-based renewable adsorbent for selective carbon dioxide capture and separation-A review	University of Science and Technology of China	China	—
22	Biomass applications in iron and steel industry: An overview of challenges and opportunities	Central Metallurgical Research and Development Institute	Egypt	—
23	Aromatics production via methanol-mediated transformation routes	King Abdullah University of Science and Technology	Saudi Arabia	—

No.	Citing paper	Citing institution(s)	Country	S2
24	A critical review on prospects of bio-refinery products from second and third generation biomasses	Chungbuk National University, Indian Institute of Technology Kharagpur, Koneru Lakshmaiah Education Foundation	India, South Korea, United States	—
25	Thermochemical conversion of municipal solid waste into energy and hydrogen: a review	Annamalai University, Sohar University, Trường ĐH Nguyễn Tất Thành	India, Oman, Vietnam	—
26	Biomass torrefaction process, product properties, reactor types, and moving bed reactor design concepts	Idaho National Laboratory, University of British Columbia	Canada, United States	—
27	Advances in solid biofuels production through torrefaction: Potential biomass, types of torrefaction and reactors, influencing process parameters and future …	Adama Science and Technology University, Chettinad Academy of Research and Education, Haramaya University	Ethiopia, Germany, India	—
28	A review of waste-to-hydrogen conversion technologies for solid oxide fuel cell (SOFC) applications: Aspect of gasification process and catalyst development	University of Tehran	Iran	—
29	An overview on biochar production, its implications, and mechanisms of biochar-induced amelioration of soil and plant characteristics	Gansu Agricultural University, University of Agriculture Faisalabad, University of Minnesota	China, Pakistan, United States	—
30	Biochar production, activation and adsorptive applications: a review	University of Saskatchewan	Canada	—

Showing the 30 most-cited of 622 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

Progress in biomass torrefaction: Principles, applications and challenges

2021 · 1,027 citations (GS)

Field-normalised: 733 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Thermochemical conversion of biomass: Potential future prospects	Durham University	United Kingdom	—
2	Advances in biomass torrefaction: Parameters, models, reactors, applications, deployment, and market	Indian Institute of Technology Roorkee, Massachusetts Institute of Technology, Universidad de Sevilla	Canada, India, Spain	—
3	Biomass pretreatment for steam gasification toward H2-rich syngas production–An overview	Nanjing University of Information Science and Technology	China	—
4	A comprehensive review on the similarity and disparity of torrefied biomass and coal properties	Bells University of Technology, Ladoke Akintola Univer-	Nigeria, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
		sity of Technology, Landmark University		
5	Biochar for agronomy, animal farming, anaerobic digestion, composting, water treatment, soil remediation, construction, energy storage, and carbon sequestration: a …	Al-Azhar University, Egyptian Atomic Energy Authority, Institute of Food and Agricultural Sciences	Egypt, Qatar, United Kingdom	—
6	Life cycle assessment and techno-economic analysis of sustainable bioenergy production: a review	Queen's University Belfast	United Kingdom	**Influential**
7	Conversion of biomass to biofuels and life cycle assessment: a review	Port Said University, Queen's University Belfast, Queen's University Belfast	Egypt, United Kingdom	—
8	Advancements in biochar as a sustainable adsorbent for water pollution mitigation	Kyung Hee University	South Korea	—
9	Optimizing biomass pathways to bioenergy and biochar application in electricity generation, biodiesel production, and biohydrogen production	Queen's University Belfast, Queen's University Belfast	United Kingdom	—
10	Sustainable pathways for biomass production and utilization in carbon capture and storage—a review	Chinhoyi University of Technology	Zimbabwe	—
11	Multifaceted applications of biochar in environmental management: a bibliometric profile	Birla Institute of Technology	India	—
12	Biochar produced from waste-based feedstocks: Mechanisms, affecting factors, economy, utilization, challenges, and prospects	Asian University for Women, Central Queensland University, King Fahd University of Petroleum and Minerals	Australia, Bangladesh, Qatar	—

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

Water gas shift reaction for hydrogen production and carbon dioxide capture: A review

2020 · 530 citations (GS)

Field-normalised: 385 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2020 indexed by Semantic Scholar, by citation count.

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

Contribution 2

Claim — Contribution 2

The researcher produced a seminal draft sequence of the rice genome, establishing a foundational genomic resource that has been extensively adopted by the independent scientific community.

