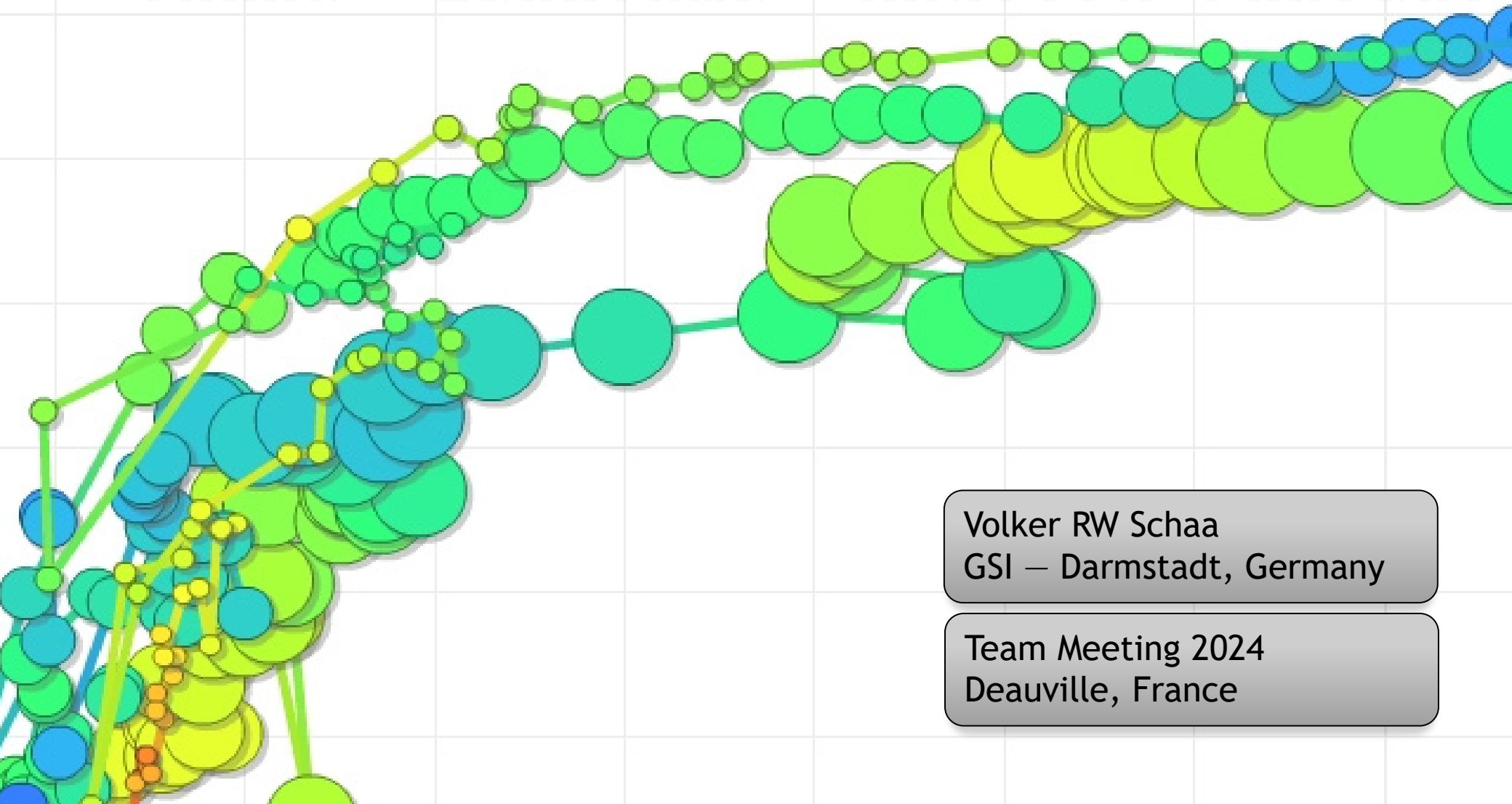


* Trends in Paper Submission: Types, Problems, Quality Control



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Over the years within JACoW each conference and their authors saw a shift in preferred platforms, file types, and accuracy of submissions.

This talk will investigate and make comment on these evolving trends in

- ❖ accuracy of submissions, and
- ❖ changes in file type for conferences.

What kind of changes took place will be shown based on data of the last 20 years [2004–2024] (where available) for

- ❖ accuracy of submissions, and
 - ❖ changes in file type for conference series.
- Data shown for 2020 and 2021 are all from virtual conferences with editors around the world without the luxury of having recently attended a Team Meeting or one of the bigger conferences as trainees. Therefore a tendency to more ‘common’ error descriptions (and codes) can be observed. Nevertheless problem areas are still identifiable.
 - Data for 2024 are from Indico and are hard to interpret as the summing up is different (e.g. TC06 with 120 %).

Changes in

❖ accuracy of submissions

❖ □ Better and Worse □

FC Files related Codes
FP Font Problems
MP Miscellaneous/Minor Problems
TC Title/Table/Text formatting Codes
UT Use of Template

Codes referring to Files

FC00 General Problems with files
FC01 PS/EPS/PDF/source or supporting file missing; file wrongly named
FC02 Problem with pictures (too big, color conversion in PDF fails, lines/colors disappearing, numbers not readable, internal problems)
FC03 Bib(La)TeX: wrong reference type, bib field or bib field content, missing bib field
FC04 Multiple or Unusable Files
FC05 Bad EPS/PS/PDF: Scale to fit; Colour image printed B/W; PostScript/EPS doesn't distill
FC06 LaTeX error: not compilable, package missing, multiply defined labels, or other info
FC10 full page image, no text

Codes referring to Font Problems

FP00 General Problems with Fonts
FP01 Font Problems (wrong or missing font, Type3/bitmap font as main text, too many fonts>50)
FP02 Font Problems (missing character, unknown glyph, unknown encoding: PDF doesn't contain readable text for search/export)

Codes referring to Miscellaneous Minor Problems

MP00 Miscellaneous Problems
MP01 Status set to RED to enable re-upload
MP02 Spelling Corrections
MP03 Too many pages, blank pages
MP04 Comments to the Author/Editor in Chief

Codes referring to Title, Text, Table, Figure Formatting, Equations, References, Graphics

TC00 General Problems related to formatting
TC01 Incorrect Title, Authors, Affiliation formatting (size, full UPPER/lowercase, not in required lowercase [e.g. MHz], city/country missing)
TC02 Text formatting incorrect (paragraphs, section/sub-section headings, indentation, column/intercolumn width, wrong text flow, number/unit split over lines)
TC03 Table formatting incorrect (not centered, outside margins, caption below table, wrongly labeled, not in Initial Caps, single/multiple line caption not centred/justified)
TC04 Figure formatting incorrect (outside margins, single/multiple line caption not centred/justified/placed above, Caption wrongly labeled [abbreviated, colon missing, wrong font size, bold/italic])
TC05 Footnote formatting incorrect (outside margins, no line above, not at bottom/first column, missing)
TC06 Reference or Reference formatting incorrect (missing, multiply defined, wrong order, indentation, hyperlink, inconsistent, wrong, incomplete)
TC07 Figure/Table/Equation/Reference numbers not in sequence
TC08 Figure/Table/Reference not referenced in text or missing
TC09 Equation/Eq., Figure/Fig., Table wrongly used in text (lower case, abbreviated, period missing)
TC10 Graphics problem (too slow displaying, too small, resolution too low/high, text not readable)
TC11 Equation formatting incorrect [outside margins, Eq. number outside, not Eq. (x)]
TC12 Badly formatted units [italic, spacing, μ italicized, KeV]
TC14 Reference formatting: missing info added, DOI/URL/site name added or corrected

Codes referring to Use of Template

UT00 General problems with template usage
UT01 Template not used or parameter change; Bounding Box wrong; Incorrect column and/or μ intercolumn widths; old template used
UT02 A4 on US or US on A4 to produce PostScript/PDF

