Edward J. Davison

List of Publications

Notation:
(J) Journal paper with referee review system
(C) Conference paper with referee review system
(Corr) Correspondence paper with referee review system
(CA) Conference paper accepted by abstract only
(CH) Chapter contributed in book
(O) Other

1965


1966


1967


This paper has been identified as being one of the most cited items in its field according to data taken from Science Citation Index (SCI) and has appeared in the Citation Classics section of Current Contents (CC): Engineering, Technology and Applied Sciences, April 25, 1983, vol 14, no 17, p 20.


1968


27. (C) Davison, E.J., Goldberg, R.W., “Optimum variable measurement in multivariable control systems”, *IFAC Symposium on Multivariable Systems*, Dusseldorf, Germany, October 1968, Section 9, pp 1-16.


1969


1970


1971


1972


1973


²This paper was chosen for honourable mention amongst the papers published in the *IEEE Trans on Automatic Control*, vol AC-18 (1973) and vol AC-19 (1974).


1974


1975


125. (CA) Davison, E.J., “Robust decentralized control of a general servomechanism problem”, Conference on Directions in Decentralized Control, Many-Person Optimization and Large-Scale Systems, Cambridge, MA, September 1-3, 1975, (invited paper).


1976


147. (C) Davison, E.J., “Connectability and structural controllability of composite systems”, *IFAC Symposium on Large Scale Systems*, Udine, Italy, June 1976, pp 241-245.


1977


159. (C) Tripathi, N.K., Davison, E.J., “Large scale interconnected system modelling in state space form”, *National Science Conference*, PSG College of Technology, Coimbatore 641004, India, June 1977.


161. (C) Davison, E.J., “Recent results on decentralized control of large scale multivariable systems”, *IFAC Multivariable Technological Systems Symposium*, New Brunswick, July 1977, pp 1-10, (invited plenary session).


1978


172. (C) Gesing, W., Davison, E.J., “A robust conjugate-gradient algorithm for solving general constrained optimization problems with application to computer-aided design”, 7th IFAC World Congress on Automatic Control, Finland, June 1978, pp 1049-1056, (invited paper).


1979


185. (C) Tripathi, N.K., Davison, E.J., “The automatic generation control of a multiarea interconnected system using reduced order models”, *IFAC Symposium on Computer Applications in Large Scale Power Systems*, New Delhi, India, August 16-18, 1979, pp 117-126.

186. (C) Davison, E.J., Tripathi, N.K., “Decentralized tuning regulators: An application to solve the load and frequency control problem for a large power system”, *18th IEEE Control & Decision Conference*, Fort Lauderdale, FL, December 1979, pp 879-885.

1900


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This paper was chosen to be the outstanding best paper award amongst the papers published in the IEEE Trans on Automatic Control, vol AC-24 (1979) and vol AC-25 (1980).


1982
205. (C) Davison, E.J., “Large scale control system design”, *IFAC Symposium on Theory and Application of Digital Control*, New Delhi, India, January 5-8, 1982, pp 12-20, (key note address – invited paper).


1983


1984


1985


1986


1987

254. (O) “Challenges to control: A collective view”, *IEEE Trans on Automatic Control*, vol AC-32, no 4, April 1987, pp 275-285. This paper which had no author, was a summary of an IEEE/NSF Workshop held at the University of Santa Clara, September 1986. (E.J. Davison was a member of the steering committee for this workshop.)


262. (C) Vaz, A., Davison, E.J., “Simplified design of controllers to solve the robust decentralized servomechanism problem for large systems”, *10th IFAC World Congress*, Munich, vol. 8, July 1987, pp 125-130.


264. (CA) Davison, E.J., “Decentralized control of large scale systems”, IEEE Control Systems Society Workshop on Decentralized and Distributed Control, The Ohio State University, Columbus, OH, September 14-15, 1987 (plenary paper).


1988


280. (C) Qiu Li, Davison, E.J., “A new method for the stability robustness determination of state space models with real perturbations”, *1988 IEEE Control & Decision Conference*, December 1988, Austin, TX, pp 538-543.

281. (C) Qiu Li, Davison, E.J., “Computation of stability robustness of large state space models with real perturbations”, *1988 IEEE Control & Decision Conference*, December 1988, Austin, TX, pp 1380-1385, (invited paper).


1989


286. (J) Vaz, A.F., Davison, E.J., “Time scale based modular synthesis of controllers to solve the robust decentralized servomechanism problem”, *Information & Decision Technologies* (was *J. Large Scale Systems*), vol 16, 1989, pp 103-120.


1990


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306. (C) Qiu Li, Davison, E.J., “Performance limitations of non-minimum phase systems”, 11th IFAC World Congress, August 13-17, 1990, Tallinn, USSR, vol 2, pp 322-327.


308. (C) Davison, E.J., “Decentralized control of large scale systems – Applications”, 8th Brazilian Congress on Automatic Control, September 10-14, 1990, Belem-PA, Brazil, pp TC27-TC33 (plenary lecture).


1991


316. (C) Qiu Li, Davison, E.J., “Point-wise gap metric and robust stabilization”, *MNTS*, June 1991, Kyoto, Japan, (invited paper).


1992


1993


1994

25


1995


This paper was chosen for honorable mention in the SIAM Linear Algebra Prize Competition, November 1, 1997.


361. (O) Blondel, V., Gevers, M., Lindquist, A., “Survey on the state of systems and control”, European J of Control, vol 1, no 1, 1995, pp 5-23 (E.J. Davison was one of the major contributors to this article).

1996


1997


1998


1999


2000


2001


2002


2003


426. (C) Khatir M., Davison, E.J., “Cooperative control for large systems”, Block Island Workshop on Cooperative Control, Block Island, RI, June 10-11, 2003


2004


2005


33
2006


2007


2008


471. (C) Samuel T.C.Huang, E.J. Davison, R H S Kwong, ”Decentralized RSP for Large Flexible Space Structures under Sensor and Actuator Failure”, IEEE Control and Decision Conference, Cancun, Mexico, Dec 2008, pp 410 - 416.
2009


