

IEEE Power Electronics Magazine

For Your Engineering Success

Welcome to the 10th Anniversary Celebration!

Please take your seats. We will have social time at the end, including cake.



ALIX PAULTRE
Editor-in-Chief

MICHAEL KELLY
PELS Executive Director

JOHAN ENSLIN
PELS President

March 2025

PELS Vice President of Products



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University of
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IEEE Power Electronics Magazine

- Founder
- First Board Member
- First Industry Deputy Editor-in-Chief
- Longest Serving Board Member
- Founder of Magna-Power Electronics, USA
- Life Fellow

“I was the founder of the Magazine and the founder of Magna-Power Electronics. I am on the road to retirement with my two sons, Grant and Adam, currently operating the company. My daughter, Brooke, is a veterinarian.”

Don Tan



IEEE Power Electronics Magazine

- Founder
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- Life Fellow
- Past President of PELS
- Founder and CTO, E2 Systems, USA
- Vice President-Elect, IEEE Technical Activities, 2025
- Distinguished Engineer/Fellow/Chief Engineer of Power Products, Northrop Grumman Aerospace Systems, USA

“I was then PELS President and appointed Ira and the team to found the magazine. I also did the paperwork for IEEE approval and was instrumental in hiring a paid EIC and in setting up the editorial policies to ensure that the magazine was for industry.”



Robert N. Guenther Jr.



IEEE Power Electronics Magazine

- Founder
- First Board Member
- Longest Serving Board Member
- Industry Deputy Editor-in-Chief
- Life Fellow
- Engineer/Owner, GPEM LLC, USA, a power electronic and magnetic component consulting firm

“A key objective for the new Power Electronic magazine was to provide content that was more useful to readers from the industry segment of PELS. At this formative stage, I felt my primary role was to bring forth the needs of our members from industry.”

Philip T. Krein



IEEE Power Electronics Magazine

- Founder
- First Board Member
- Life Fellow
- Past President of PELS
- Research Professor, University of Illinois Urbana-Champaign, USA

“We first began discussing a magazine in 1999 when I was PELS President. We started by expanding our newsletter. I was a committee member on the team that developed the magazine and got it through IEEE for the first publication in 2014.”



William A. Peterson



IEEE Power Electronics Magazine

- Founder
- First Board Member
- Life Fellow
- Longest Serving Board Member
- Consultant at Electronic Power Conversion, USA (retired)

“My role was to guide the magazine in the direction of practical application oriented information for the practicing engineering industry.”

Ashok Bindra



IEEE Power Electronics Magazine

- Founder
- First Board Member
- Founding Editor-in-Chief (2014-2024)

“As a founding Editor-in-Chief of IEEE Power Electronics Magazine, my role was to execute the vision of the founders, keeping readers informed about the cutting-edge advancements in the industry and academia, while also anticipating what is coming down the road. Along the way, the magazine earned some awards, and a website was added to expand the scope of the print.”



Michael P. Kelly



IEEE Power Electronics Magazine

- Founder
- First Board Member
- Executive Director, IEEE Power Electronics Society (PELS)

“Mike Kelly created the new periodical proposal document as per IEEE requirements and followed the process for approval from the IEEE periodicals committee. The periodical title was selected as IEEE Power Power Electronics Magazine with four issues per year.”

IEEE Power Electronics Magazine Receives 2024 APEX Award for Publication Excellence



L-R: EIC Ashok Bindra, Jonas Huber, Johann Kolar.

The IEEE Power Electronics Magazine's March 2023 cover feature "Monolithic Bidirectional Power Transistors," written by Jonas Huber and Johann Kolar of Power Electronic Systems Laboratory, ETH Zurich, Switzerland, has been recognized for excellence in publishing by professional communicators. Today we have certificates to present to the authors and EIC.



IEEE Power Electronics Magazine EIC Recognition



Magazine Gallery

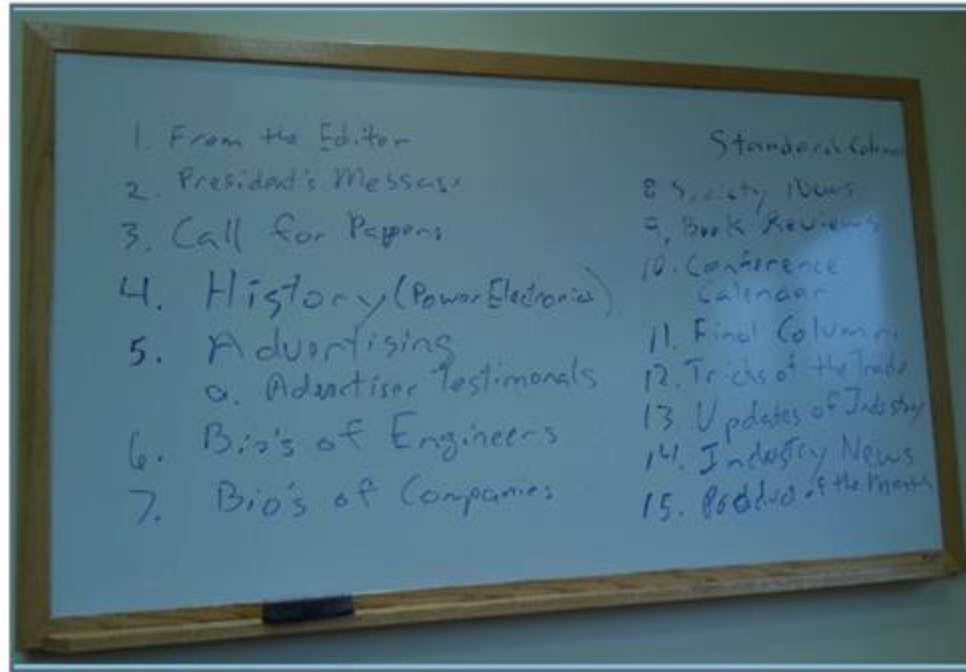


FIG 1 Results of PELS' first brainstorming session creating a vision for IEEE Power Electronics Magazine.