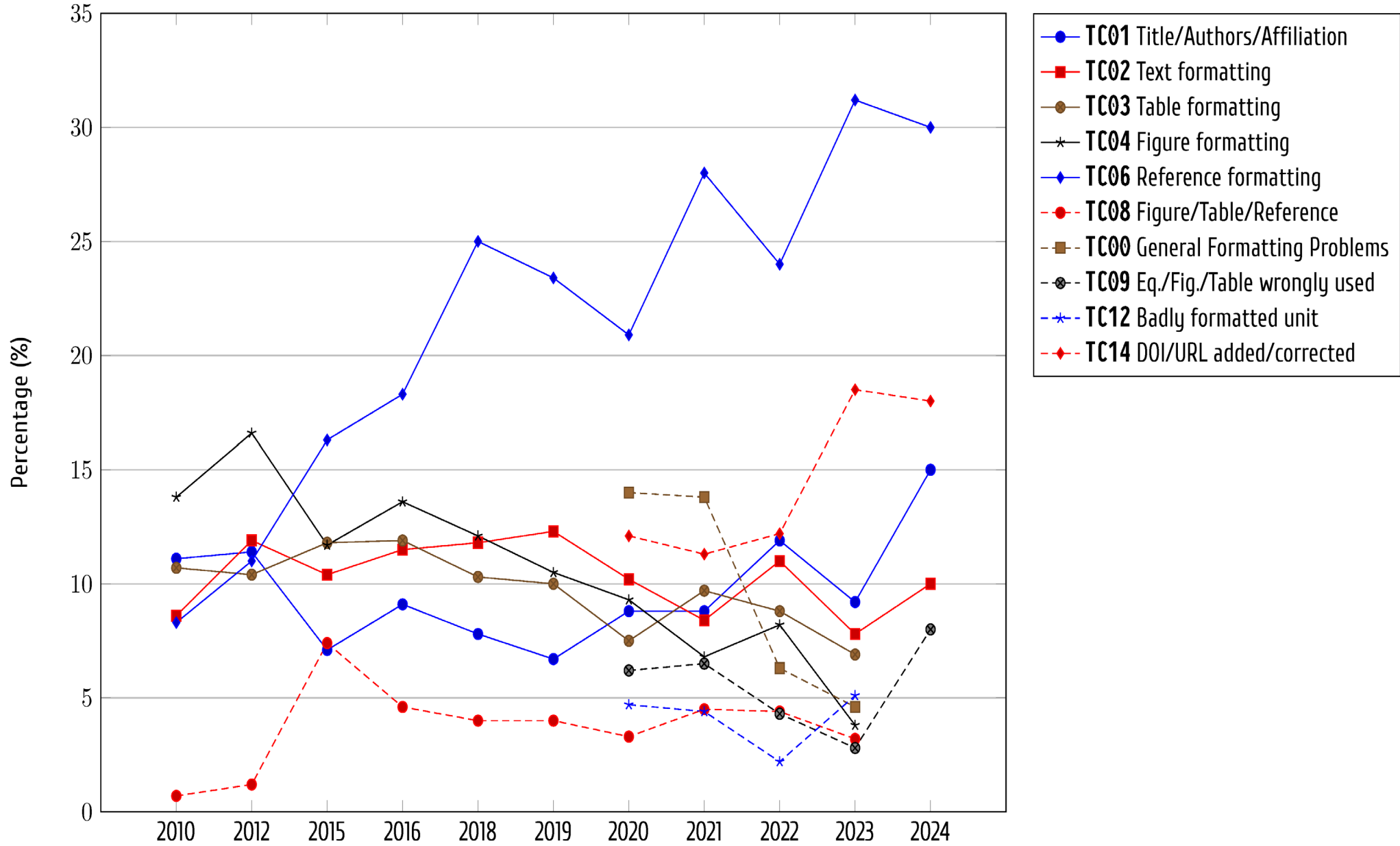
* Accuracy of submissions

* JACoW maintains a list of **Error Codes** which is updated when the need arises and were used in SPMS and now also in Indico.

* On the left the latest version from 2022-09-12 (new code **FC03** introduced for BibLaTeX/BibTeX/Biber)

* Accuracy of submissions

Error codes [TC01, TC02, TC03, TC04, TC06, TC08, TC00, TC09, TC12, TC14] in [%]



* Accuracy of submissions

- * Better: some errors which had often been seen between 2004–2014 are nearly gone or below 2%, e.g. Font problems [FPxx], Graphics problems [TC10, FC02], Bad PDF/PS/EPS, Tearing Boxes [FC04, FC05, FC10]
- * As we are now checking References in more detail, these errors are mentioned most often: Reference formatting [TC06], DOI problem [TC14]
- * Code TC12 (Badly formatted units) shows up more often as e.g. spacing or linebreak between value and unit is checked.
- * Then there are a number of problems found depending on source format:
 - Word & ODF: Wrong text flow after double wide figures and tables
 - LaTeX: Use of BibTeX without fitting style information (IEEEtran style does not agree with JACoW style requirements ⇒ BibLaTeX & Biber)
 - LuaLaTeX: missing BoldMath symbols due to wrong font & encoding selection ⇒ log checking necessary (texlogsieve, etc.)

* Accuracy of submissions (cont.)

- * And still the good old formattings errors
 - * Uppercase units in Title and Section headings
 - * Acronyms missing their CamelCase
 - * Figure and Table formatting, caption formatting
 - * Figures, Tables, References not in sequence or not references in text
- * The presumed decline of errors in Text, Table, and Figure formatting is just the compensation of the shift in more
- * The presumed decline of errors in Text, Table, and Figure formatting is only due to the strong shift to Reference and DOI type errors. Only the errors up to a running total of ~75 % are taken into account for each conference
- * for **Indico** all errors above 50% were summed up and each divided by the total.

Changes (labelling in the graphs)

❖ file types for conferences

Colors used to signify changes

INFO increasing

INFO stable/small variations

INFO decline/decreasing

202x (x) remote conference due to COVID

2022 (x) not published/publishable

#15: $\Delta \pm 343(27\%)$ 251 < 1278 < 1536

number of conferences

Δ deviation from mean number of pages

% deviation percentage

÷ lowest number of papers (declining)

< average number of papers (stable)

< maximum number of papers

Changes (labelling in the graphs)

- tendency
- ↑ slow up
 - ↓ slowdown
 - ↗ quick up
 - ↘ unclear

33 < 69 < 93 new low, lower, same since last

year of conferences

number of publishable papers



YBUC

2010–2024

name of series and years covered

#14: Δ±343(27%) 851 < 1263 < 1536

TEX: 32% ↗ 71% ↑ ODF: 0.7% ↓

starting % — current max.

number of conferences

deviation from mean number of papers

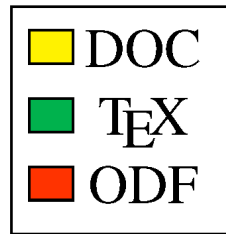
deviation percentage

min. number of papers

average number of papers

max. number of papers

2024 (1061)
 2023 (1449)
 2022 (851)
 2021 (1255)
 2020 (19)
 2019 (1243)



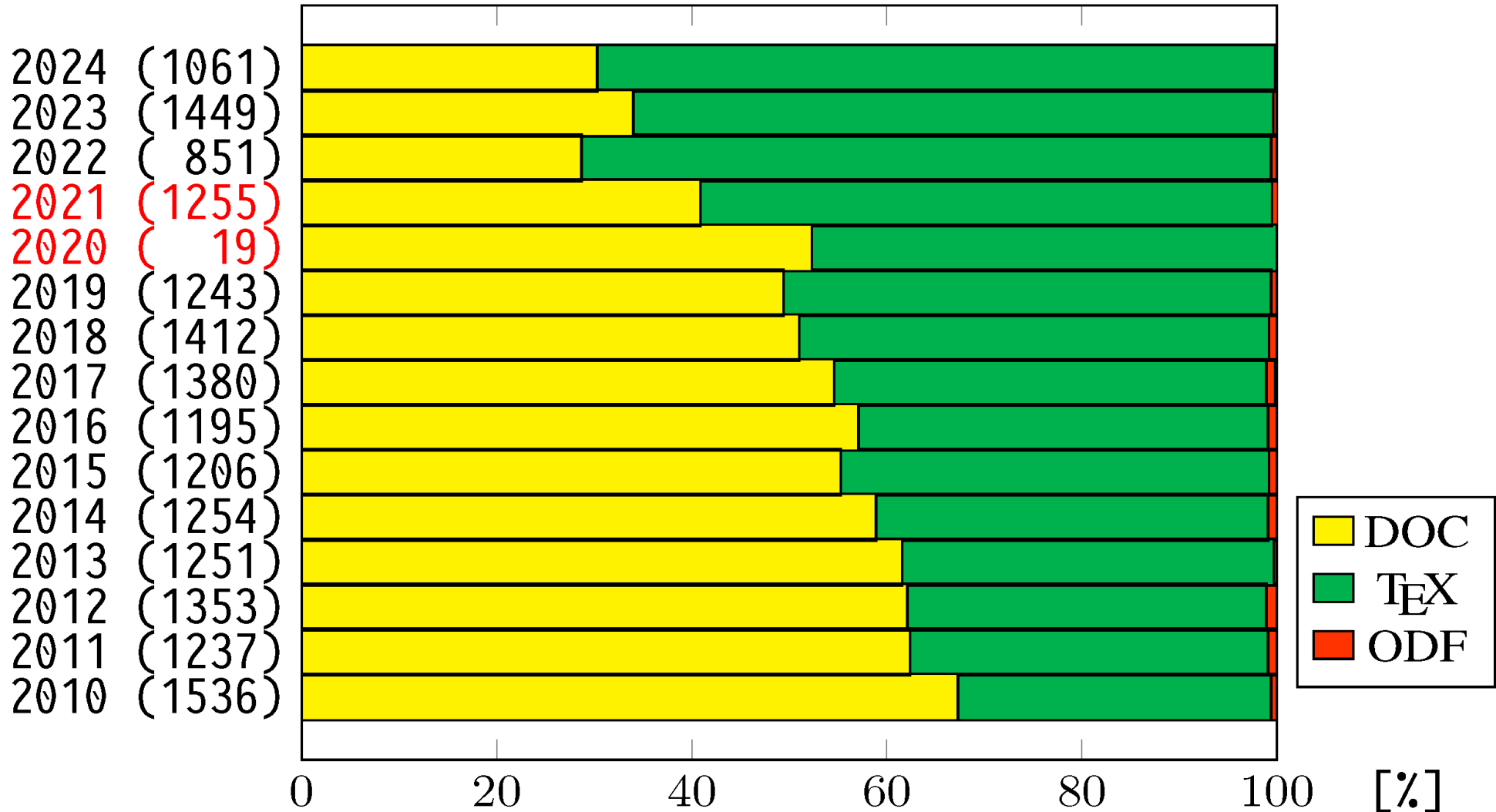
2022 year published 2022 COVID conference 2022 unpublished

