

# Using IEEE Xplore for Competitive Intelligence and Understanding the Hi-Tech Landscape – Webinar for Romania

Presented by:
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IEEE Client Services Manager
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### **IEEE: Who, What, Why?**

#### Who is IEEE?

■ IEEE is the world's leading professional association, dedicated to the practicing engineer and with the mission of advancing technology for humanity.

#### What we do?

• We publish the top-cited science and technology research in the field, most notably our journals, conferences, and standards.

#### Who do we serve?

Our publications are made available to academic, corporate, and government organizations around the world via our online database: the IEEE Xplore® Digital Library.

### Why do you need IEEE Xplore?

■ Access to the research in IEEE Xplore helps students, faculty, scientists, researchers and engineers save time and money by accelerating their R&D efforts, getting their research and products to market faster, and not reinventing the wheel.





### **How IEEE Supports Engineers**



- IEEE Sections and Chapters for sharing technical interests, solving local problems, networking, and skill development
- IEEE Women in Engineering (WiE) connects nearly 20,000 members globally to advance women in tech throughout their career; offers flagship and regional leadership conferences.
- IEEE Young Professionals (YP) provides technical, leadership, and social activities for early career engineers
- IEEE Member Elevation and Awards
  Global recognition of members' and companies' contributions to "advancing technology for humanity"
  - IEEE Vision, Innovation, and Challenges Summit and Honors Ceremony brings together and celebrates some of the world's most notable technologists.



### **New Technology Connection: Future Directions**

Fostering cooperative efforts in emerging topics among Societies, Councils, and industry





























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TRANSPORTATION ELECTRIFICATION COMMUNITY

- New Career Center
- New Resource Center
- Access our webinars
- Attend our conferences
- Connect with peers



### Message from the Chair -October 2020



Welcome to the IEEE Transportation Electrification Community!

Our mission is to coordinate all things transportation

within IEEE. Honestly, our task gets bigger every day with applications that would have been thought of as "futuristic" if not downright crazy just a few year ago, from autonomous cars to fully electric airplanes.

Read more ...

What's New

Feature Article

Technology Spotlight

Quick Links

CFP: 2021 IEEE 12th International

Published by IEEE Spectrum

New Webinar!

For Suggestions, comments, or questions

### **Stay Current with IEEE**

The technology landscape is constantly evolving and so are IEEE publications.

IEEE introduces new publications to address growing areas of research that transform our lives such as IoT, Blockchain, Big Data, Machine Learning, Renewable Energy, 5G, Autonomous Vehicles, Secure Computing, Robotics, and more.

Coverage of all of these technologies can be found in current and forthcoming publications from IEEE.





### **IEEE Xplore** Digital Library

The source that the top research organizations in the world rely on to fuel imagination and drive innovation

- IEEE journals, conference proceedings and standards plus select partner content dating as far back as 1884
- Approximately 200 IEEE journals, magazines, and transactions with expert-authored articles from a wide range of established and uncharted technology
- Conference proceedings on the latest technology breakthroughs from IEEE conferences and events worldwide, curating cutting-edge research
- Over 3,000 approved and published IEEE standards which are instruments that support technological change, process improvement and technology transfer among sectors and across borders.



https://ieeexplore.ieee.org





### **Using IEEE Content: Applications**

Moving towards a learning and knowledge-based culture

- Research & Development
- Technological Precedent & Forecasting
- New Product Information
- Current Awareness
- Patent-Related Searching
- Competitive & Market Intelligence





### **IEEE Covers All Areas of Technology**

Electrical engineering, computing, and beyond...

Aerospace

Artificial Intelligence

**Autonomous Vehicles** 

**Biomedical Engineering** 

**Broadcasting** 

Circuits

Communications

Computing

Control and Automation

**Cyber Security** 

Electronics

Information Technology

Internet of Things

Nanotechnology

**Optics** 

**Power Electronics** 

Renewable Energy

**Robotics** 

Semiconductors

**Smart Cities & Smart Grid** 

Transportation

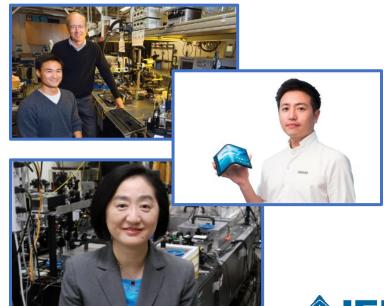
And more...