The researcher's primary contribution is the publication of a draft sequence of the rice genome (Oryza sativa L. ssp. indica) in 2002. This work stands as a singular, foundational achievement in the field, with no subsequent follow-up papers by the same researcher listed in this specific line of inquiry. The core paper serves as the definitive reference point for this contribution.

This line of work appears to address the critical need for a comprehensive genomic map of a major staple crop. By providing a draft sequence, the researcher likely filled a significant gap in plant genomics, enabling downstream studies in genetics, breeding, and molecular biology. The absence of follow-up papers by the researcher suggests this was a discrete, high-impact milestone rather than an ongoing iterative series by the same author.

The significance of this contribution is evidenced by its extensive citation record, with the core paper accumulating 4241 citations. Notably, 94.0% of the classified citing papers originate from independent researchers, indicating broad adoption and reliance on this genomic resource by the wider scientific community. This high degree of independent citation underscores the work's status as a standard reference tool in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 814 · **26 flagged influential by Semantic Scholar**

CORE PAPER

A draft sequence of the rice genome (Oryza sativa L. ssp. indica)

2002 · 4,241 citations (GS)

Field-normalised: 3,669 Semantic Scholar citations place it in the top 1% of Agricultural and Food Sciences papers from 2002 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Initial sequencing and comparative analysis of the mouse genome	Washington University in St. Louis	United States	—
2	Plant genome information facilitates plant functional genomics	Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional	Mexico	—
3	Designing salt stress-resilient crops: Current progress and future challenges	China Agricultural University	China	—
4	Molecular breakthroughs in modern plant breeding techniques	United Arab Emirates University	United Arab Emirates	—
5	A route to de novo domestication of wild allotetraploid rice	Center for Excellence in Molecular Plant Sciences, Chinese Academy of Agricultural Sciences, Chinese Academy of Sciences	China, Italy, Saudi Arabia	—
6	Gene duplication and evolution in recurring polyploidization–diploidization cycles in plants	State Key Laboratory of Crop Genetics and Germplasm Innovation, University of Georgia	China, United States	—
7	Wild emmer genome architecture and diversity elucidate wheat evolution and domestication	Agricultural Research Organization, Agricultural Research Service, Ben-Gurion University of the Negev	Canada, Germany, Israel	—
8	Twenty years of plant genome sequencing: achievements and challenges	Chinese Academy of Agricultural Sciences, Commonwealth Scientific and Industrial Research Organisation, Zhejiang University	Australia, China	—

No.	Citing paper	Citing institution(s)	Country	S2
9	Cytokinin oxidase regulates rice grain production	Nagoya University	Japan	—
10	Prediction of plant microRNA targets	Massachusetts Institute of Technology, Rice University, Whitehead Institute for Biomedical Research	United States	—
11	WEGO: a web tool for plotting GO annotations	Zhejiang Institute of Mechanical and Electrical Engineering	China	—
12	By carrot or by stick: cognitive reinforcement learning in parkinsonism	University of Colorado Boulder	United States	—
13	Ribosomal ITS sequences and plant phylogenetic inference	Iowa State University	United States	—
14	Genome-wide association mapping reveals a rich genetic architecture of complex traits in Oryza sativa	Cornell University	United States	—
15	Genome sequence of the Brown Norway rat yields insights into mammalian evolution	Avalon Pharma (United States), Baylor College of Medicine, Baylor College of Medicine | Washington University in St. Louis	Canada, United States	—
16	The genome sequence of the rice blast fungus Magnaporthe grisea	North Carolina State University	United States	—
17	Development and Mapping of 2240 New SSR Markers for Rice (Oryza sativa L.)	Cornell University	United States	—
18	The TIGR rice genome annotation resource: improvements and new features	—	—	—
19	Comparative analysis of the receptor-like kinase family in Arabidopsis and rice	Institute of Bioinformatics and Systems Biology, Institute of Information Science, Academia Sinica, National Tsing Hua University	Germany, Taiwan, United States	—
20	Gene identification in novel eukaryotic genomes by self-training algorithm	Georgia Institute of Technology	United States	Influential
21	The rice genome revolution: from an ancient grain to Green Super Rice	University of Arizona	United States	—
22	Bias in plant gene content following different sorts of duplication: tandem, whole-genome, segmental, or by transposition	University of California, Berkeley	United States	—
23	Intracardiac fluid forces are an essential epigenetic factor for embryonic cardiogenesis	California Institute of Technology	United States	—
24	The population genetics of structural variants in grapevine domestication	Agricultural University of Georgia, UC Davis, UC Irvine	Georgia, United States	—
25	Genomics-assisted breeding for crop improvement	Cornell University, International Crops Research Institute for the Semi-Arid Tropics, Leibniz-Institut für Pflanzen-	Ethiopia, Germany, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
		genetik und Kulturpflanzenforschung (IPK)		
26	What are we learning from plant pangenomes?	German Centre for Integrative Biodiversity Research, Leibniz-Institut für Pflanzengenetik und Kulturpflanzenforschung (IPK), Texas A&M University	Germany, United States	—
27	Nuclear DNA analyses in genetic studies of populations: practice, problems and prospects	State Key Laboratory of Integrated Management of Pest Insects and Rodents	China	Influential
28	Novel insights into rice innate immunity against bacterial and fungal pathogens	Chinese Academy of Agricultural Sciences, Colorado State University, Hunan Agricultural University	China, United States	—
29	Assessing plant genetic diversity by molecular tools	Università degli Studi della Tuscia	Italy	—
30	Rice phosphate transporters include an evolutionarily divergent gene specifically activated in arbuscular mycorrhizal symbiosis	Torrey Mesa Research Institute	United States	—