* Changes in file type in IPAC

IPAC
2010–2024

#14: $\Delta \pm 343$ (27%) 851 < **1263** < 1536

TEX: 32% ↗ **71%** ↑ ODF: **0.7%** ↓

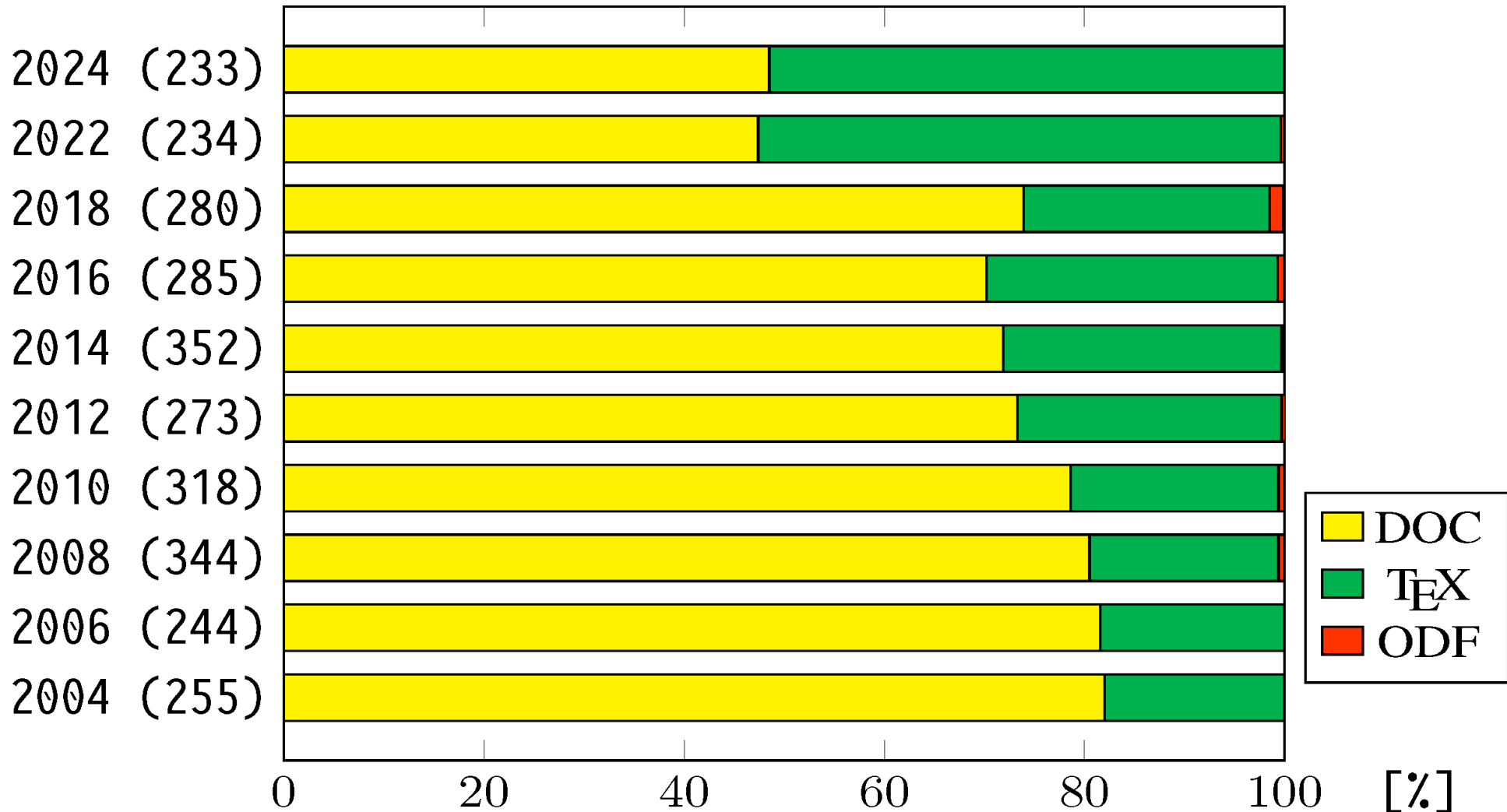


* Changes in file type for LINAC

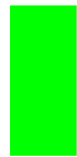
LINAC
2004–2024

#10: $\Delta \pm 60$ (21%) 233 < 287 < 352

TEX: 18% ↗ 52% ODF: 0.5% ↓



* Changes in file type for FEL

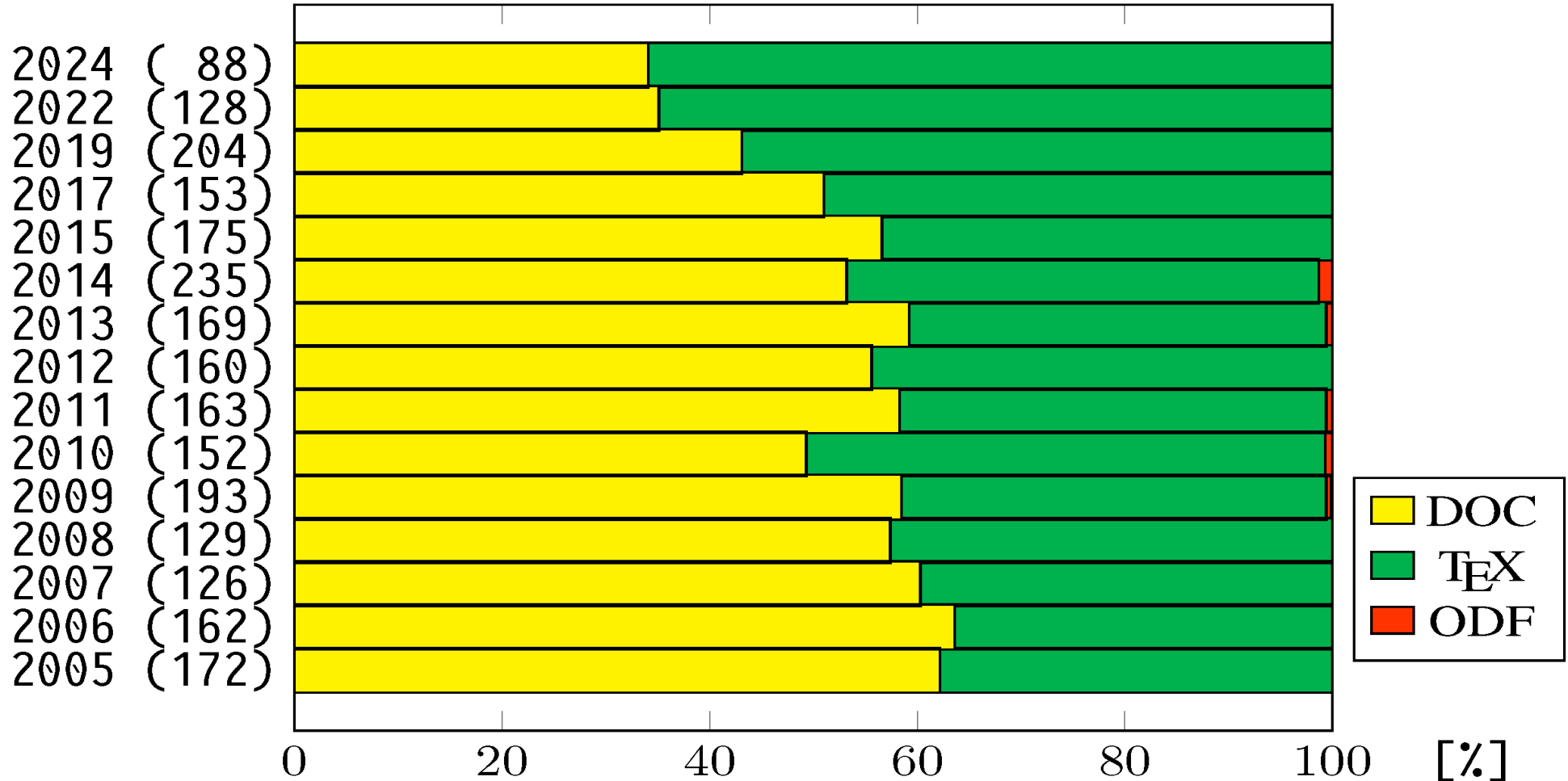