# IEEE Conferences Scale, Adapt, and Thrive in the Current Environment

- IEEE adapted to support the technical community and continues to drive innovation forward during this challenging time
- To ensure the safety of attendees while still providing opportunities to share new research, IEEE conferences have scaled up to reshape many more events in a virtual format
- The result: we are seeing an increase in registrants of <u>3 to 4</u>
   times for certain events
- Example: The CLEO conference, held in May 2020, reached nearly 20,000 registrants from 75 countries, with more than 2,000 scientific presentations
- All papers presented at this conference will be coming soon to the IEEE Xplore digital library





### **IEEE Standards**

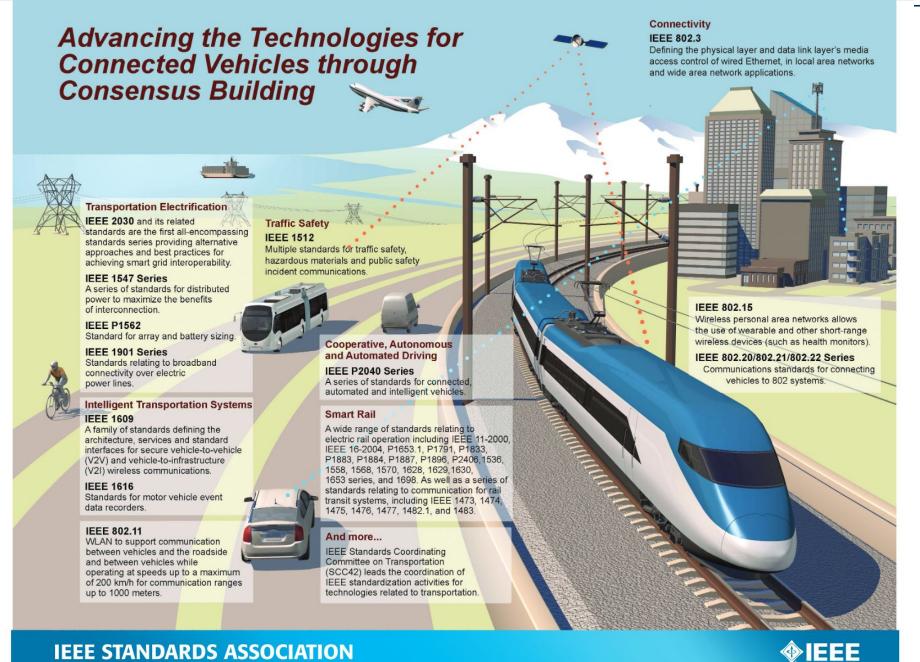
Standards provide specifications and procedures designed to ensure the reliability of the materials, products, methods, and/or services people use every day.

### Standards:

- Establish compatibility, interconnectivity, and interoperability
- Simplify product development
- Speed time-to-market









### **Draft Standards: A Window Into the Future of Technology**

P2821/D5, Jun 2020 - IEEE Draft Guide for Unmanned Aerial Vehicle-based Patrol Inspection System for Transmission Lines

P1937.1/D6.0, May 2020 - IEEE Draft Standard Interface Requirements and Performance Characteristics for Payload Devices in Drones

P1906.1.1/D1, Apr 2020 - IEEE Draft Standard Data Model for Nanoscale Communication Systems



### **Using IEEE Content: Developing Search Strategies**

- Think through the project or problem:
  - what are the major concepts?
  - what are the refining concepts?
- Be prepared to use the IEEE Xplore interface to "drill down" to obtain precision and relevancy
- Do the results suggest new avenues for research?
- Examine abstracts and keywords
- Use keywords to change or refine strategy
- Use Alerts to stay current on major concepts





### Why IEEE Xplore for Competitive Intelligence?



- Discover trending technology topics and content
- Locate information on competitors, new product technologies, related patents, companies, or organizations using author affiliation
- Stay up to date and gather intelligence using saved search alerts