Showing the 30 most-cited of 814 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 3

Claim — Contribution 3

The researcher pioneered the application of convolutional neural networks for P300 detection, establishing a foundational deep learning approach for brain-computer interface signal processing.

The researcher's seminal contribution rests on the 2010 paper titled 'Convolutional neural networks for P300 detection with application to brain-computer interfaces.' This work represents a distinct line of inquiry focused on integrating deep learning architectures with neurophysiological signal analysis. The titles indicate a methodological shift toward using convolutional neural networks to identify P300 event-related potentials, a critical component in brain-computer interface systems. By applying this specific neural network architecture to P300 detection, the work appears to address the challenge of robust feature extraction from complex EEG data, offering a novel computational framework for this domain. The significance of this contribution is evidenced by its substantial citation count of 1,043, indicating widespread recognition and utility within the scientific community. Furthermore, citation analysis reveals that 94.0% of citing papers originate from independent researchers, demonstrating that the work has served as a foundational reference for diverse groups outside the researcher's immediate institution or collaboration network. This high degree of independent uptake underscores the broad impact and enduring relevance of the proposed methodology in advancing brain-computer interface technologies.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 301 · **25 flagged influential by Semantic Scholar**

CORE PAPER

Convolutional neural networks for P300 detection with application to brain-computer interfaces

2010 · 1,043 citations (GS)

Field-normalised: 740 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Deep learning with convolutional neural networks for EEG decoding and visualization	BrainLinks-BrainTools Cluster of Excellence, University of Freiburg, Medical Center - University of Freiburg	Germany	—
2	EEGNet: a compact convolutional neural network for EEG-based brain–computer interfaces	U.S. Army Research Laboratory	United States	—
3	Deep learning-based electroencephalography analysis: a systematic review	Université de Montréal	Canada	—
4	Deep learning in bioinformatics	Seoul National University, ToolGen	South Korea	—
5	3D convolutional neural networks for human action recognition	Baidu, NEC (United States), Texas A&M University	China, United States	—
6	A review of classification algorithms for EEG-based brain–computer interfaces: a 10 year update	Centre Inria d'Université Côte d'Azur, GIPSA-Lab, Institut Polytechnique de Bordeaux	France, Japan	—
7	Neonatal seizure detection using deep convolutional neural networks	Erasmus University Medical Center, KU Leuven, University Hospitals Leuven	Belgium, Netherlands, United Kingdom	—
8	Road scene segmentation from a single image	Computer Vision Center, New York University, NVIDIA	Netherlands, Spain, United States	—
9	Driver distraction behavior recognition for autonomous driving: Approaches, datasets and challenges	Chinese Academy of Sciences, Tongji University	China	—
10	Deep convolutional neural networks for mental load classification based on EEG data	Brown University, Xidian University	China, United States	—
11	A survey on deep learning-based non-invasive brain signals: recent advances and new frontiers	Lehigh University, Macquarie University, University of New South Wales	Australia, United States	—
12	Deep learning in the biomedical applications: Recent and future status	Franche-Comté Électronique Mécanique Thermique et Optique - Sciences et Technologies, Hydro-Québec, Sorbonne Université	Canada, France	—
13	Deep learning for EEG data analytics: A survey	Chung-Ang University, Chung-Ang University Hospital, Universidad Autonoma de Madrid	South Korea, Spain	—
14	Speech imagery decoding using EEG signals and deep learning: A survey	Liaocheng University, Nanjing University of Aeronautics and Astronautics	China	—
15	DeepSite: bidirectional LSTM and CNN models for predicting DNA–protein binding	Chengdu University of Information Technology	China	—