10 Things to Learn from 11 Years of MPEL

Stephanie Watts Butler
Industry Deputy Editor-in-Chief

*Followed by Recognition of founding leadership; deputy editors;
Significant Papers, Noted Authors and Columnists
Hosted by Editor-in-Chief Alix Paultre*

1. Recognition of Kristen Parrish's Analysis

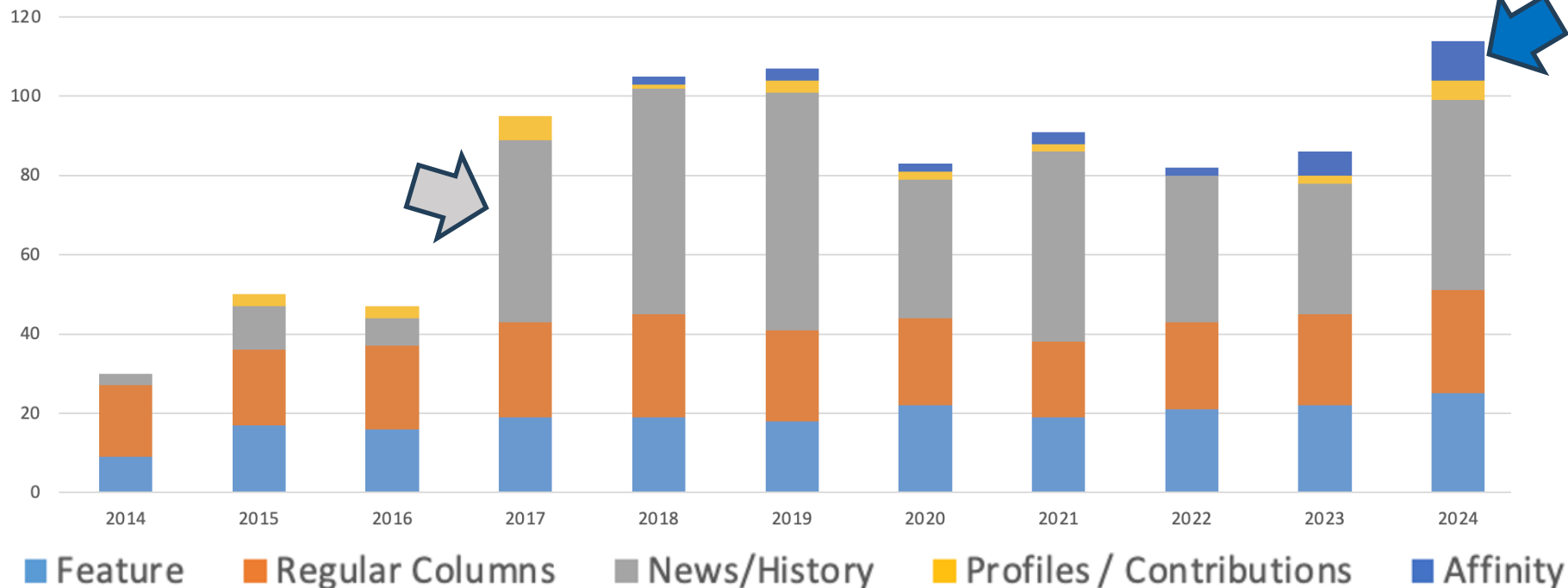
11 Years of Power Electronics Magazine: A Retrospective through a Demographic Lens



- ▶ Industry Pulse Columnist
- ▶ Examining/Increasing Engagement & Inclusion
- ▶ 11 years = 44 issues
 - 1633 line items (one per by-line (Author))
 - 788 Unique Authors (only 4 were “unstalkable”)
 - 1040 articles
- ▶ Every issue of the magazine contains:
 - “Features” (technical articles, sometimes conference recaps)
 - “Society News” (usually chapter/local section news, may also include conference recaps)
 - “Affinity groups” (WIE, DEI, SYP columns)
 - “Regular columns” (eg White Hot, PSMA Corner, Letter from the Editor)
 - and some misc columns (In Memoriam, etc)

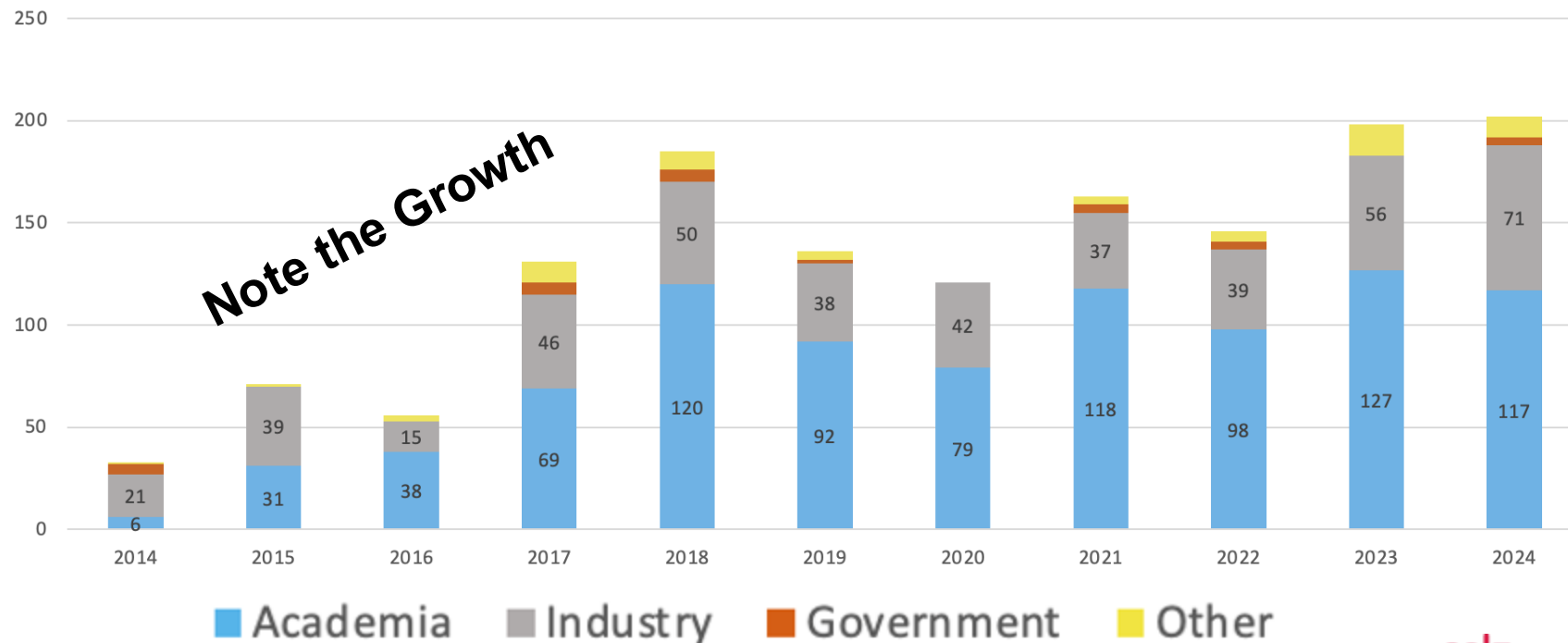
2. Variety of Article Types through the years