Polyme 18 • Number 5 • September/October 2020

DOWER& Energy

May 19 • Number 5 • September/October 2020

for electric power professional



## Look to the Future

What It Holds for Hydropower

Water and Power
The Early Years

2020 Awards
Congratulations to All





# Electrification

HIGH-FREQUENCY POWER ELECTRONICS AT THE GRID EDGE

ADVANCES OF DC BUS SYSTEMS FOR ELECTRICAL SHIPS

FREQUENCY FLUCTUATIONS IN MARINE MICROGRIDS

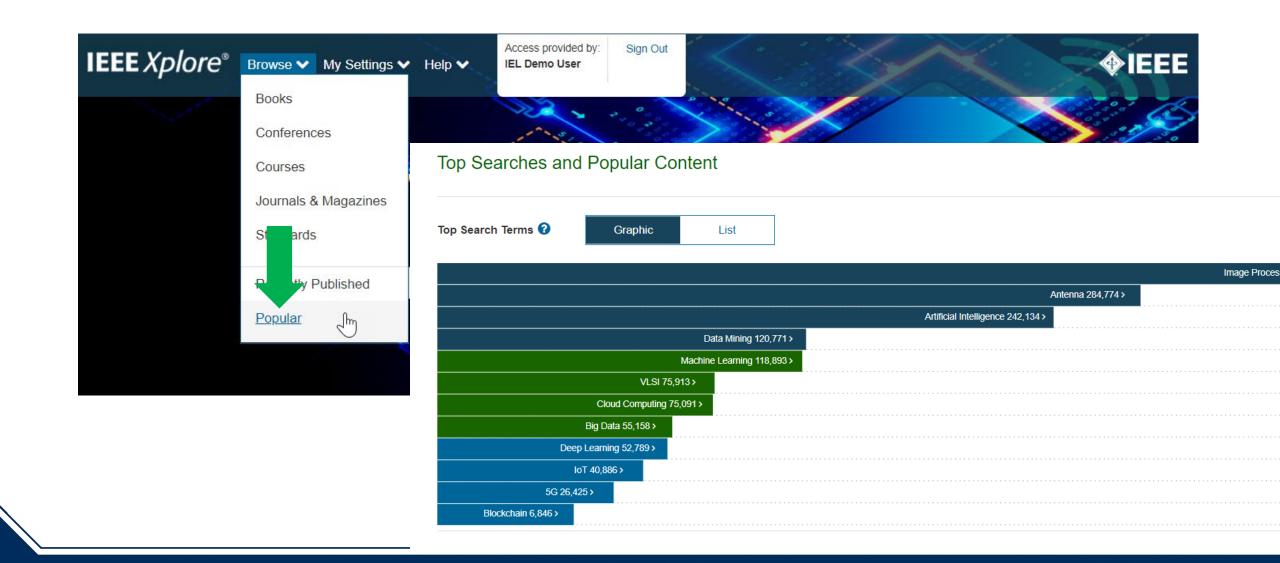
SHORE CHARGING FOR PLUG-IN BATTERY-POWERED SHIPS



"Seas" the Day: Power Electronics Converter Applications



### **Discover Trending Search Terms and Concepts**



### **Discover Popular Content**

# Popular Content All Journal and Magazine Articles Conferences Papers Standards Books

#### Turkish lira banknotes classification using deep convolutional neural networks

2018 26th Signal Processing and Communications Applications Conference (SIU) GÛlçin Baykal;Ugur Demir;Ira Shyti;Gözde Ünal

### Small Sample Classification of Hyperspectral Remote Sensing Images Based on Sequential Joint Deeping Learning Model

**IEEE Access** 

Zesong Wang; Cui Zou; Weiwei Cai

#### PiiGAN: Generative Adversarial Networks for Pluralistic Image Inpainting

**IEEE Access** 

Weiwei Cai;Zhanguo Wei

#### Design Lessons From Al's Two Grand Goals: Human Emulation and Useful Applications

IEEE Transactions on Technology and Society

Ben Shneiderman

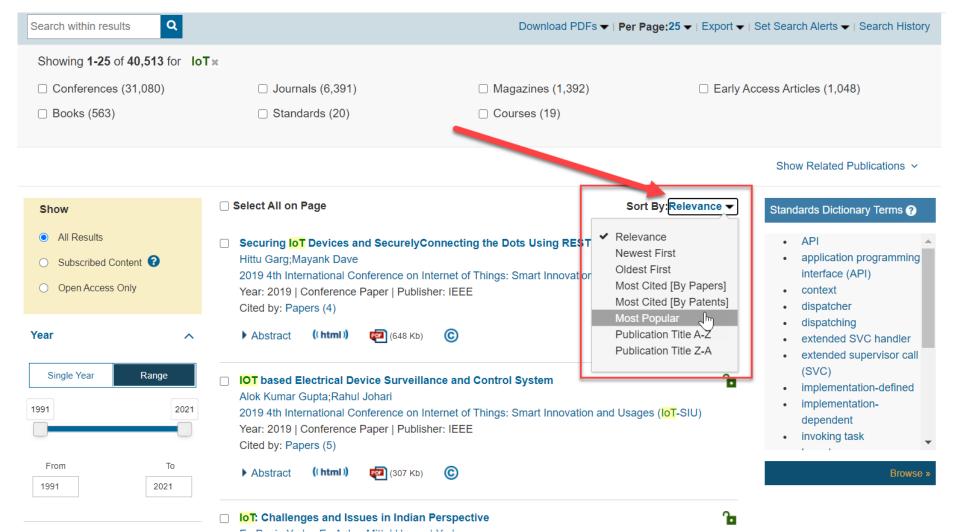
#### **Internet of Things for Smart Cities**