FEL

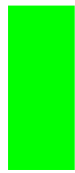
2005–2024

#15: $\Delta \pm 74$ (46%) 88 < 161 < 235

TEX: 36% ↗ 66% ODF: 0.3%



* Changes in file type for IBIC

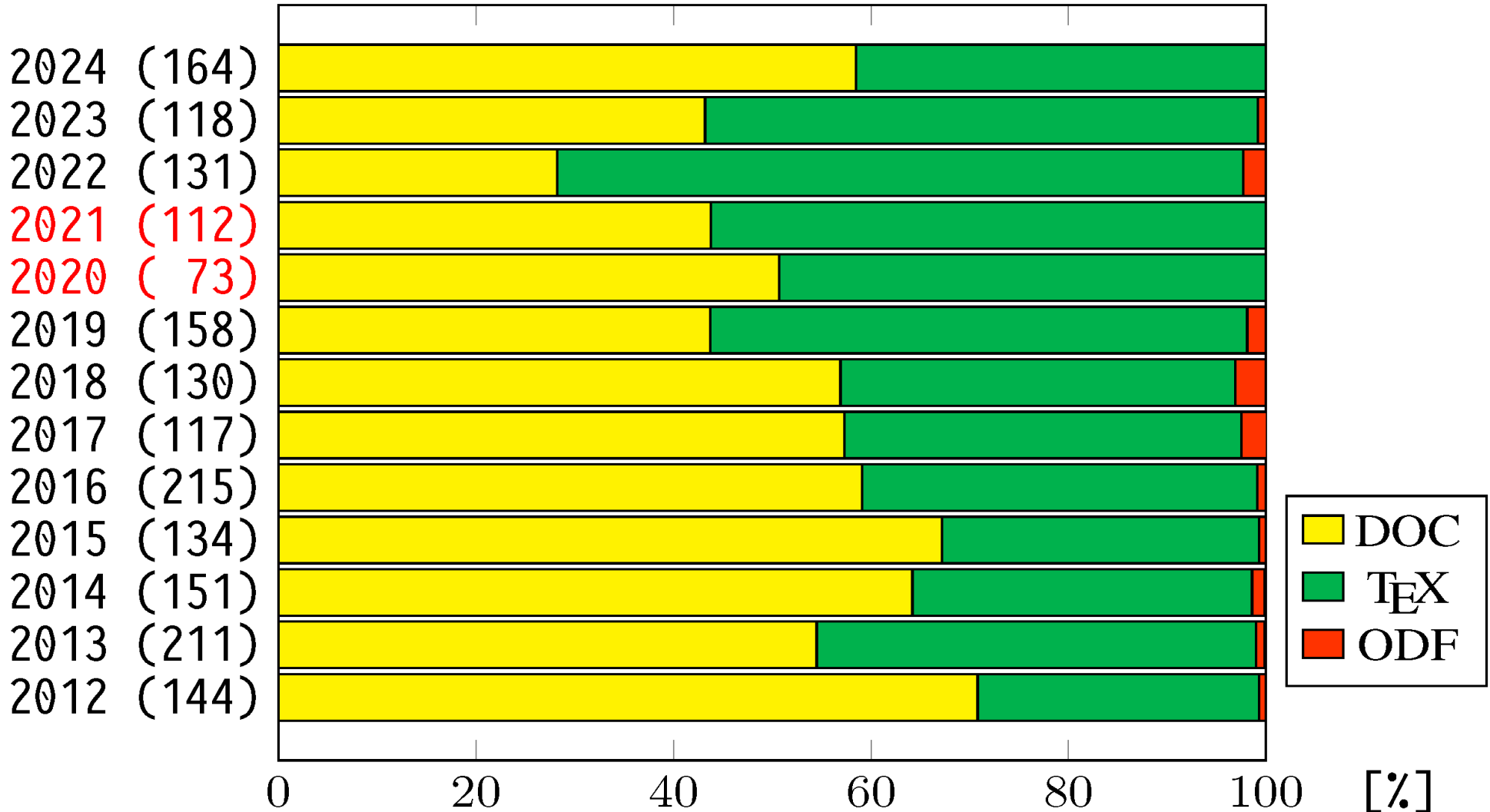


IBIC

2012–2024

#13: $\Delta \pm 52$ (36%) 112 < 143 < 215

TEX: 28% ↗ 63% ODF: 1.2%

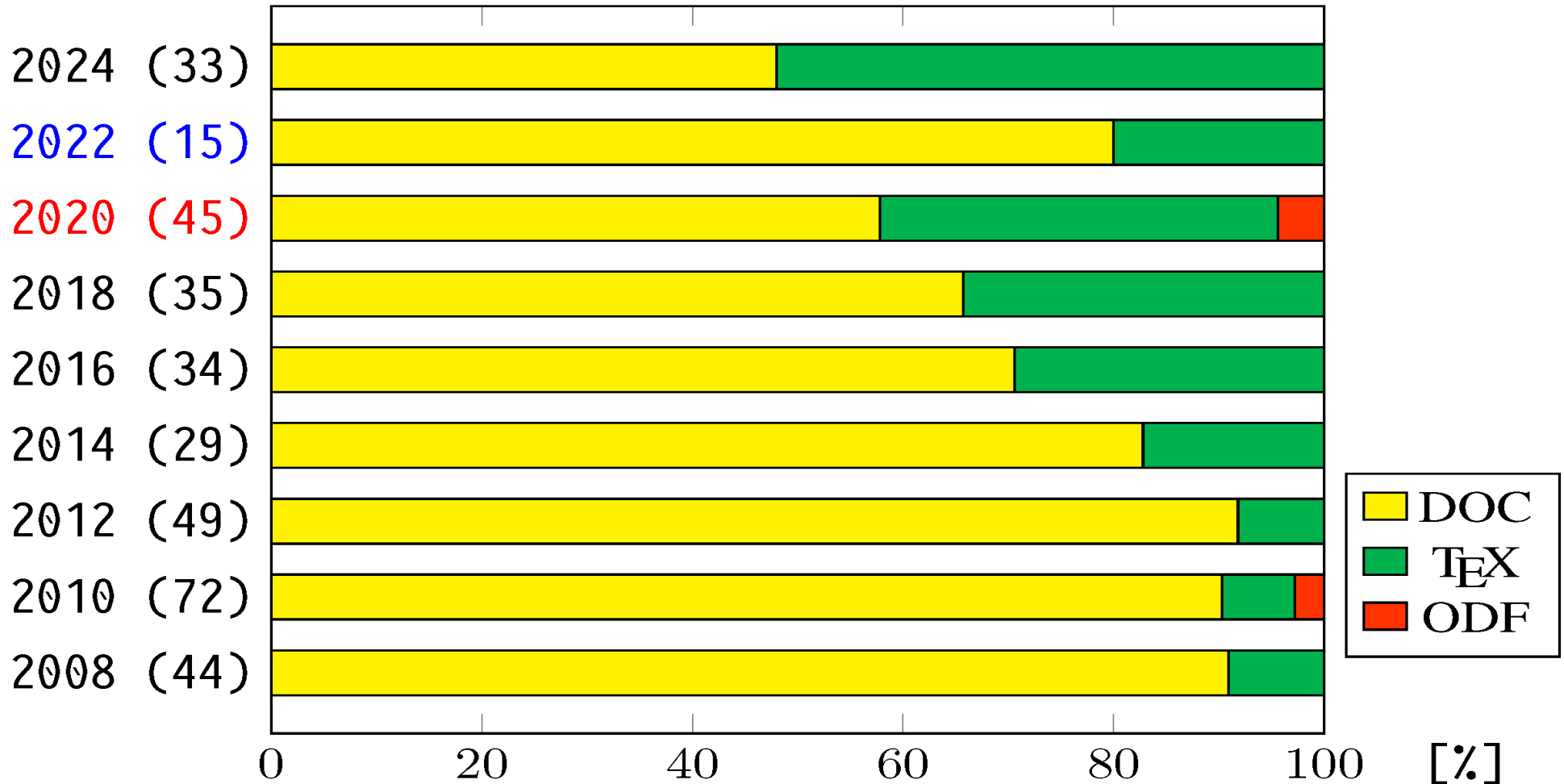


* Changes in file type for ECRIS

ECRIS