Features, News/History, Affinity (DEI, WIE, SYPS), profiles/obits, and Regular Columns



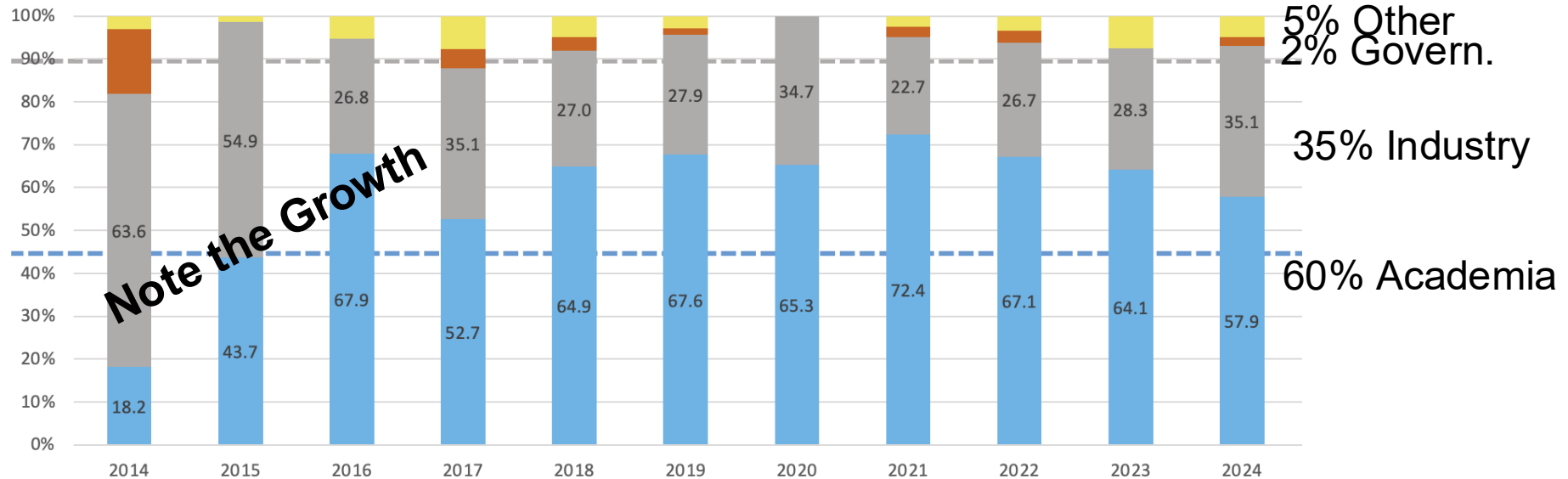
3. Affiliation – WHO writes for the magazine?

Bylines over time – absolute numbers (not including Ashok/Unknown)



3. Affiliation – Increasing Academia

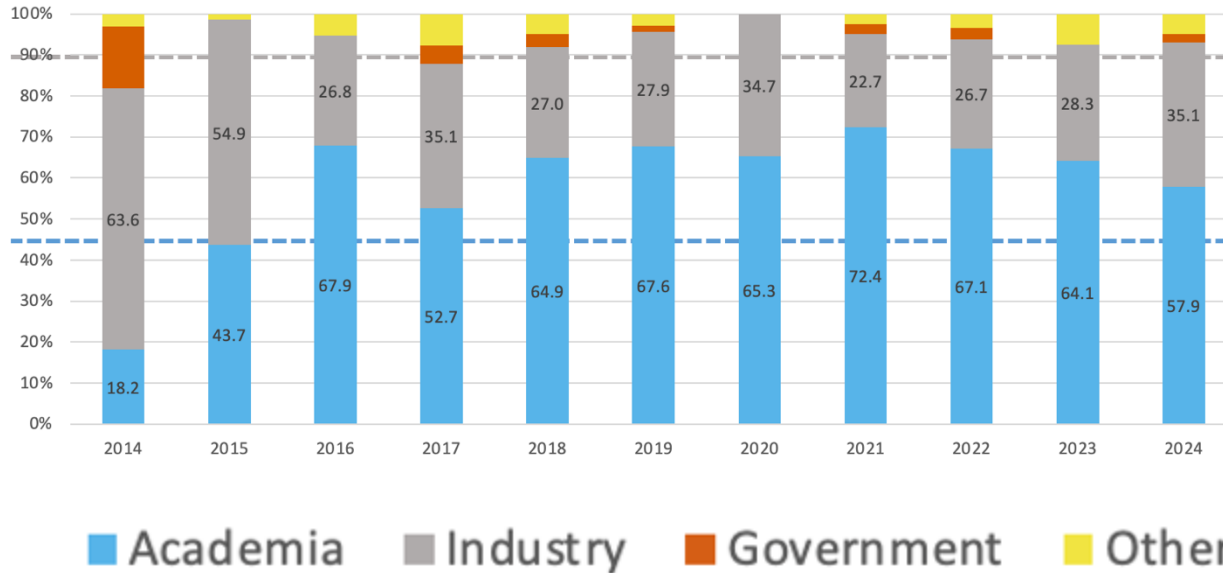
Bylines over time – % (not including Ashok/Unknown)



Academia Industry Government Other

3a. Affiliation of Authorship vs Membership Profile

Bylines over time – % (not Ashok/Unknown Mag)