IEEE Internet of Things Journal

Andrea Zanella; Nicola Bui; Angelo Castellani; Lorenzo Vangelista; Michele Zorzi

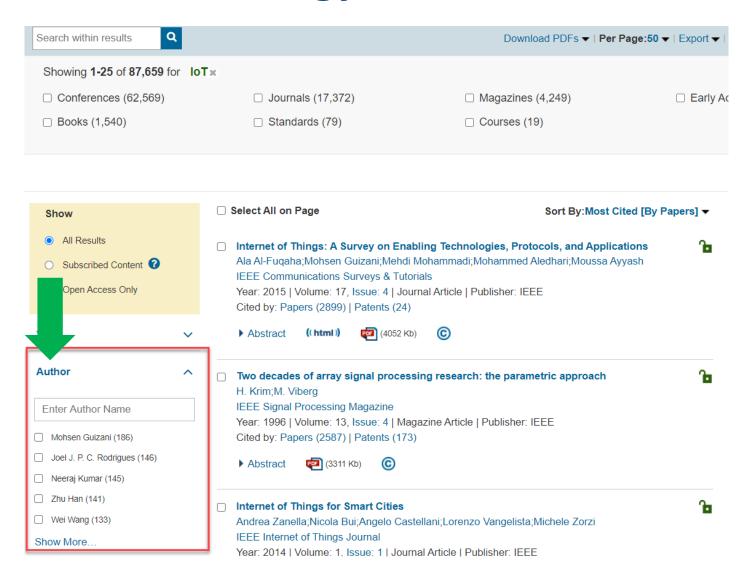


### **Discover Trending Content**





### **Discover Technology Influencers: Author Facet**



Identify key researchers or subject matter experts using the Author Facet to see the top published authors for your search.



## Discover Technology Influencers: Author Details Page



Yan Zhang

Also published under: Y. Zhang

Affiliation
Department of Informatics
University of Oslo
Oslo, Norway

**Publication Topics** 

learning (artificial intelligence), mobile computing, vehicular ad hoc networks, data privacy, smart power grids, optimisation, resource allocation, cloud computing, telecommunication traffic, 5G mobile View More

#### Biography

Yan Zhang (Fellow, IEEE) received the Ph.D. degree from the School of Electrical and Electronics Engineering, Nanyang Technological University, Singapore. He is currently a Full Professor with the Department of Informatics, University of Oslo, Oslo, Norway. His research interests include next-generation Publications 264
Publication 2005 2020

#### Co-Authors:

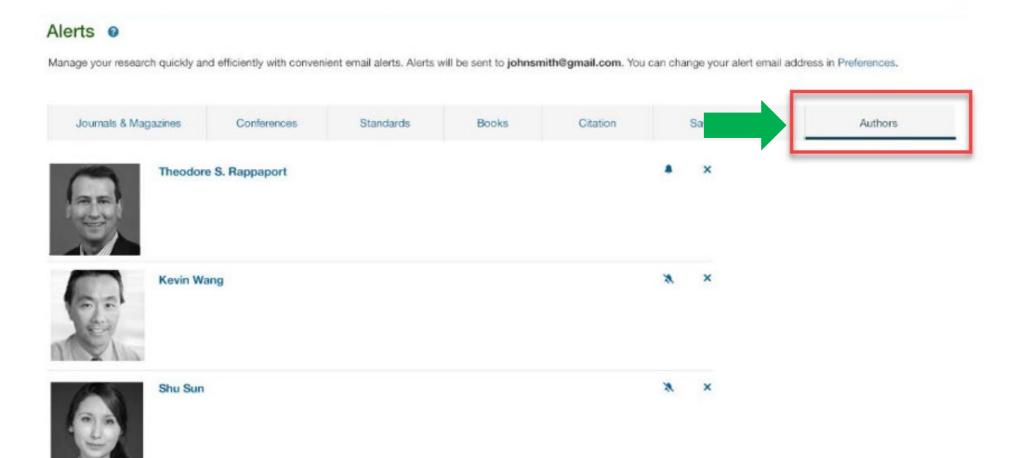
Bamidele Adebisi Almudena Alcaide Kelvin Anoh Hamid R. Arabnia Arash Asadi

View All (358)





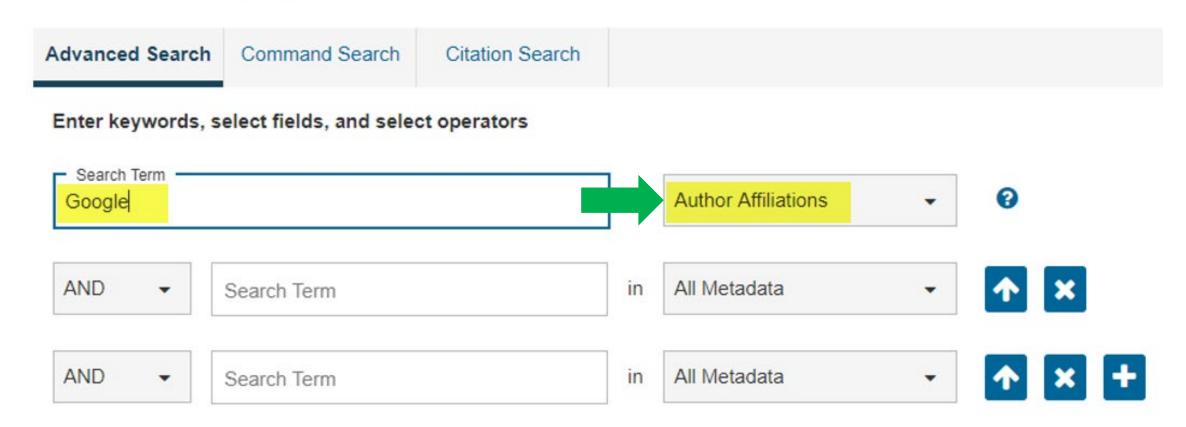
### **Track Technology Influencers: Follow Authors Feature**