No.	Citing paper	Citing institution(s)	Country	S2
16	Deep learning: current and emerging applications in medicine and technology	Columbia University	United States	—
17	Performance enhancement of P300 detection by multiscale-CNN	Ministry of Education of the People's Republic of China, University of Patras, Wuyi University	China, Greece	Influential
18	Multimodal classification with deep convolutional-recurrent neural networks for electroencephalography	State Key Laboratory of Intelligent Technology and Systems	China	—
19	Deep learning for brain disorders: from data processing to disease treatment	Allen Institute for Brain Science, Centre de Recherche en Économie et Statistique	France, United States	—
20	EEG-based brain-computer interfaces (BCIs): A survey of recent studies on signal sensing technologies and computational intelligence approaches and their ...	Huazhong University of Science and Technology, Macquarie University, University of California, Irvine Medical Center	Australia, China, United States	—
21	Asynchronous video target detection based on single-trial EEG signals	PLA Information Engineering University, University of Electronic Science and Technology of China	China	—
22	A convolutional neural network for sleep stage scoring from raw single-channel EEG	CEA Grenoble, Centre Hospitalier Universitaire de Grenoble, Maison des Sciences sociales et des Humanités de Dijon	France	—
23	Toward reliable signals decoding for electroencephalogram: A benchmark study to EEGNeX	Chinese University of Hong Kong, Leibniz University Hannover, Zhejiang University	China, Germany, Hong Kong	—
24	Edge deep learning for neural implants: a case study of seizure detection and prediction	University of Pennsylvania	United States	Influential
25	An evaluation of transfer learning models in EEG-based authentication	Multimedia University, Technical University of Malaysia Malacca	Malaysia	—
26	Review of machine learning techniques for EEG based brain computer interface	Netaji Subhas Institute of Technology, Netaji Subhas University of Technology	India	—
27	Learning representations from EEG with deep recurrent-convolutional neural networks	Université de Montréal, University of Memphis, University of Texas at Austin	Canada, United States	—
28	A deep learning architecture for temporal sleep stage classification using multivariate and multimodal time series	École normale supérieure - PSL, Inria, Laboratoire Traitement et Communication de l'Information	France	—
29	Status of deep learning for EEG-based brain–computer interface applications	Kyushu Institute of Technology, University of Dhaka, University of East London	Bangladesh, Japan, Netherlands	—

No.	Citing paper	Citing institution(s)	Country	S2
30	Deep learning human mind for automated visual classification	University of Catania, University of Central Florida	Italy, United States	—

Showing the 30 most-cited of 301 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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
National Cheng Kung University	Taiwan	SCImago #1316 · THE 501–600 · QS =203	76
Chinese Academy of Sciences	China	SCImago #2	45
Cornell University	United States	SCImago #61 · THE =18 · QS 16	30
University of Georgia	United States	SCImago #597 · THE 351–400 · QS 525	28
Huazhong University of Science and Technology	People's Republic of China	SCImago #25 · THE =176 · QS 319	28
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	27
University of Saskatchewan	Canada	SCImago #1541 · THE 351–400 · QS 378	23
Chinese Academy of Agricultural Sciences	China	SCImago #213	23
University of British Columbia	Canada	SCImago #144 · THE 45 · QS 40	23
Nanjing Forestry University	China	SCImago #702 · THE 601–800	20
University of California, Irvine Medical Center	United States	—	20
International Rice Research Institute	The Philippines	SCImago #2866	20
Iowa State University	United States	SCImago #897 · THE 401–500 · QS 449	18
University of Malaya	Malaysia	SCImago #1258 · THE 201–250	18
Harbin Institute of Technology	China	SCImago #56 · THE =131 · QS 256	18

Geographic distribution of citing authors

Country	Citing papers
China	517
United States	379
India	148
Japan	96
United Kingdom	93

Country	Citing papers
Taiwan	90
Canada	89
France	84
Germany	81
Australia	80
Malaysia	68
South Korea	67

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 state-of-the-art review of biomass torrefaction, densification and applications	634	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	A draft sequence of the rice genome (Oryza sativa L. ssp. indica)	814	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Convolutional neural networks for P300 detection with application to brain-computer interfaces	301	8 CFR 204.5(i)(3) — Outstanding Researcher