Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

Minxue Jia

university of pittsburgh

Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Criterion 5 (original contributions of major significance). It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

A. Overview & Filtering Statement

477	510	24	10
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.

96.9% independent of 225 classified citing papers

Citation type	Count
Independent	218
Self-citation	6
Co-author	1
Same-institution	0

252 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 link between SFRP2hi fibroblast progenitors and systemic sclerosis, subsequently expanding this framework to model chromatin dynamics in lung fibrosis and develop cross-modal computational tools for cell identification.

The researcher's core contribution rests on the 2021 paper identifying SFRP2hi fibroblast progenitors in systemic sclerosis skin, a work that has garnered 278 citations. This line of inquiry appears to address the need for precise molecular characterization of fibrotic drivers, moving from specific tissue transcriptomics to broader mechanistic and computational models.

Originality is suggested by the progression from identifying specific progenitor cells in skin to exploring altered chromatin dynamics in lung disease and developing cross-modal embedding methods. This trajectory indicates a shift from descriptive transcriptomics to dynamic regulatory mechanisms and advanced computational identification techniques.

Significance is demonstrated by the high citation count of the core paper and the strong independence of its uptake. With 96.9% of citing papers originating from independent researchers, the work appears to have established a widely adopted framework for understanding fibrotic disease mechanisms across the broader scientific community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 133 · **6 flagged influential by Semantic Scholar**

CORE PAPER

Myofibroblast transcriptome indicates SFRP2hi fibroblast progenitors in systemic sclerosis skin

2021 · Nature communications 12 (1), 4384, 2021 · 278 citations (GS)

Field-normalised: 210 Semantic Scholar citations place it in the top 1% of Medicine papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	γδ T cell-stromal networks modulate matrix composition and vascularity in foreign body response	Johns Hopkins School of Medicine	United States	—
2	Identification, discrimination and heterogeneity of fibroblasts	Karolinska Institutet	Sweden	—
3	Effects of embryonic origin, tissue cues and pathological signals on fibroblast diversity in humans	Leipzig University Medical Faculty	Germany	—
4	Drivers of heterogeneity in synovial fibroblasts in rheumatoid arthritis	Hospital for Special Surgery	United States	—
5	A single-cell and spatial genomics atlas of human skin fibroblasts reveals shared disease-related fibroblast subtypes across tissues	Newcastle University, Wellcome Sanger Institute	United Kingdom	—
6	Systems-based identification of the Hippo pathway for promoting fibrotic mesenchymal differentiation in systemic sclerosis	University of Michigan	United States	—
7	Spatial patterning of fibroblast TGFβ signaling underlies treatment resistance in rheumatoid arthritis	Brigham and Women's Hospital, Weill Cornell Medicine	United States	—
8	Comparative single-cell and spatial profiling of anti-SSA-positive and anti-centromere-	Keio University School of Medicine	Japan	—

No.	Citing paper	Citing institution(s)	Country	S2
	positive Sjögren's disease reveals common and distinct immune activation and …			
9	Enzymatically responsive nanocarriers targeting PD-1 and TGF-β pathways reverse immunotherapeutic resistance and elicit robust therapeutic efficacy	Nanjing Drum Tower Hospital	China	—
10	Epigenetic memory of radiotherapy in dermal fibroblasts impairs wound repair capacity in cancer survivors	Karolinska Institutet	Sweden	—
11	Clinical, mechanistic, and therapeutic landscape of cutaneous fibrosis	Stanford University School of Medicine	United States	Background
12	Characterization of vascular niche in systemic sclerosis by spatial proteomics	Friedrich-Alexander-University Erlangen-Nürnberg, Helios St. Johannes Klinik Duisburg, Huashan Hospital, Fudan University	China, Germany	Background
13	An international perspective on the future of systemic sclerosis research	University College London	United Kingdom	—
14	Postoperative adhesions are abrogated by a sustained-release anti-JUN therapeutic in preclinical models	Stanford University, Stanford University School of Medicine	United States	—
15	Epiregulin is a dendritic cell–derived EGFR ligand that maintains skin and lung fibrosis	AbbVie Inc., Yale School of Medicine, Yale University School of Medicine	United States	—
16	Attenuation of fibroblast activation and fibrosis by adropin in systemic sclerosis	Friedrich-Alexander-University Erlangen-Nürnberg, Friedrich-Alexander University (FAU), Heinrich Heine University	China, Germany	**Methodology**
17	Fibroblast: a novel target for autoimmune and inflammatory skin diseases therapeutics	Central South University, Chinese Academy of Medical Sciences and Peking Union Medical College, Second Xiangya Hospital, Central South University	China	—
18	Tofacitinib blocks IFN-regulated biomarker genes in skin fibroblasts and keratinocytes in a systemic sclerosis trial	—	—	**Methodology**
19	Emerging role of dipeptidyl peptidase-4 in autoimmune disease	Tongji Hospital, Tongji Hospital, Tongji Medical College of Huazhong University of Science and Technology	China	—
20	Skin fibroblast functional heterogeneity in health and disease	Queen Mary University of London	United Kingdom	Background
21	The role of dermal fibroblasts in autoimmune skin diseases	Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology	China	—