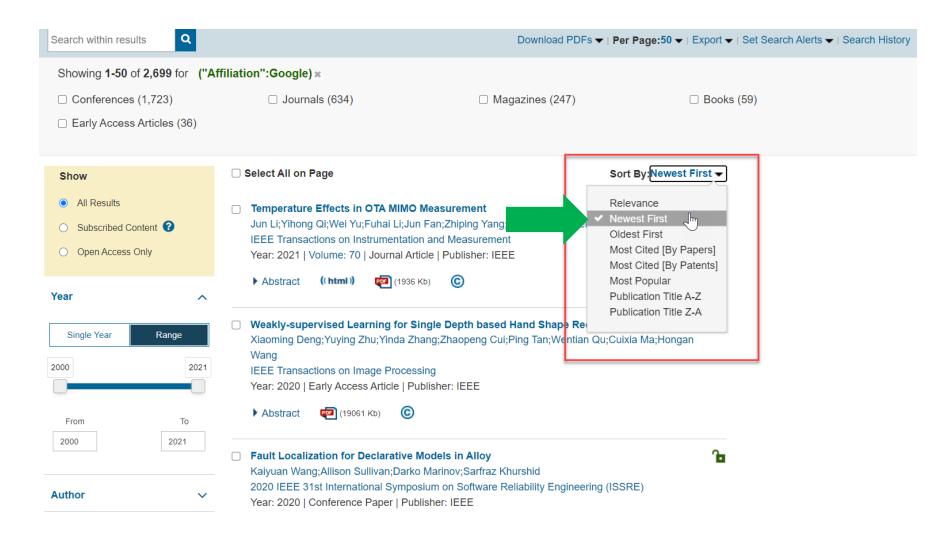
- Ability to follow up to 15 authors with your IEEE Xplore Personal Account
- Alerts generated weekly to notify users of new papers added to IEEE Xplore by author



### Advanced Search @

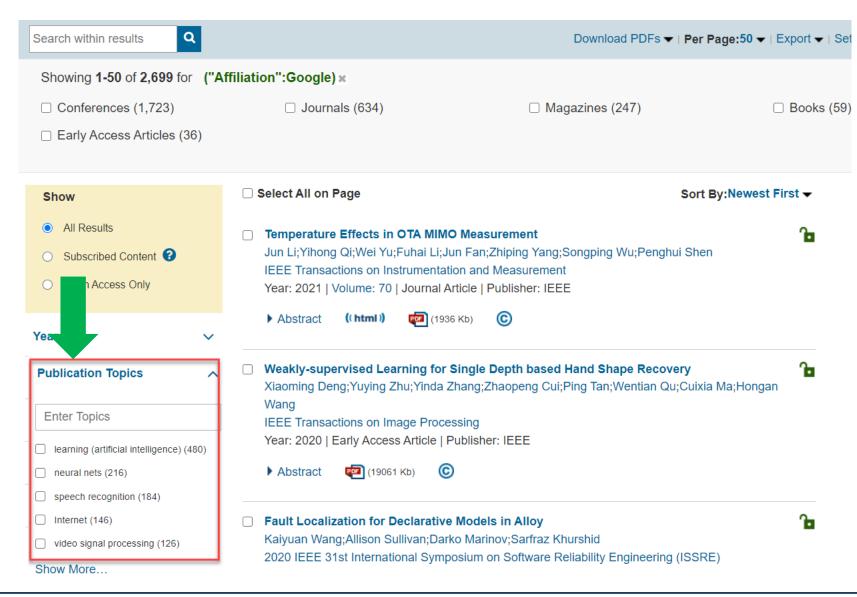






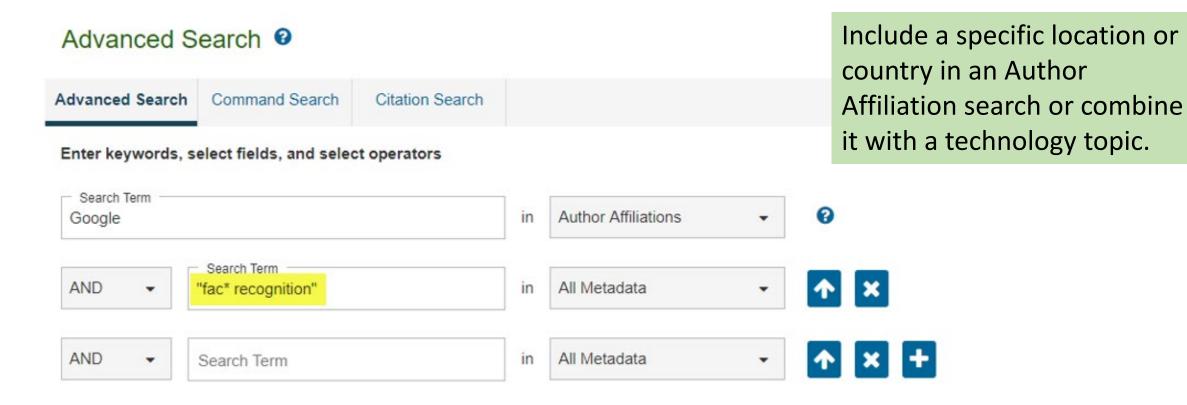
Use the sort options to find the most recently published content (Newest First) or to identify high impact papers (Sort Most Cited by Papers or Patents)