2008–2024

#9 $\Delta \pm 22$ (55%) 29 < 39 < 72

TEX: 8% \rightsquigarrow \nearrow 52% ODF: 1.1%



* Changes in file type for ICALEPCS

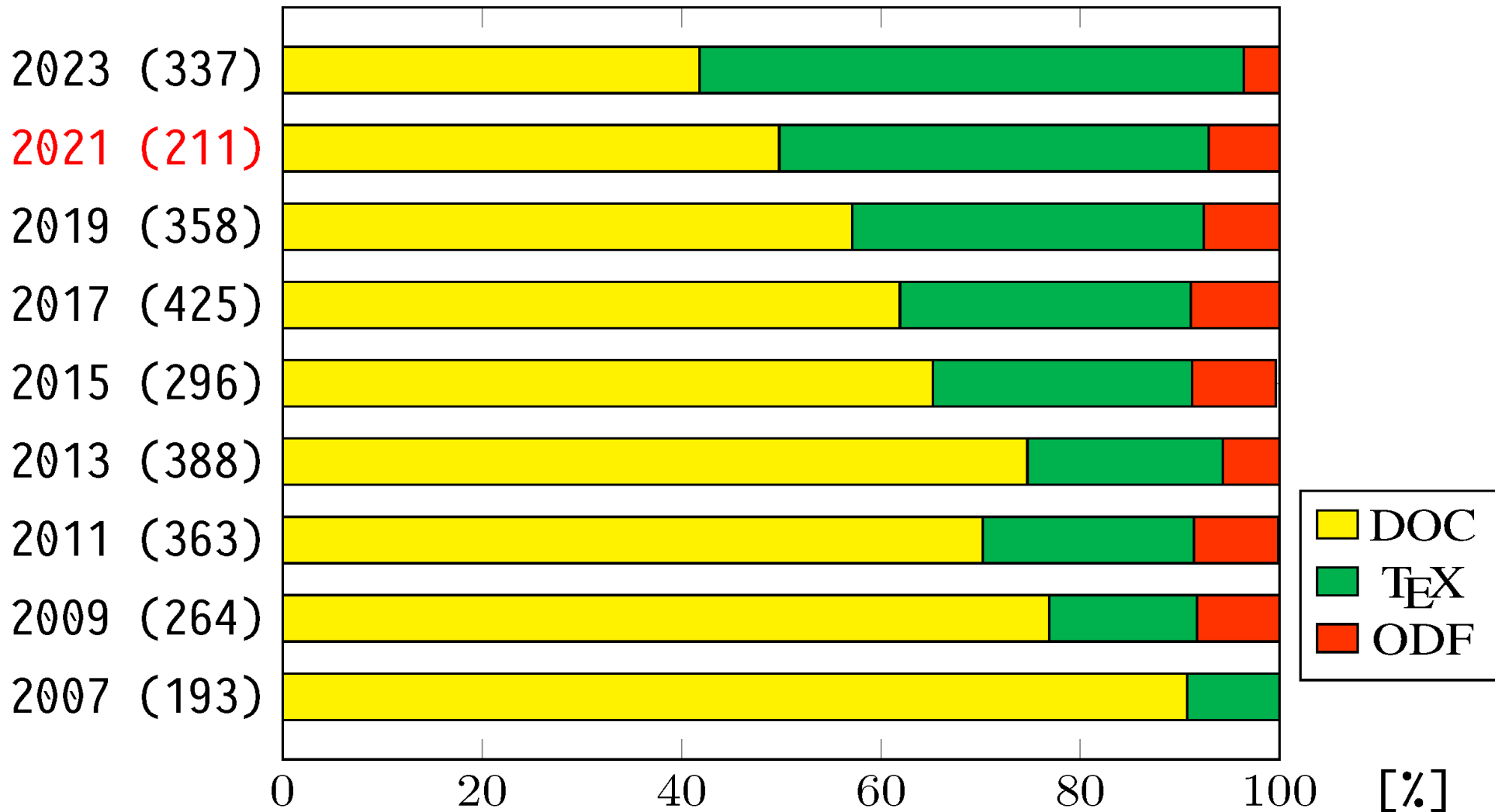


ICALEPCS

2007–2023

#9: $\Delta \pm 116$ (37%) 193 < 315 < 425

TEX: 9% ↗ 54% ODF: 3.6%

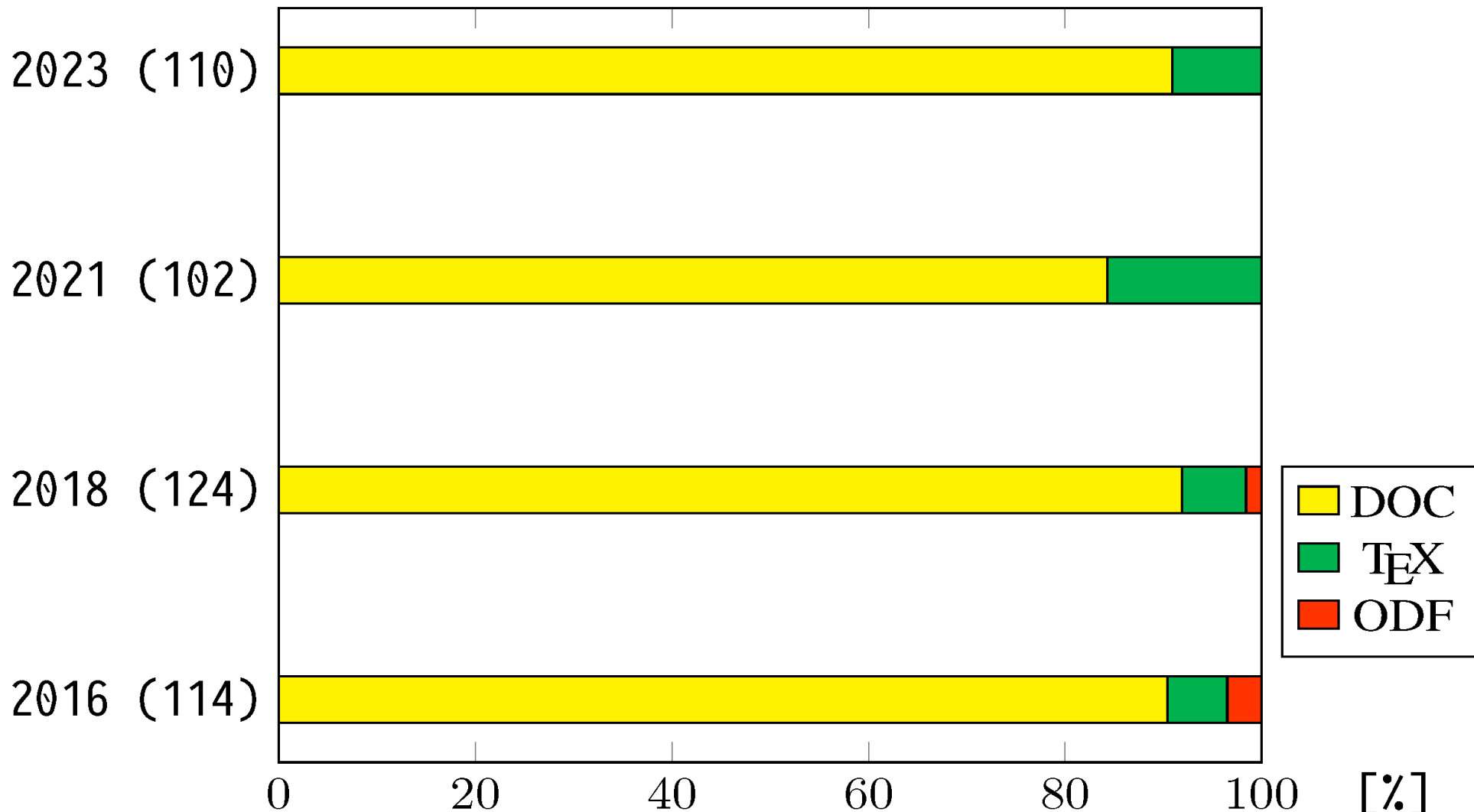


* Changes in file type for MEDSI

MEDSI
2016–2023

#4: $\Delta \pm 11$ (10%) 102 < 113 < 124