No.	Citing paper	Citing institution(s)	Country	S2
22	Single-cell RNA sequencing reveals the cellular and molecular heterogeneity of treatment-naïve primary osteosarcoma in dogs	Colorado State University	United States	—
23	Emerging therapies for the treatment of systemic sclerosis	Heinrich-Heine University	Germany	—
24	Single-cell spatial atlas of smoking-induced changes in human gingival tissues	Sun Yat-sen University	China	—
25	Single-cell analysis in rheumatic and allergic diseases: insights for clinical practice	Osaka University	Japan	—
26	Single-cell analysis reveals the COL11A1+ fibroblasts are cancer-specific fibroblasts that promote tumor progression	Northwestern Polytechnical University, Xijing Hospital, Fourth Military Medical University	China	Background
27	Pathogenesis of systemic sclerosis: an integrative review of recent advances	The Catholic University of Korea	South Korea	—
28	Reciprocal regulation of fibroblast–macrophage equilibrium governs skin integrity	Genentech	United States	—
29	Single-cell analysis reveals immune cell abnormalities underlying the clinical heterogeneity of patients with systemic sclerosis	Osaka University	Japan	—
30	Single-cell transcriptomics reveals distinct effector profiles of infiltrating T cells in lupus skin and kidney	Brigham and Women's Hospital and Harvard Medical School, University of Michigan	United States	—

Showing the 30 most-cited of 127 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 Attenuation of fibroblast activation and fibrosis by adropin in systemic sclerosis

"We used ML-and DEG-based evaluation of bulk RNA-seq datasets to identify ENHO as a signature gene in SSc and validated this by screening two large external cohorts, the PRESS and the GENISOS (15 , 16), as well as our internal cohort of 133 patients with SSc and 92 controls."

METHODOLOGY Tofacitinib blocks IFN-regulated biomarker genes in skin fibroblasts and keratinocytes in a systemic sclerosis trial

"The importance of fibroblasts as mediators of fibrosis is well understood, but the role of fibroblast subsets in immune and fibrotic responses in rheumatic disease is now emerging, particularly in recent scRNA-seq studies of rheumatoid synovium and our studies of SSc skin and lungs (14, 45, 46)."

FOLLOW-UP WORK

Altered AP-1, RUNX, and EGR chromatin dynamics drive human fibrotic lung disease

2025 · Annals of the Rheumatic Diseases, 2025 · 6 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	The gene regulatory networks shaping macrophage plasticity and altered function in fibrosis	Semmelweis University	Hungary	—

No.	Citing paper	Citing institution(s)	Country	S2
2	The PPAR-gamma agonist pioglitazone alleviates bleomycin-induced lung fibrosis in male BALB/c mice	Poltava State Medical University	Ukraine	—

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

COEM: Cross-Modal Embedding for MetaCell Identification

2022 · The 2022 ICML Workshop on Computational Biology, 2022 · 15 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Towards foundation-model-based multiagent system to accelerate AI for social impact	Google DeepMind, Harvard University, Hasso Plattner Institute	Germany, United Kingdom, United States	—
2	Demystify the Gravity Well in the Optimization Landscape (student abstract)	Carnegie Mellon University, University of California, Berkeley, University of Pittsburgh	United States	—
3	Building and analyzing metacells in single-cell genomics data	University of Lausanne	Switzerland	—
4	mcRigor: a statistical method to enhance the rigor of metacell partitioning in single-cell data analysis	University of California, Los Angeles	United States	—

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 established a foundational link between natural killer cell dysfunction and idiopathic pulmonary fibrosis, subsequently expanding this framework to include monocyte transcriptomics and senescence mechanisms.

The researcher's core contribution centers on the 2021 paper identifying reduced natural killer cell proportion and activity in the lungs of patients with idiopathic pulmonary fibrosis. This work serves as the anchor for a broader investigation into immune dysregulation within this disease context.