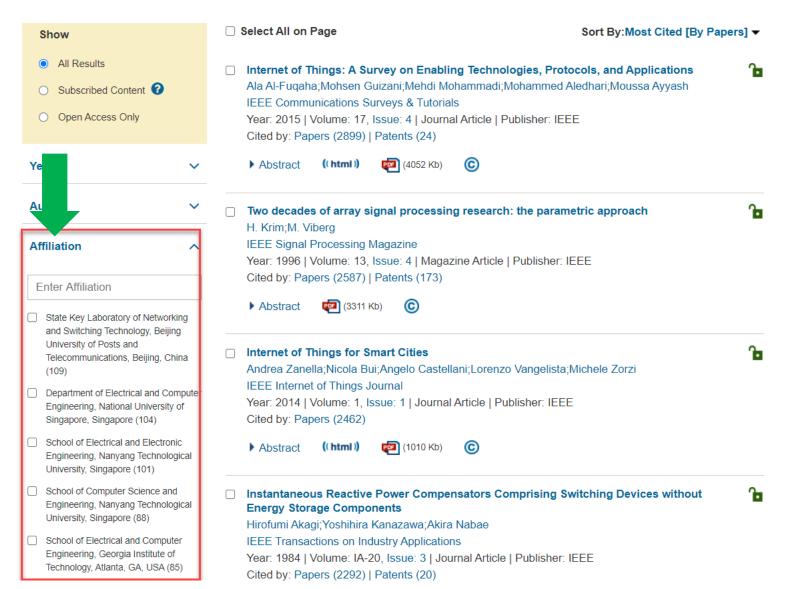
Use the facets on the search results page to identify top researchers at an organization or the top technology topics they are publishing on.







## **Identifying Leading Companies in a Technology Field**



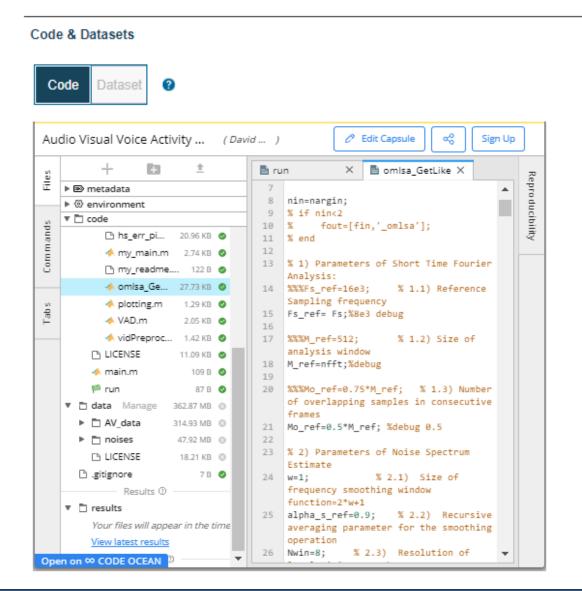
Use the Author Affiliation facet to discover which organizations are publishing the most research in a technology space.



### **Beyond the PDF: Copy Source Code for Equations**



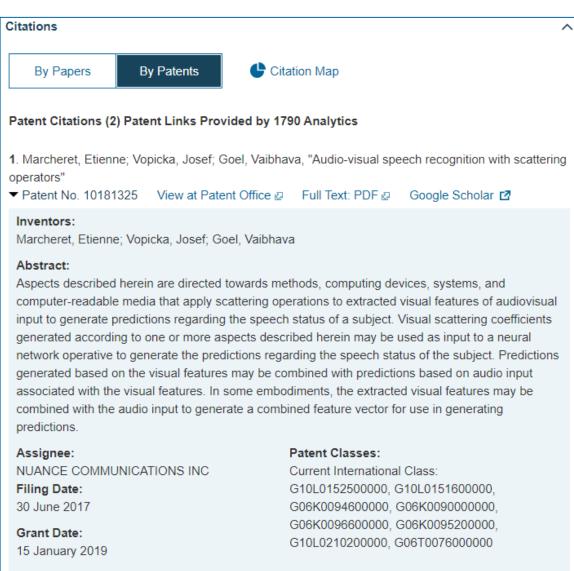
### **Beyond the PDF: View and Run Code**