TEX: 6% \rightsquigarrow 9% ODF: 1.3%



* Changes in file type for SRF

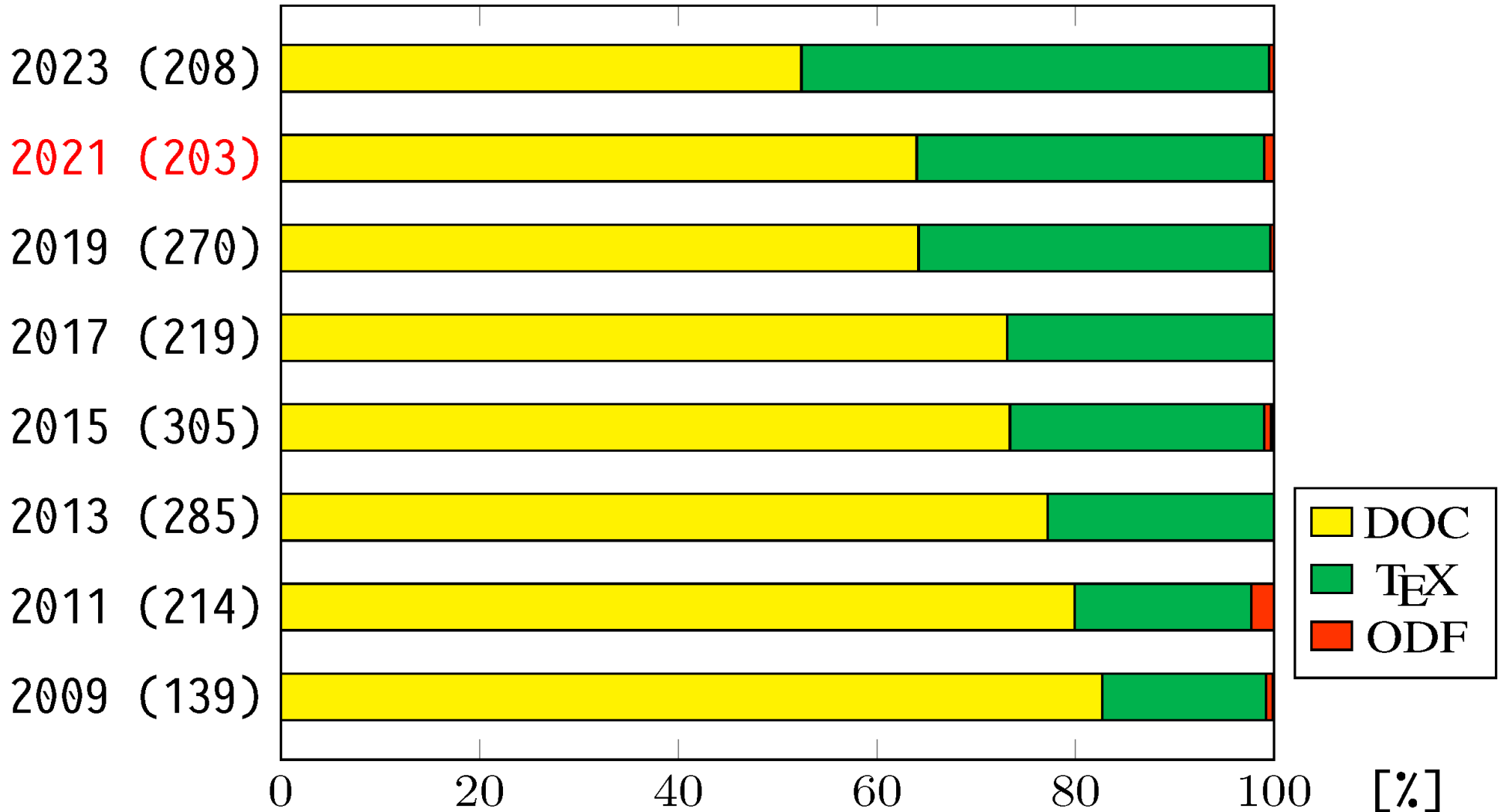


SRF

2009–2023

#8: $\Delta \pm 83$ (36%) 139 < 230 < 305

$\text{T}_{\text{E}}\text{X}$: 16% ↗ 45% ODF: 0.5%



* Changes in file type for HB

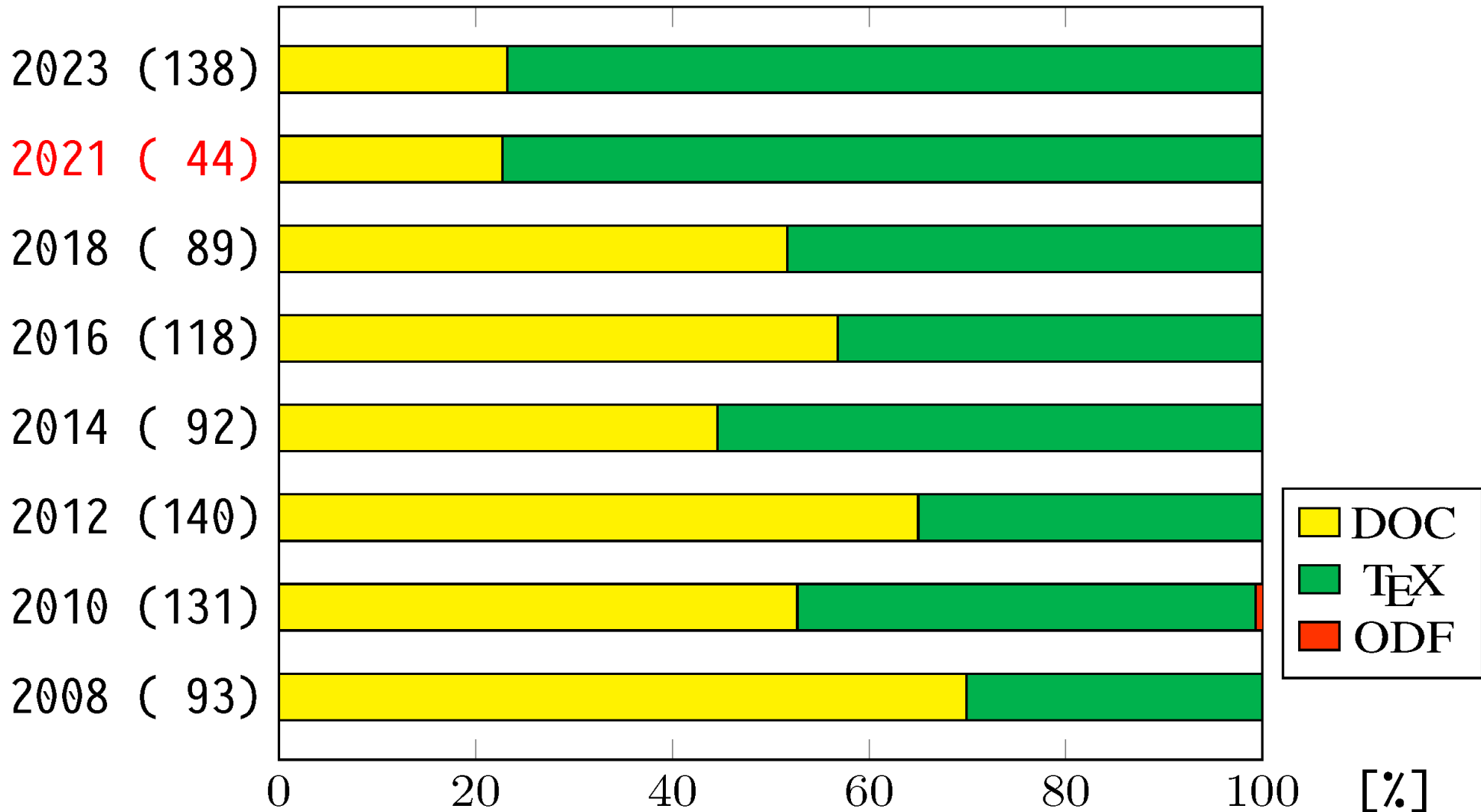


HB

2008–2023

#8: $\Delta \pm 26$ (26%) 89 < 101 < 140

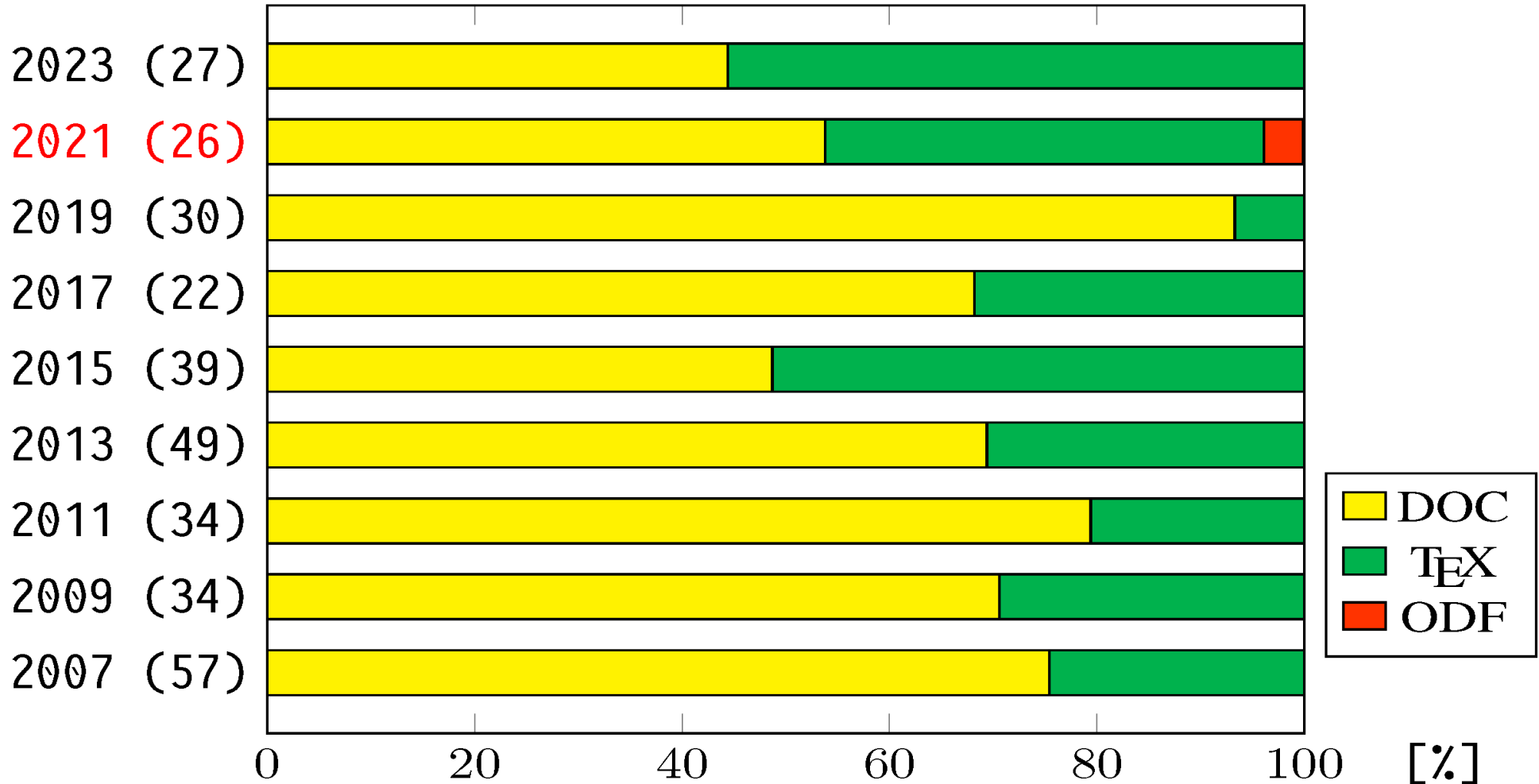