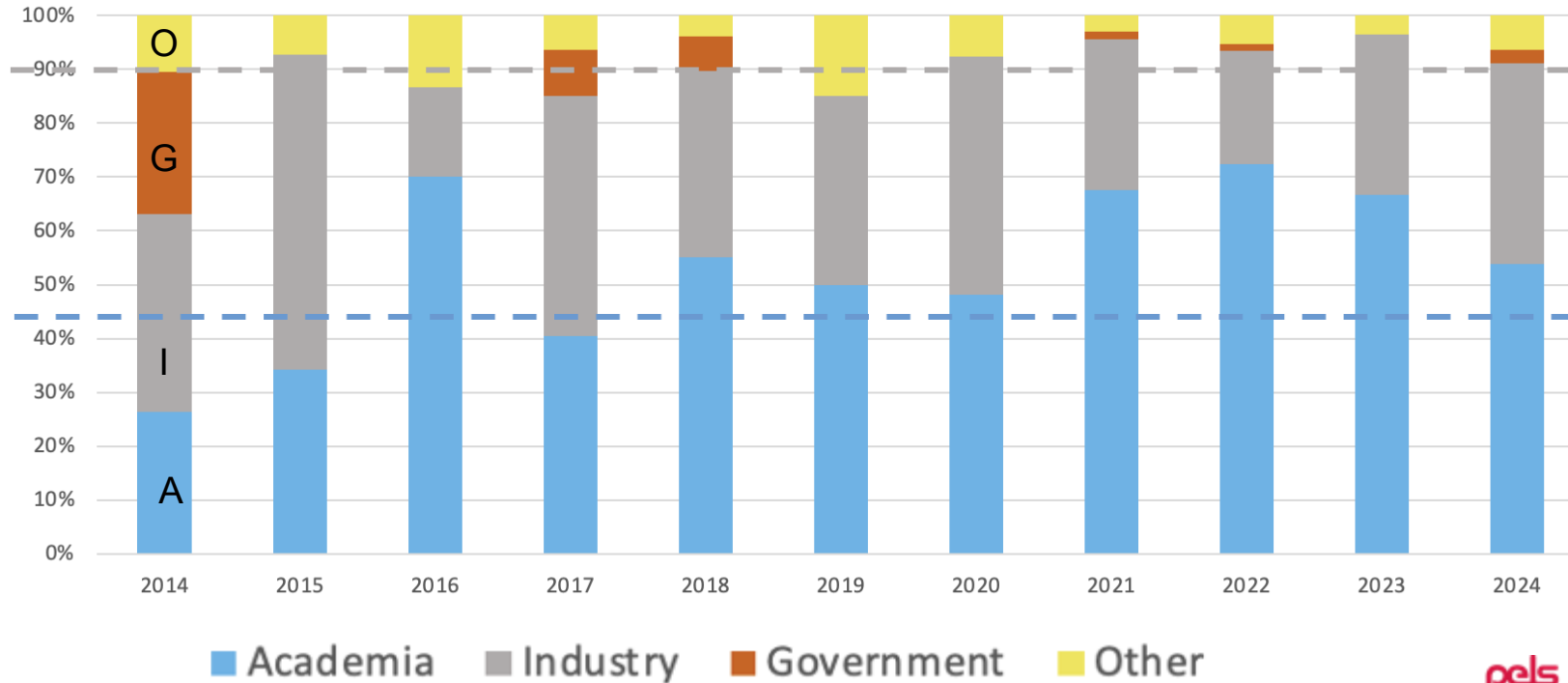


Affiliation	% magazine	% population
Academia	61	27
Government	3	3
Industry	32	28
none	0	40
Other	4	2