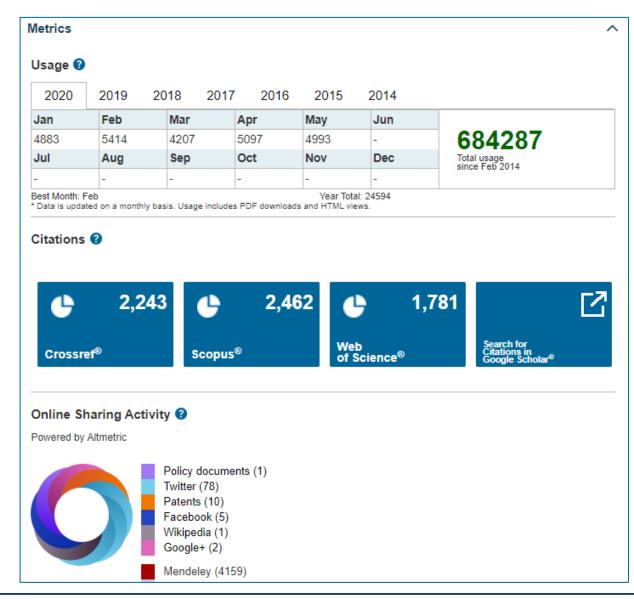


Some article includes code hosted on Code Ocean, a computational reproducibility platform that allows users to view, modify, run, and download code included with IEEE *Xplore* articles.



### Beyond the PDF: See How the Research is Being Used





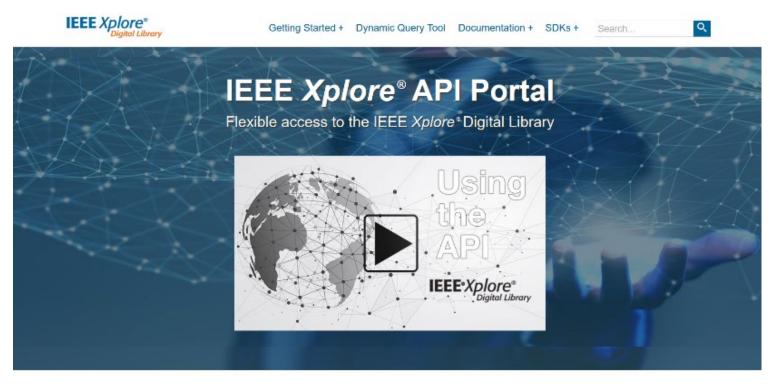
# **Discover Funding Opportunities**

Document Title	Authors		Author Affiliations	Publicatio	Funding Information
Combined Star-Delta	M. N. Ibrahim; P. Sergea	ant; E. E. N	Department of Electrical Energ	2016	Egyptian Ministry of Higher Education; Special Research Fund of Ghent University (BOF);
Relevance of Includin	M. N. Ibrahim; P. Sergea	ant; E. M. I	Department of Electrical Energ	2017	Egyptian Ministry of Higher Education; Special Research Fund of Ghent University;
Virtual Identity Perfo	I. Gomaa; E. Abd-Elrahm	nan; E. Saa	Electronics, Communications a	2019	Egyptian National Telecommunication Institute (NTI), Cairo, Egypt;
Primary User-Aware C	A. Guirguis; F. Digham; k	K. G. Sedd	Department of Computer and	2019	Egyptian National Telecommunication Regulatory Authority (NTRA);
A Powerful Finite Con	A. Bakeer; M. A. Ismeil;	M. Orabi	Aswan Power Electronics Appl	2016	Egyptian Science and Technology Development Funds (STDF);
A Novel Dual-Input Hi	E. A. D. Ibrahim; M. A. G	aafar; M.	Aswan Power Electronic Appli	2020	Egyptian Science and Technology Development Funds; Natural Sciences and Engineering Council of Canada;
Study and Analysis of	A. Salem; E. M. Ahmed;	M. Orabi;	APEARC, Aswan University, As	2016	Egyptian Scientific Research Ministry under the Egypt-Tunis Collaboration project;
Induced Voltages on (	M. E. M. Rizk; F. Mahmo	od; M. Lel	Faculty of Engineering, Depart	2016	Egyptian Study Mission; Aalto University, Finland;
Design of a Dual-Band	M. Aboualalaa; A. B. Abo	del-Rahm	Egypt-Japan University of Scie	2017	Egypt-Japan University of Science and Technology;
A Backup Protection T	A. Saber; A. Emam; H. El	lghazaly	Department of Electrical Power	2018	Elsewedy PSP Company, Egypt;
SemanticSLAM: Using	H. Abdelnasser; R. Moha	amed; A. I	Wireless Research Center, Egy	2016	Google Research Award; E-JUST; Egyptian Information Technology Industry Development Agency (ITAC);
Automatic Rich Map S	H. Aly; A. Basalamah; M.	. Youssef	University of Maryland, Colleg	2017	Google; KACST National Sc. and Tech. Plan; KACST GIS Tech. Innov. Center at Umm AlQura Univ; Egypt-Japan Un
Compact and Broadba	M. M. Mansour; H. Kana	ya	Graduate School of Informatio	2018	Grand-in-Aid for KAKENHI and CREST from Japan Society for the Promotion of Science, Japan; VDEC, The Univer
Compact Wireless Pov	S. Hekal; A. B. Abdel-Ral	hman; H.	Egypt-Japan University of Scie	2016	Grant-in-Aid for Scientific Research (C); Egyptian Ministry of Higher Education (MoHE), Cairo, Egypt; Egypt-Japa
CHARM-Deep: Contin	S. Ashry; T. Ogawa; W. G	Gomaa	NA; NA; NA	2020	Information Technology Industry Development Agency ITIDA Information Technology Academia Collaboration
Deeply-Etched MEMS	M. A. Othman; Y. M. Sab	ory; I. M. N	Faculty of Engineering, Ain Sh	2017	Information Technology Industry Development Agency through the ITAC program; Research, Development and
<b>Employing Game The</b>	M. S. Abdalzaher; O. Mu	ıta	Seismology Department, Natio	2019	Japan-Society-for-the-Promotion-of-Science (JSPS) KAKENHI; Egypt-Japan Initiation for Education;
Interference Mitigatio	A. Nasser; O. Muta; M. E	Elsabrouty	Graduate School of Informatio	2019	JSPS KAKENHI; Kyushu University; NTRA; Egyptian Ministry of Higher Education;
Queue-Aware Opport	A. M. Benaya; M. Elsabro	outy; O. N	Department of Electronics and	2018	Kyushu University; Egypt-Japan University of Science and Technology under the project Super-HETs, Empoweri
Providing End-to-End	A. A. A. El-Latif; B. Abd-E	El-Atty; S.	Mathematics and Computer Sc	2020	Menoufia University, Egypt; MSIT (Ministry of Science and ICT), Korea, under the ITRC (Information Technology
Machine Learning Me	S. K. Ibrahim; A. Ahmed	; M. A. E.	Zagazig University, Zagazig, Eg	2019	National Authority for Remote Sensing and Space Science-Egypt;



