The ieee bibliography style for biblatex*

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This package provides a style for biblatex which follows the guidelines of the IEEE. The citation style is numeric and unsorted. The bibliography style follows the pattern of the official IEEEtran package (https://ieeeauthorcenter.ieee.org/wp-content/uploads/IEEE-Editorial-Style-Manual.pdf). The style should be loaded in the usual way

```
\usepackage[style=ieee]{biblatex}
```

The References section of this document demonstrates the format generated by the package using the `biblatex-ieee.bib` database of example citations.

The style introduces new bibliography strings:

patentjp the text "Japanese Patent";

presentedat the text "presented at the" when printing conference papers using the name of the conference rather than a reference to a book of abstracts.

These may be localized in the usual way.

The style adds the **dashed** option to those recognised: as-standard, this is *not* activated. The option works in the same way as that from the core biblatex style author-year.

As-standard, citation numbers are all printed. If you wish to have compressed citations, use

```
\usepackage[style = ieee, citestyle = ieee-comp]{biblatex}
```

The appearance of URLs in the bibliography is set by the mechanism of the url package. Thus to print URLs in the current roman font, place the instruction

```
\renewcommand*{\UrlFont}{\rmfamily}
```

immediately before

```
\printbibliography
```

Control of the exact information in dates is best achieved by using the `\AtEveryCite` command with appropriate data manipulation. In particular, if your database includes full dates, you will likely want to drop these for most periodicals using `\clearfield`

Also included in the bundle is a style using alphabetic labels, but otherwise following the guidelines of the IEEE. This style should be loaded using

```
\usepackage[style=ieee-alphabetic]{biblatex}
```

*This file describes v1.4g, last revised 2026-11-04.

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It is demonstrated in the accompanying PDF file `biblatex-ieee-alphabetic`.

Suggestions for improvement and bug reports can be logged in the package issue database, found at https://github.com/josephwright/biblatex-ieee/issues/, or can be sent by e-mail to joseph@texdev.net.

References

[1] J. B. Anderson and K. Tepe, "Properties of the tailbiting BCJR decoder," in *Codes, Systems and Graphical Models* (IMA Volumes in Mathematics and Its Applications). New York: Springer-Verlag, 2000.

[2] B. K. Bul, *Theory Principles and Design of Magnetic Circuits*. Moscow: Energia Press, 1964, p. 464, (in Russian).

[3] J. C. Candy and G. C. Temes, Eds., *Oversampling Delta-Sigma Data Converters Theory, Design and Simulation*. New York: IEEE Press., 1992.

[4] J. Breckling, Ed., *The Analysis of Directional Time Series: Applications to Wind Speed and Direction* (Lecture Notes in Statistics). Berlin, Germany: Springer, 1989, vol. 61.

[5] A. Castaldini, A. Cavallini, B. Fraboni, P. Fernandez, and J. Piqueras, "Midgap traps related to compensation processes in CdTe alloys," *Phys. Rev. B.*, vol. 56, no. 23, pp. 14 897–14 900, 1997.

[6] X. Yang, W. Cao, Y. Lu, and Y. Zhou, "Hyperspectral image transformer classification networks," *IEEE Trans. Geosci. Remote Sens.*, vol. 60, 2022, Art. no. 5528715, doi: 10.1109/TGRS.2022.3171551.

[7] M. Coates, A. Hero, R. Nowak, and B. Yu, "Internet tomography," *IEEE J. Selected Areas Commun.*, May 2002, to be published.

[8] B. D. Cullity, *Introduction to Magnetic Materials*. Reading, MA: Addison–Wesley, 1972.

[9] R. M. A. Dawson et al., "Design of an improved pixel for a polysilicon active-matrix organic LED display," in *SID Tech. Dig.* 1998, vol. 29, pp. 11–14.

[10] W. Dai, H. V. Pham, and O. Milenkovic, "Distortion-rate functions for quantized compressive sensing," in *IEEE Information Theory Workshop on Networking and Information Theory*. 2009.

[11] W. Dai, H. V. Pham, and O. Milenkovic, "Comparative study of quantized compressive sensing schemes," in *IEEE Information Theory Workshop on Networking and Information Theory*. 2009.

[12] S. G. Finn, M. Médard, and R. A. Barry, "A novel approach to automatic protection switching using trees," presented at the IEEE International Conference on Communications, Montreal, Que., Canada, 1997.

[13] *FLEXChip Signal Processor (MC68175/D)*, Motorola, 1996.

[14] P. Hedelin, P. Knagenhjelm, and M. Skoglund, "Theory for transmission of vector quantization data," in *Speech Coding and Synthesis*, W. B. Kleijn and K. K. Paliwal, Eds. Amsterdam, The Netherlands: Elsevier Science, 1995, ch. 10, pp. 347–396.

[15] U. Hideki, "Quadrature modulation circuit," Japanese Patent 152932/92, 1992-05-20.

[16] *IEEE Personal Commun. Mag., Special Issue on Wireless ATM*, vol. 3, 1996-08.

[17] *Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification*, IEEE Standard 802.11, 1997.

[18] "PDCA12-70 data sheet," Opto Speed SA, Mezzovico, Switzerland.