3b. Affiliation – Feature Articles

Possibly skewed towards academia – especially in later years

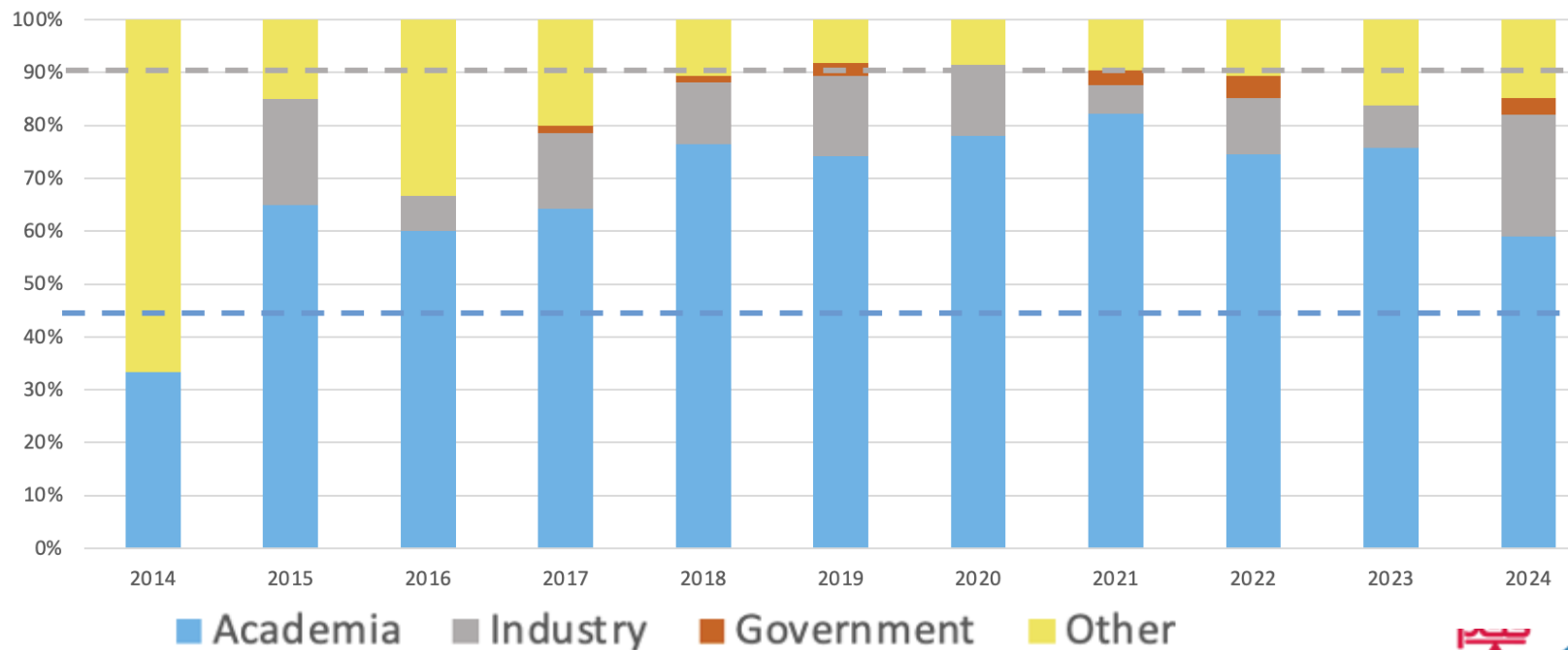
Government only major in year 1



3b. Affiliation – Society news / history articles*

Mostly students, post-docs and professors involved at the chapter level

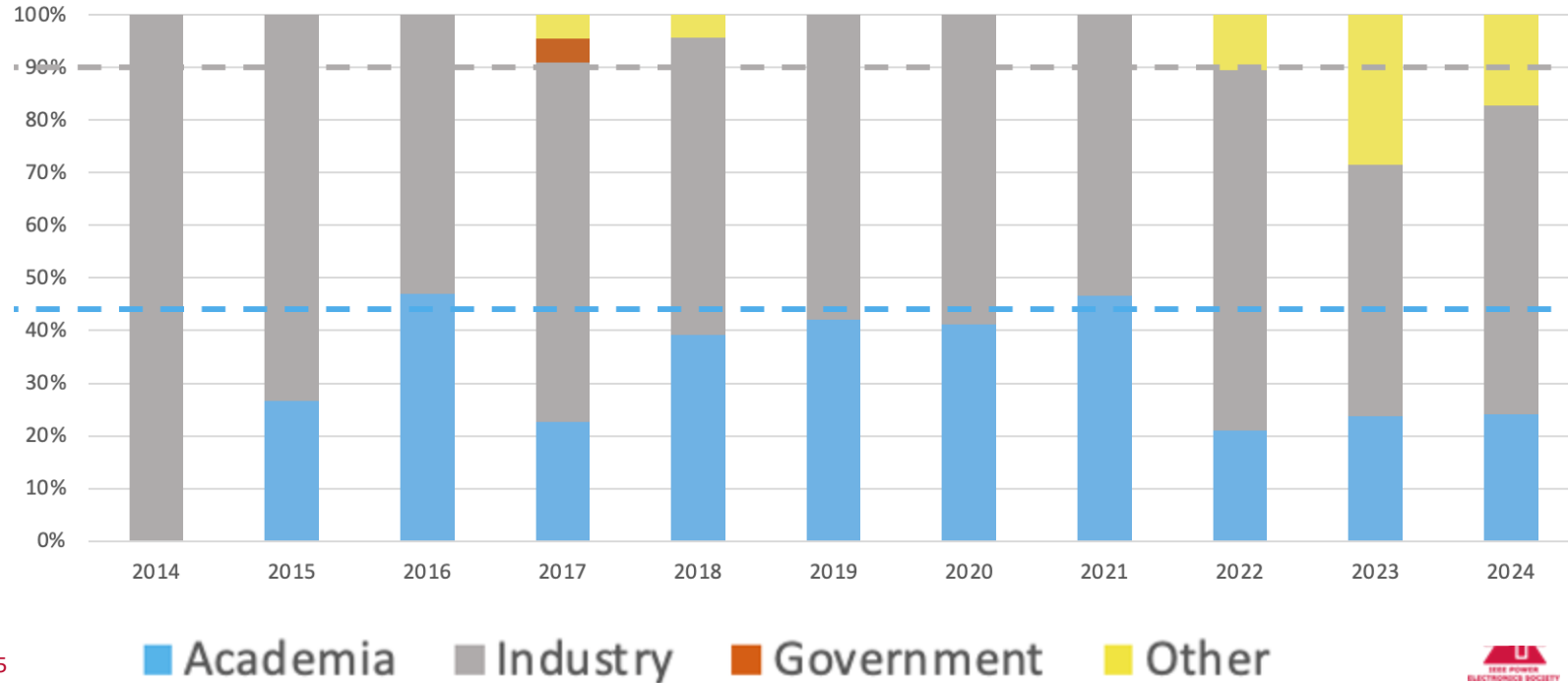
Undergrads regularly contribute Society News articles