### **IEEE Xplore API Platform/Portal**

Query and retrieve metadata records including abstracts for nearly 5 million documents in IEEE *Xplore* including Journals, Conference Proceedings, eBooks, Courses, and Standards.



https://developer.ieee.org

For more information: <a href="mailto:onlinesupport@ieee.org">onlinesupport@ieee.org</a>





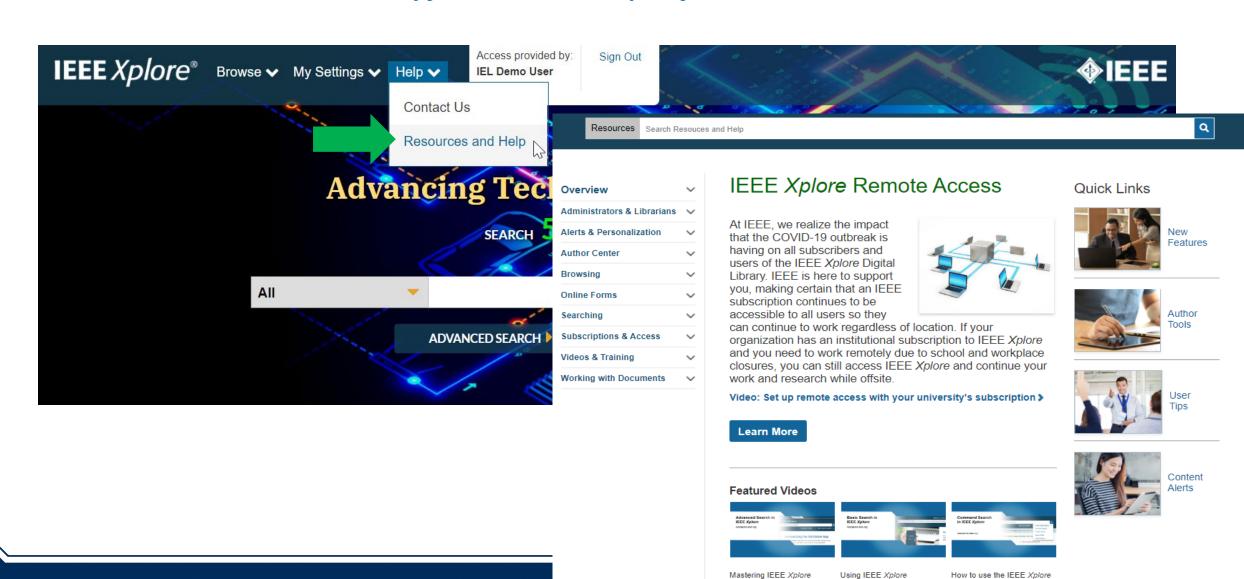






### **IEEE Xplore** Resources and Help

Indexed and searchable with helpful content on topics for users, librarians, and administrators



### **Thank You!**

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