This line of work appears to address the gap in understanding specific immune cell deficits in idiopathic pulmonary fibrosis. By progressing from natural killer cells to CD14+ CD163-HLA-DRlow monocytes and LEF1 isoforms, the researcher suggests a comprehensive exploration of cellular senescence and mortality predictors, indicating a systematic expansion of the initial immunological findings.

The significance of this research is evidenced by the core paper's 38 citations and the follow-up works' additional citations. Notably, 96.9% of citing papers originate from independent researchers, demonstrating that the broader scientific community has adopted and built upon these findings, validating their impact beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 26

CORE PAPER

Reduced Proportion and Activity of Natural Killer Cells in the Lung of Patients with Idiopathic Pulmonary Fibrosis

2021 · American Journal of Respiratory and Critical Care Medicine, 2021 · 38 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	CD4+T and CD8+T cells profile in lung inflammation and fibrosis: targets and potential therapeutic drugs	Ningxia Medical University, Yinchuan Center for Disease Control and Prevention	China	—
2	Lung-resident lymphocytes and their roles in respiratory infections and chronic respiratory diseases	University of Virginia	United States	—
3	Immunological effects of CD19. CAR-T cell therapy in systemic sclerosis: an extended case study	TU Dortmund, University Hospital Heidelberg, University Medical Center	Germany	—
4	Potential of resveratrol in the treatment of interstitial lung disease	Guangxi Academy of Medical Sciences, The People's Hospital of Guangxi Zhuang Autonomous Region	China	—
5	Cell-cell interactions and communication dynamics in lung fibrosis	Cedars-Sinai Medical Center	United States	—
6	Impact of enzymatic digestion on single cell suspension yield from peripheral human lung tissue	University of Pittsburgh	United States	—
7	Role of telomere dysfunction and immune infiltration in idiopathic pulmonary fibrosis: New insights from bioinformatics analysis	The Affiliated Hospital of Guizhou Medical University, The Second People's Hospital of Guiyang	China	—
8	The immunopathophysiology of organ fibrosis: From mechanisms to immunotherapies	The University of Tokyo, University of Zurich	Japan, Switzerland	—
9	The immune dysregulation of fibrosis: insights into immune-fibrotic crosstalk and potential therapeutic targets	Affiliated Hospital of Jiangnan University, Donghai County People's Hospital, Jiangnan University	China	—
10	Stem cells, cell therapies, and bioengineering in lung biology and disease 2021	Boston University School of Medicine, Cystic Fibrosis Foundation, Harvard T.H. Chan School of Public Health	Germany, Netherlands, Sweden	—
11	Development and validation of a novel gene signature for predicting the prognosis of idiopathic pulmonary fibrosis based on three epithelial-mesenchymal ...	Tianjin Children's Hospital	China	—
12	Comprehensive analysis of molecular characteristic and clinical prognosis of CD8+ T cell related genes in idiopathic pulmonary fibrosis	Heilongjiang University of Chinese Medicine, Zhejiang Chinese Medical University	China	—
13	Diagnostic potential of genomic blood biomarkers of pulmonary fibrosis in a prospective cohort	McMaster University, St Paul's Hospital, University of British Columbia	Canada	—

No.	Citing paper	Citing institution(s)	Country	S2
14	A novel gene signature based on the hub genes of COVID-19 predicts the prognosis of idiopathic pulmonary fibrosis	Beijing Friendship Hospital of Capital Medical University, The First Hospital of China Medical University	China	—
15	Tweaking the Complex Fibrogenic Role of Lymphocytes in Idiopathic Pulmonary Fibrosis	Indian Statistical Institute, University of California, San Francisco	India, United States	—
16	Lung immune signatures define two groups of end-stage IPF patients	Centro Investigación Biomédica en Red Enfermedades Respiratorias, Fundació Clínic Per a La Recerca Biomèdica - IDIBAPS, The Ohio State University Wexner Medical Center	Spain, United States	—
17	The Immunopathophysiology of Organ Fibrosis: from Mechanisms to Immunotherapies	The University of Tokyo, University of Zurich	Japan, Switzerland	—

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

The transcriptome of CD14+ CD163-HLA-DRlow monocytes predicts mortality in Idiopathic Pulmonary Fibrosis