* Not including articles without bylines

3b. Affiliation – Regular Columns

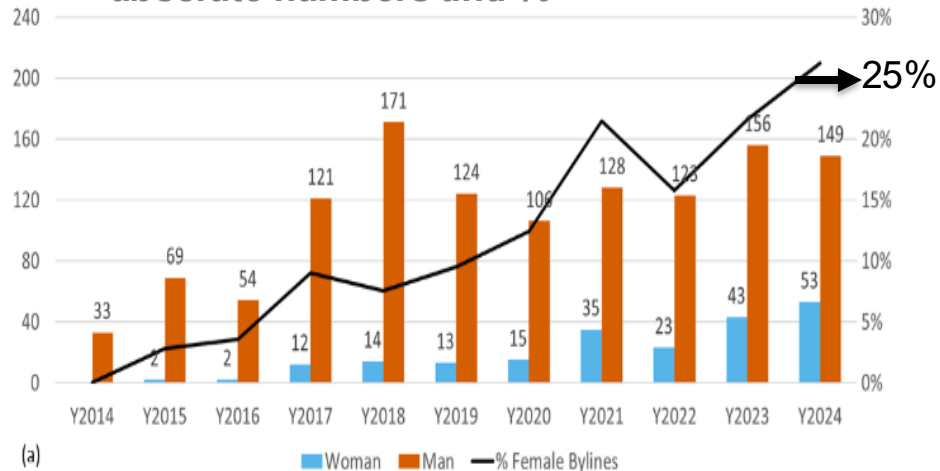
Industry are primary authors



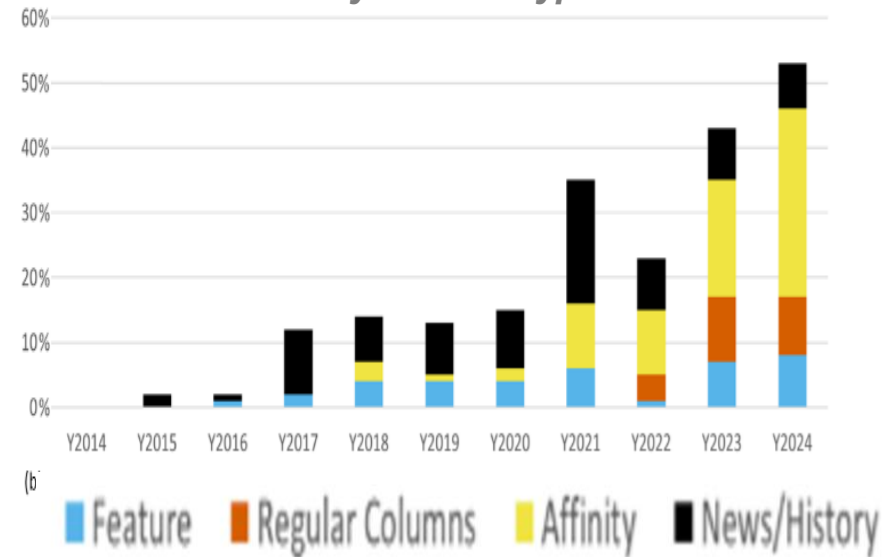
4. Gender

Increasing authorship of what type of articles

*Female Bylines over time
– absolute numbers and %*



*Percentage of female bylines
- broken out by column type*



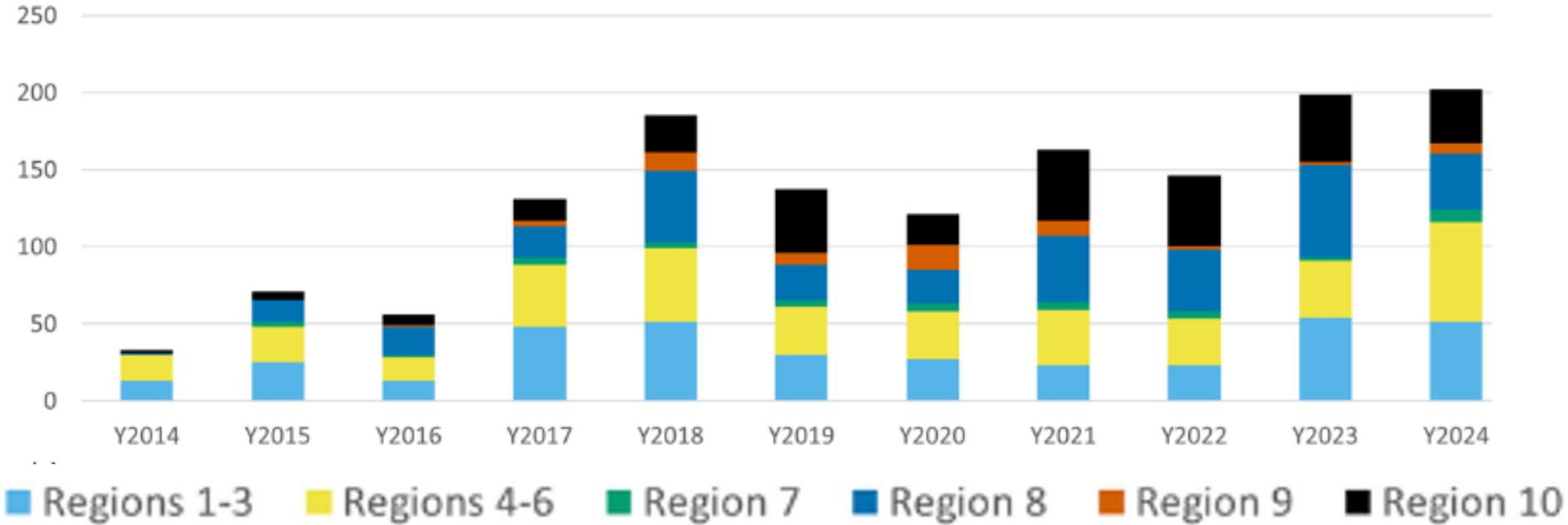
12% of IEEE Members identify as female
12% check “unknown/other” in their IEEE Profile

5. Geography – 100% known!

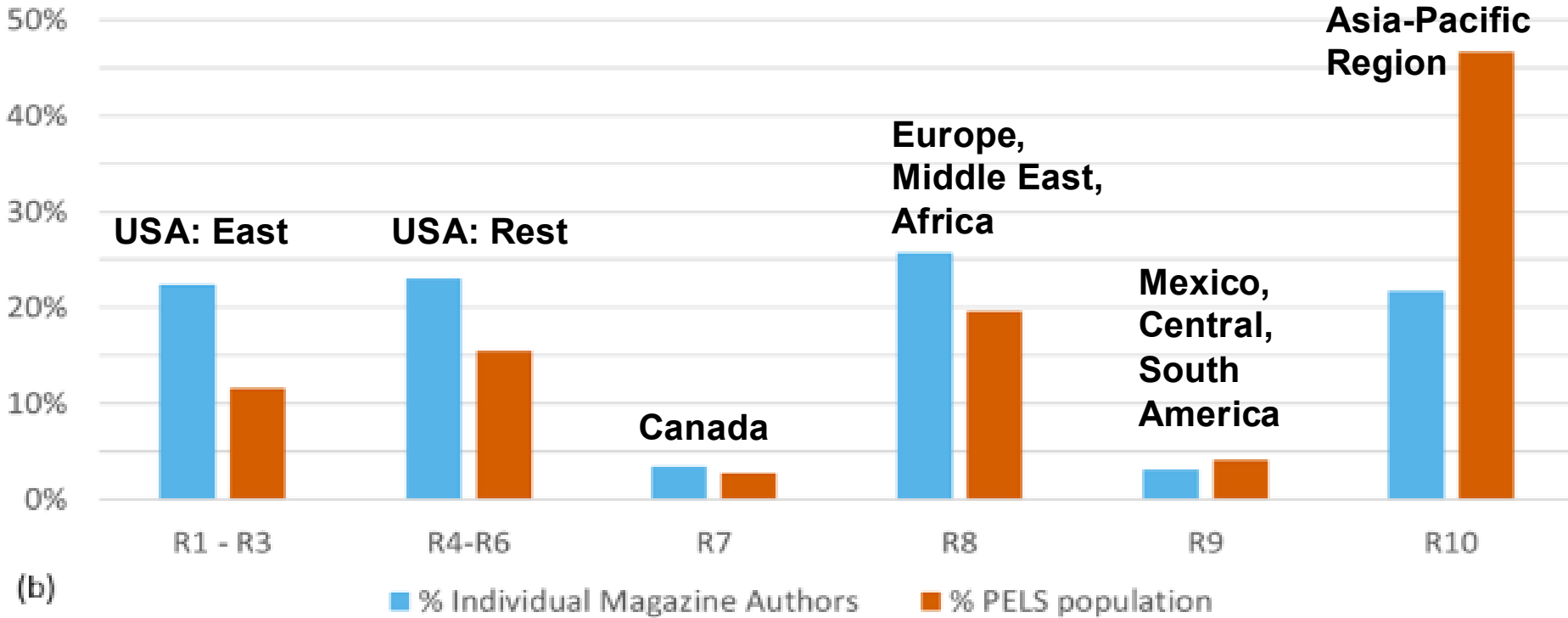


5. Geography – Is it well represented?

Region representation over time (absolute)