TEX: 28% ↗ 76% ODF: 0.0%



* Changes in file type for COOL

COOL
2007–2023

#9: $\Delta \pm 14$ (22%) 22 < 37 < 57
T_EX: 7% \rightsquigarrow 50% ODF: 0.3%

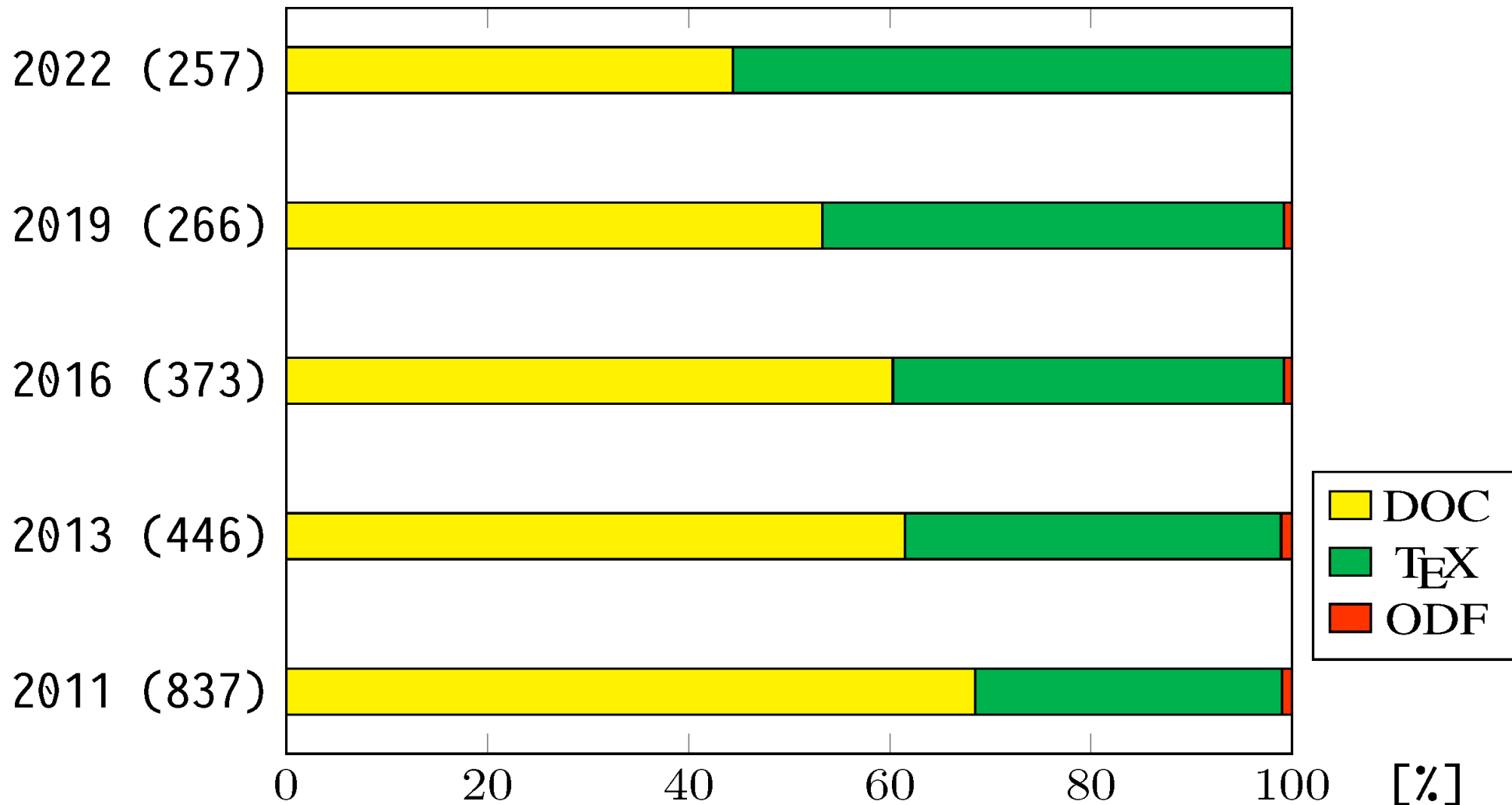


* Changes in file type for NAPAC

NAPAC
2011–2022

#5: $\Delta \pm 290$ (67%) **257 < 436 < 837**

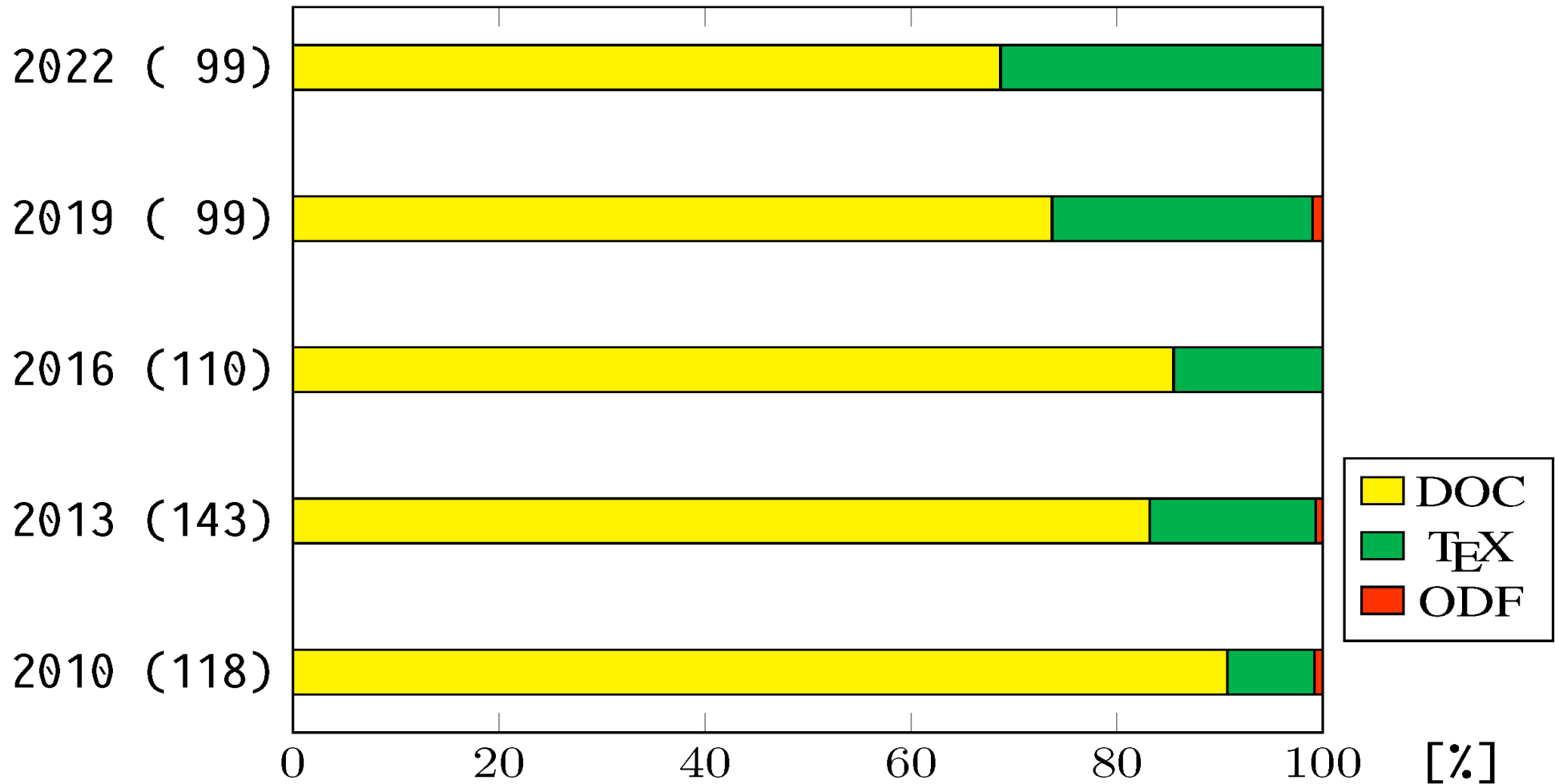
$\text{T}_{\text{E}}\text{X}$: 31% ↗ 56% ODF: 0.7%