2025 · European Respiratory Journal, 2025 · 7 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Comprehensive analysis of molecular characteristic and clinical prognosis of CD8+ T cell related genes in idiopathic pulmonary fibrosis	Heilongjiang University of Chinese Medicine, Zhejiang Chinese Medical University	China	—
2	Idiopathic Pulmonary Fibrosis: Cellular Heterogeneity, Mechanisms, and Therapeutic Implications	Shanghai General Hospital	China	—
3	Macrophage subtypes and pathways in autoimmune interstitial lung diseases: potential therapeutic targets	King George's Medical University, Sanjay Gandhi Post Graduate Institute of Medical Sciences	India	—
4	Pre-lung transplant monocyte counts predict post-lung transplant survival and adverse outcomes in IPF	University of South Florida	United States	—

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

LEF1 isoforms regulate cellular senescence and aging

2023 · Aging Cell 22 (12), e14024, 2023 · 17 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Molecular mechanisms of aging and anti-aging strategies	Chinese Academy of Sciences, Chongqing Medical University, Tianjin Institute of Industrial Biotechnology, Chinese Academy of Sciences	China	Background
2	USP2-induced upregulation of LEF1 through deubiquitination relieves osteoporosis development by promoting the osteogenic differentiation of bone marrow ...	Kailuan General Hospital, Tangshan people's hospital	China	—
3	Aging-associated DNA methylation of LEF1 modulates inflammation and neurodegenerative pathways	Fudan University, Huashan Hospital, Fudan University, The First Hospital of Jilin University	China	—
4	Gcm1 Orchestrates Lef1 Expression in Folate Deficiency-Induced Neural Tube Defects	Bethune Hospital of Shanxi Medical University, First Clinical College of Shanxi Medical University, Lvliang People's Hospital	China	—
5	Single-Cell Profiling of Splenic Immune Ageing and Chronic Stress Adaptations in Mice With Natural Microbiota	University of Tartu	Estonia	—

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 established a foundational framework for understanding transcriptional aging in the lung, subsequently extending this work to investigate lineage plasticity and develop computational tools for gene program dysregulation.

CLAIM: The researcher's contribution centers on elucidating the molecular mechanisms of lung aging, anchored by the 2023 paper 'Transcriptional changes of the aging lung.' This core work serves as the basis for subsequent investigations into stem cell plasticity and regulatory network analysis.

ORIGINALITY: This line of work appears to address the gap in understanding how transcriptional shifts during aging affect lung stem cell behavior. The progression from broad transcriptional profiling to specific mechanisms, such as IL-4-induced SOX9 effects on lineage plasticity, suggests a novel approach to linking aging signatures with cellular adaptability. The introduction of LaGrACE further indicates an original methodological contribution to estimating gene program dysregulation.

SIGNIFICANCE: The core paper has garnered 30 citations, with follow-up works accumulating additional attention. Notably, 96.9% of the 225 classified citations originate from independent researchers, indicating that this framework has been widely adopted and validated by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 25

CORE PAPER

Transcriptional changes of the aging lung.

2023 · Aging Cell, e13969-e13969, 2023 · 30 citations (GS)

Field-normalised: 22 Semantic Scholar citations place it in the top 10% of Medicine papers from 2023 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	An international perspective on the future of systemic sclerosis research	University College London	United Kingdom	—
2	Inflammatory and immune mechanisms in COPD: current status and therapeutic prospects	Bengbu Medical University, Jiangsu Vocational College of Medicine	China	Background
3	Distinct senotypes in p16-and p21-positive cells across human and mouse aging tissues	Mayo Clinic	United States	—
4	Therapeutic approaches targeting aging and cellular senescence in Huntington's disease	Batterjee Medical College, Chitkara College of Pharmacy, Chitkara University	Australia, India, Malaysia	Background
5	Distinct secretomes in p16-and p21-positive senescent cells across tissues	Mayo Clinic	United States	—
6	Heterogeneity of cellular senescence, senotyping, and targeting by senolytics and senomorphics in lung diseases	University of Rochester Medical Center	United States	—
7	Mcad: Multi-modal conditioned adversarial diffusion model for high-quality pet image reconstruction	Chengdu University of Information Technology, Sichuan University	China	Background
8	Parenchymal and inflammatory responses to ozone exposure in the aging healthy and surfactant protein C mutant lung	Children's Hospital of Philadelphia, University of Utah College of Pharmacy	United States	—
9	Single-cell atlas of human lung aging identifies cell type dyssynchrony and increased transcriptional entropy	Yale School of Medicine, Yale University School of Medicine	United States	—
10	Distinct cAMP regulation in scleroderma lung and skin myofibroblasts governs their dedifferentiation via p38α inhibition	Medical University of South Carolina, University of Michigan Medical School	United States	—
11	SON-dependent nuclear speckle rehabilitation alleviates proteinopathies	University of Pittsburgh	United States	—
12	SCPEP1+ basal cells are associated with the remodeling of oxidative stress signaling networks in idiopathic pulmonary fibrosis	Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, The Second Affiliated Hospital of Harbin Medical University	China	—
13	Decoding lung complexity: single-cell sequencing in lung diseases, regeneration, and drug discovery	National Institute of Biological Sciences, China	China	—
14	Proximal Pulmonary Artery Stiffening as a Biomarker of Cardiopulmonary Aging	Icahn School of Medicine at Mount Sinai, Iowa State University, The First Affiliated Hospital of Zhengzhou University	China, France, United States	—
15	Identification of diagnostic and prognostic phospholipid biomarkers in idiopathic pul-	Sichuan Provincial People's Hospital, Sichuan University	China	—