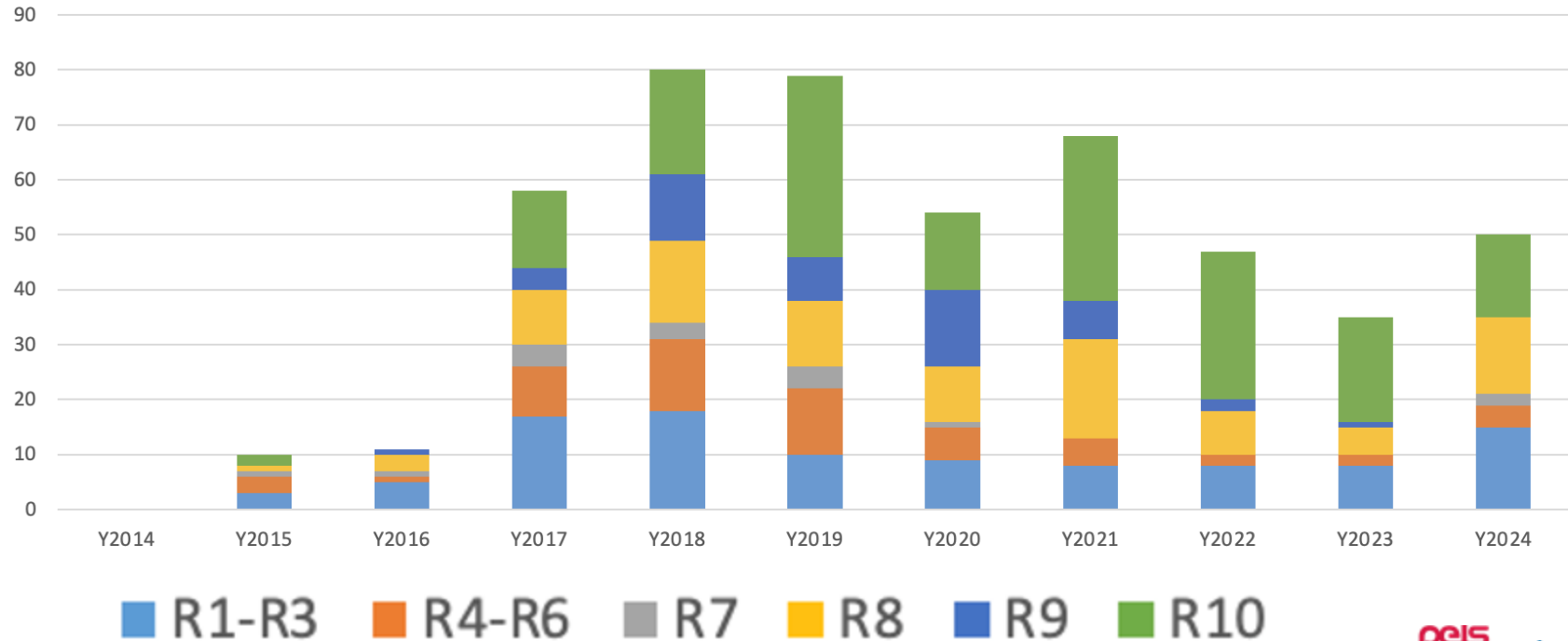


5. Geography: Magazine vs PELS Population



5a. Geography: Society News

Region 10! Do they have the busiest sections? Or just best about reporting out?



6. Across Career (2 examples)

Joseph Kozak: from grad student at Virginia Tech, to Researcher in Johns Hopkins

2018	4 Virginia Tech IEEE Student Branch Chapter Organizes Company and Laboratory Tours	Society News
2021	4 Enthusiastic Celebrations Set New Records at PELS Day 2021	Society News
2021	3 IEEE PELS Students and Young Professionals Symposium: A New Venture!	Society News
2022	2 PELS Students and Young Professionals "Marching Towards Normalcy"	Society News
2022	4 PELS S&YP Committee Presents Year-End Update	Students and Young Professionals Rendezvous
2023	1 Explore the IEEE PELS Students and Young Professionals Committee and Get Involved	Students and Young Professionals Rendezvous
2023	4 IEEE PELS Students and Young Professionals Symposium 2023 Overview	Students and Young Professionals Rendezvous
2023	3 PELS Day 2023 Looks Back to Support Local Chapters	Students and Young Professionals Rendezvous
2023	2 The Revival of SYPS and Recent YP Activities	Students and Young Professionals Rendezvous

Nayara Brandao de Freitas: from grad student and postdoc to Visiting Professor and Researcher

2017	3 New PELS/IAS Student Branch Chapter Formed at the Federal University of Campina Grande	Society News
2018	1 Joint IEEE PELS/IAS Federal University of Campina Grande Student Branch Chapter Promotes Power Activities	Society News
2020	4 Maintaining Connections in the COVID-19 Era!	Society News
2020	2 Joint SPEC-COBEP 2019 Successfully Held in Brazil	Society News
2020	3 IEEE PELS WIE Breakfast Reception at Joint SPEC-COBEP 2019 Honors Prof. Camila Gehrke	Women in Engineering
2021	1 First IEEE PELS Students and Young Professionals Symposium	Society News
2021	4 Enthusiastic Celebrations Set New Records at PELS Day 2021	Society News
2021	3 IEEE PELS Students and Young Professionals Symposium: A New Venture!	Society News
2021	2 Women in IEEE PELS: Learning From the Past, Defining the Future	Women in Engineering
2022	2 PELS Students and Young Professionals "Marching Towards Normalcy"	Society News
2022	4 PELS S&YP Committee Presents Year-End Update	Students and Young Professionals Rendezvous
2023	4 IEEE PELS Students and Young Professionals Symposium 2023 Overview	Students and Young Professionals Rendezvous
2023	3 The S&YP Spotlight Program	Students and Young Professionals Rendezvous
2023	1 Explore the IEEE PELS Students and Young Professionals Committee and Get Involved	Students and Young Professionals Rendezvous