* Changes in file type for Cyclotrons

Cyclotrons
2010–2022

#5: $\Delta \pm 22$ (19%) 99 < 114 < 143
 $T_{\text{E}}\text{X}$: 9% \rightsquigarrow 30% ODF: 0.6%

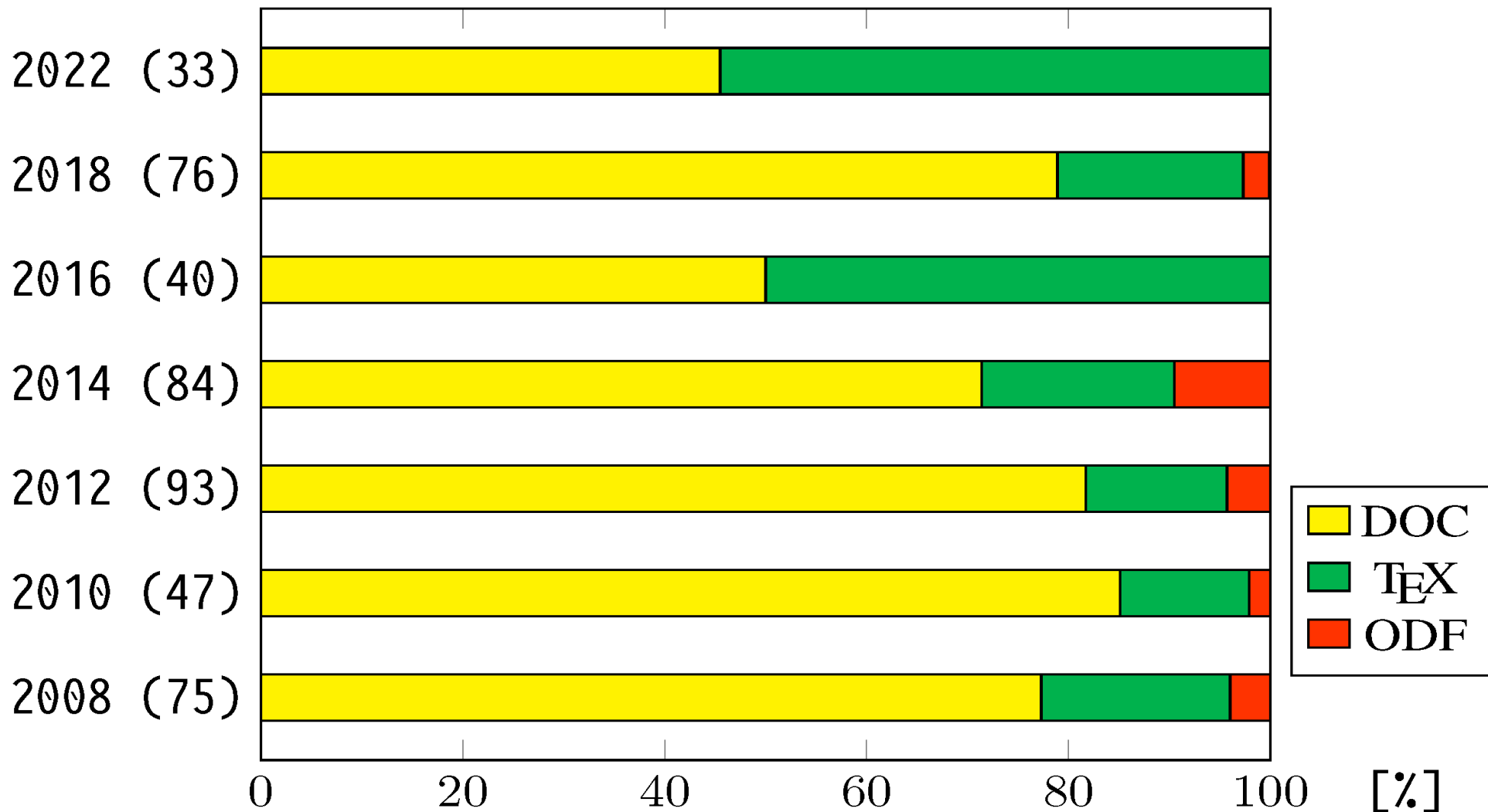


* Changes in file type for PCaPAC

PCaPAC
2008–2022

#7: $\Delta \pm 30$ (43%) **33** < **69** < 93

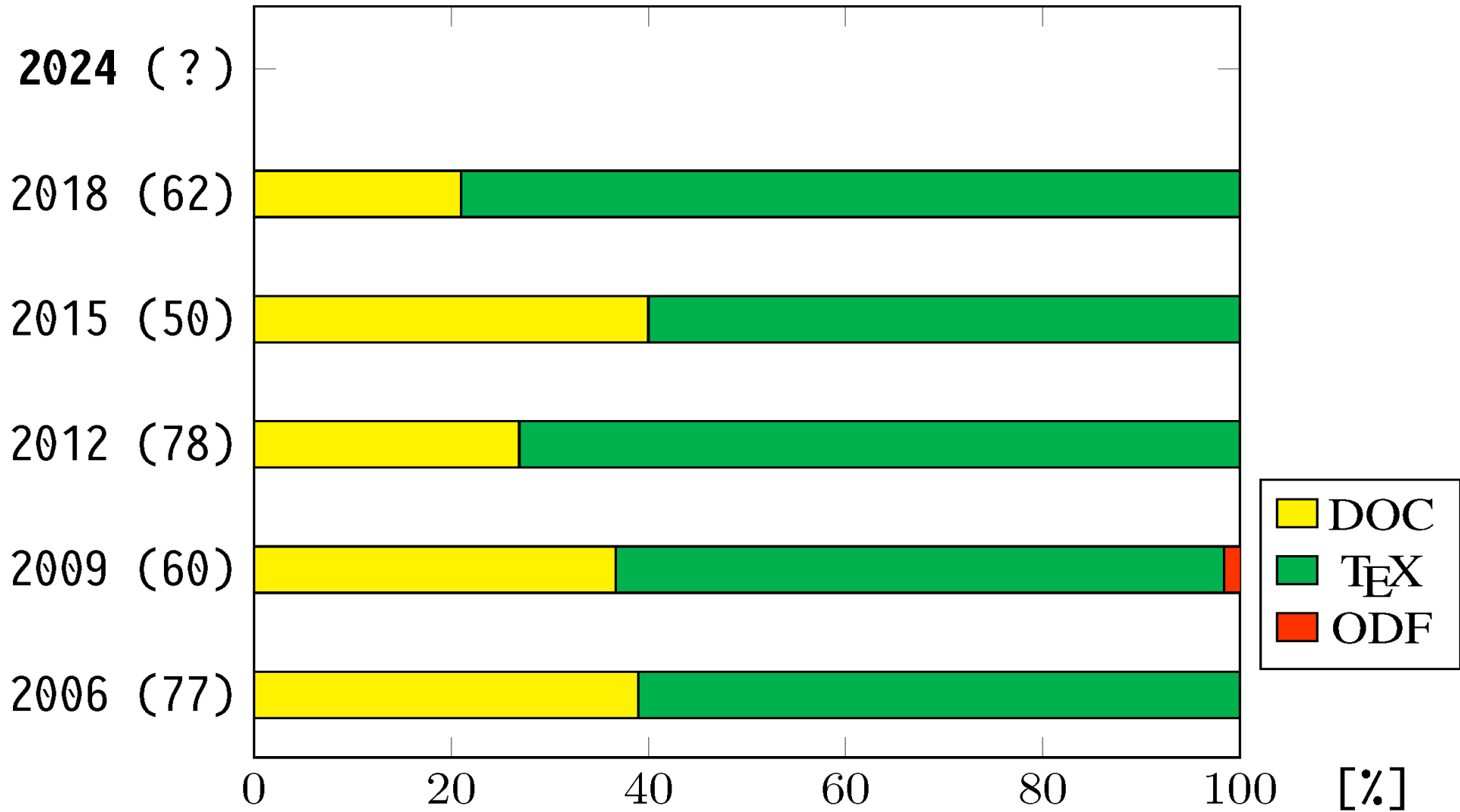
T_{EX} : **128** % ODF: **3.2** %



* Changes in file type for ICAP

ICAP
2006–2018

#5: $\Delta \pm 18$ (47%) 50 < 65 < 78
 $T_{\text{E}}\text{X}$: 61% \rightsquigarrow 79% ODF: 0.3%



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* Questions?