[19] V. Jacobson. "Modified TCP congestion avoidance algorithm," Accessed: Apr. 1990. [Online]. Available: ftp://ftp.isi.edu/end2end/end2end-interest-1990.mail

[20] R. Jain, K. K. Ramakrishnan, and D. M. Chiu, "Congestion avoidance in computer networks with a connectionless network layer," Digital Equipment Corporation, MA, Tech. Rep. DEC-TR-506, 1987-08.

[21] N. Kahale and R. Urbanke, "On the minimum distance of parallel and serially concatenated codes," *IEEE Trans. Inf. Theory*, submitted for publication.

[22] S. Kandala, "Changes to Annex D," IEEE 802.11 TGe, Tech. Rep. 02/680r0, 2002-10.

[23] A. Karnik, "Performance of TCP congestion control with rate feedback: TCP/ABR and rate adaptive TCP/IP," M. Eng. thesis, Indian Institute of Science, Bangalore, India, 1999-01.

[24] F. Kowalik and M. Isard, "Estimateur d'un défaut de fonctionnement d'un modulateur en quadrature et étage de modulation l'utilisant," French, French Patent Request 9 500 261, 1995-01-11.

[25] Q. Li, "Delay characterization and performance control of wide-area networks," Ph.D. dissertation, Univ. of Delaware, Newark, NJ, 2000-05. [Online]. Available: http://www.ece.udel.edu/~qli

[26] N. C. Loh, "High-resolution micromachined interferometric accelerometer," M.S. thesis, Massachusetts Institute of Technology, Cambridge, MA, 1992.

[27] D. H. Lorenz and A. Orda. "Optimal partition of QoS requirements on unicast paths and multicast trees," Accessed: Jul. 1998. [Online]. Available: ftp://ftp.technion.ac.il/pub/supported/ee/Network/lor.mopq98.ps

[28] S. M. Metev and V. P. Veiko, *Laser Assisted Microtechnology*, 2nd ed., R. M. Osgood Jr., Ed. Berlin, Germany: Springer-Verlag, 1998.

[29] D. Middleton and A. D. Spaulding, "A tutorial review of elements of weak signal detection in non-Gaussian EMI environments," National Telecommunications and Information Administration (NTIA), U.S. Dept. of Commerce, NTIA Report 86-194, 1986-05.

[30] B. Mikkelsen et al., "160 Gbit/s single-channel transmission over 300 km nonzero-dispersion fiber with semiconductor based transmitter and demultiplexer," in *Proc. ECOC'99*, Nice, France, 1999, pp. 28–29.

[31] Y. Okada, K. Dejima, and T. Ohishi, "Analysis and comparison of PM synchronous motor and induction motor type magnetic bearings," *IEEE Trans. Ind. Appl.*, vol. 31, pp. 1047–1053, 1995-09/1995-10.

[32] T. J. Ott and N. Aggarwal, "TCP over ATM: ABR or UBR," Unpublished.

[33] J. Padhye, V. Firoiu, and D. Towsley, "A stochastic model of TCP Reno congestion avoidance and control," Univ. of Massachusetts, Amherst, MA, CMPSCI Tech. Rep. 99-02, 1999.

[34] H. E. Rose, *A Course in Number Theory*. New York: Oxford Univ. Press, 1988, ch. 3.

[35] R. E. Sorace, V. S. Reinhardt, and S. A. Vaughn, "High-speed digital-to-RF converter," U.S. Patent 5 668 842, 1997-09-16.

[36] W. V. Sorin, "Optical reflectometry for component characterization," in *Fiber Optic Test and Measurement*, D. Derickson, Ed. Englewood Cliffs, NJ: Prentice–Hall, 1998.

[37] V. Valloppillil and K. W. Ross. "Cache array routing protocol v1.1," Accessed: 1998. [Online]. Available: http://ds1.internic.net/internet-drafts/draft-vinod-carp-v1-03.txt

[38] M. Wegmuller, J. P. von der Weid, P. Oberson, and N. Gisin, "High resolution fiber distributed measurements with coherent OFDR," in *Proc. ECOC'00*, Munich, Germany, 2000, p. 109.

[39] M. Yajnik, S. B. Moon, J. Kurose, and D. Towsley, "Measurement and modeling of the temporal dependence in packet loss," in *Proc. IEEE INFOCOM'99*, vol. 1, New York, 1999-03, pp. 345–352.

[40] M. S. Yee and L. Hanzo, "Radial basis function decision feedback equaliser assisted burst-by-burst adaptive modulation," in *Proc. IEEE Globecom '99*, Rio de Janeiro, Brazil, 1999-12-05/1999-12-09, pp. 2183–2187.

[41] A. Amador Pérez and R. A. Rodríguez Solís, "Analysis of a CPW-fed annular slot ring antenna using DOE," in *Proc. IEEE Antennas Propag. Soc. Int. Symp.*, in Slot Ring Antennas II, vol. 3, Jul. 2006, pp. 4301–4304.

Change History

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v1.0a
General: Print "presented at" for `inproceedings` entries only if an `eventtitle` is available 4
v1.0b
General: Add instructions for printing URL in roman font . . . 4
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v1.0c
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v1.0d
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v1.1
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