7. Usage of the Magazine is growing

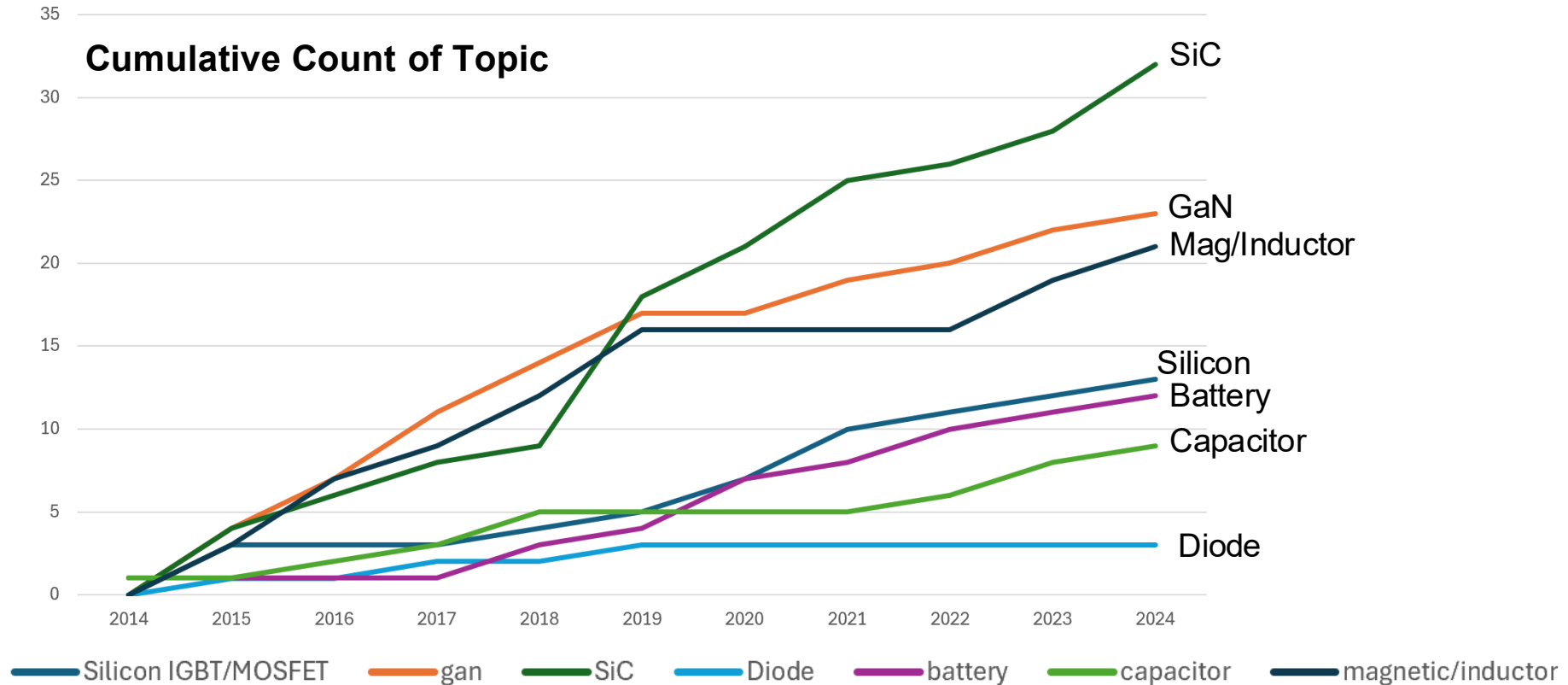
IEEE Power Electronics Magazine		Total Usage
	FY 2015	20,979
	FY 2016	23,028
	FY 2017	45,696
	FY 2018	66,660
	FY 2019	88,711
	FY 2020	91,187
	FY 2021	84,850
	FY 2022	87,282
	FY 2023	107,014
	FY 2024	128,663

8. Usage by Country

- ▶ Green is top 10% of all usage

Usage by Country	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Grand Total
United States	31.2	35.4	28.4	27.3	22.5	26	24.5	27.5	26.1		22.945825
China	13	15	12.3	12.6	12.3	14.5	13.9	12	13.9	19.4	14.08053
India	16.6	11.8	14.5	8.82	10.3	10.4	9.63	10.2	11.1	12	10.970742
Germany	3.68	4.89	4.71	4.82	5.81	7.76	7.39	6.11	8.39	7.6	6.6120123
United Kingdom	2.19	2.24	2.57	3.83	4.23	2.59	3.57	7.15	4.04	4.87	4.075423
Korea, Republic of	2.52	3.08	2.68	2.55	1.74	4.87	4.98	2.65	2.69	3.14	3.1521228
Canada	1.69	1.7	1.75	2.37	2.57	3.5	2.02	1.87	2.91	4.95	2.7743357
Brazil	1.98	1.17	3.29	2.19	2.92	2.83	2.2	3	1.97	2.65	2.5184458
Japan	2.13	2.18	3.25	2.21	2.2	2.13	2.22	2.84	2.37	2.95	2.467241
Italy	1.27	1.33	1.6	1.79	1.56	2.54	2.2	2.32	2.19	4.19	2.3023371
Taiwan, Province of	2.17	2.16	2.76	2.66	1.74	1.3	1.98	3.73	1.87	2.24	2.2348704
Spain	0.75	0.78	0.79	8.54	1.92	0.82	0.83	0.64	0.87	1.23	1.7358582
Singapore	0.75	1.16	0.86	2.01	1.38	2.91	2.15	1.78	1.29	1.69	1.7342454
France	1.17	0.76	1.36	2.14	1.61	0.89	1.42	1.12	1.87	2.47	1.5760614
Hong Kong	0.89	1.04	0.59	0.68	0.8	0.74	1.14	1.22	1.32	4.9	1.4947518
Australia	1.28	0.91	2.19	1.01	1.43	0.82	1.17	0.87	1.27	2.19	1.3182899
Denmark	0.62	0.74	0.97	1.23	2.58	0.69	0.91	0.64	0.95	1.18	1.1086323
Turkiye	1.01	0.72	1.2	1	1.27	1	1.2	1.25	1	1.13	1.1043316
Netherlands	0.63	0.71	0.68	0.9	0.64	0.58	1.52	1.52	0.84	1.29	0.9841816
Switzerland	1.07	0.56	0.76	0.65	0.8	1.36	1.16	0.7	0.88	1.32	0.962947
Poland	0.46	0.49	0.76	0.43	0.34	0.6	0.49	0.81	0.77	2.41	0.8371524

9. Every topic growing...



10. Some Final Takeaways

- ▶ Include contact email for society news
 - Reminder: all IEEE members get FREE @ieee.org gmail account!
Hopefully your IEEE membership outlasts your corporate/school email address
- ▶ Update your IEEE profiles
- ▶ Maintain your IEEExplore author pages
 - <https://ieeexplore.ieee.org/Xplorehelp/author-center/author-profile-management>