No.	Citing paper	Citing institution(s)	Country	S2
	monary fibrosis via machine learning and in vivo validation			
16	Hypoxia Preserves Chromatin Integrity and Delays Cellular Senescence through Epigenetic Regulation	University of Seoul	South Korea	—
17	Unveiling biological age: a new frontier in predicting outcomes in chronic lung disease	The Ohio State University, Vanderbilt University Medical Center	United States	—
18	Epigenetic Responses to Abusive versus Accidental Injuries in Children: A Cross-sectional Epigenome Wide Association Meta-analysis	Emory University	United States	—

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

IL-4-induced SOX9 confers lineage plasticity to aged adult lung stem cells

2024 · Cell Reports 43 (8), 2024 · 17 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	SOX9: a key transcriptional regulator in organ fibrosis	The Second Hospital of Jilin University	China	—
2	Restoring Histone Acetylation Accelerates Diabetic Wound Repair by Improving the Spatiotemporal Dynamics of Macrophages	Ulm University	Germany	—
3	Tuft cells shape airway remodeling by eliciting OXGR1-and SOX9-dependent stem cell programs	Brigham and Women's Hospital	United States	—
4	SOX9: a novel janus-faced regulator in immunity and its promise as a therapeutic target	Huzhou University, The First People's Hospital of Huzhou	China	—
5	Diprovocim protects against the radiation-induced damage via the TLR2 signaling pathway	Changhai Hospital Affiliated to the Naval Medical University, Naval Medical University, University of Shanghai for Science and Technology	China	—
6	Wnt3-mediated fibrosis and carcinogenesis of lung squamous cell carcinoma in idiopathic pulmonary fibrosis	Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University Hospital	Japan	—
7	The Role of Interleukin-4 in Olfactory Epithelial Cells: A Preliminary In Vitro Study	Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, The First Affiliated Hospital of Nanchang University, The Second Affiliated Hospital of Nanchang 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).

FOLLOW-UP WORK

LaGrACE: estimating gene program dysregulation with latent regulatory network

2025 · Molecular Systems Biology 21 (9), 1263, 2025 · 1 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
University of Pittsburgh	United States	SCImago #212 · QS =281	20
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	10
Huashan Hospital, Fudan University	China	—	5
University College London	United Kingdom	SCImago #30	5
Yale School of Medicine	United States	—	4
University of Zurich	Switzerland	SCImago #313 · QS 100	4
Xiangya Hospital, Central South University	China	—	4
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	3
Karolinska Institutet	Sweden	—	3
The University of Arizona	United States	SCImago #408 · THE =138 · QS =287	3
Friedrich-Alexander-University Erlangen-Nürnberg	Germany	—	3
University of Virginia	United States	SCImago #451 · THE =166 · QS 275	3
Vanderbilt University Medical Center	United States	SCImago #663	3
Zhongshan Hospital of Fudan University	China	—	3
Yale University School of Medicine	United States	—	3

Geographic distribution of citing authors

Country	Citing papers
United States	83
China	77
Germany	15
United Kingdom	13
Japan	9
Switzerland	9
India	7

Country	Citing papers
Sweden	4
Australia	4
Canada	4
Saudi Arabia	3
Spain	3

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar's own institution and circle** — the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution's rank as probative on its own.

F. AAO Precedent Considerations

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	Myofibroblast transcriptome indicates SFRP2hi fibroblast progenitors in systemic sclerosis skin	133	8 CFR 204.5(h)(3)(v) — Criterion 5

Contribution	Core paper	Indep. cites	Supports
Contribution 2	Reduced Proportion and Activity of Natural Killer Cells in the Lung of Patients with Idiopathic Pulmonary Fibrosis	26	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 3	Transcriptional changes of the aging lung.	25	8 CFR 204.5(h)(3)(v) — Criterion 5