

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

1. (C) Davison, E.J., “An automatic way of finding ‘optimal’ control systems for large multi-variable plants”, *Proc IFAC Tokyo Symposium*, August 1965, pp 357-373.

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2. (J)¹ Davison, E.J., “A method for simplifying linear dynamic systems”, *IEEE Trans on Automatic Control*, vol AC-11, no 1, January 1966, pp 93-101.
3. (C) Davison, E.J., “A numerical method of finding the poles and zeros of a control system”, *Proc 3rd Congress of IFAC*, June 1966, London, pp 1B.1-1B.7.
4. (O) Davison, E.J., Cowan, K., “Functional optimization by Rosenbrock’s method of hill-climbing”, *SHARE Library*, no 3466, December 1966.

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6. (J) Davison, E.J., “The stability of certain classes of differential equations”, *IEEE Trans on Automatic Control*, vol AC-12, no 1, February 1967, pp 118-119.
7. (J) Davison, E.J., “Reality of eigenvalues for a class of real unsymmetric matrices”, *Matrix and Tensor Quarterly*, vol 17, no 3, March 1967, pp 96-101.
8. (Corr) Chidamabara, M.R., Davison, E.J., “Further remarks on simplifying linear dynamic systems”, *IEEE Trans on Automatic Control*, vol AC-12, no 2, April 1967, pp 213-214.
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¹This 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.

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12. **(J)** Davison, E.J., "A high order Crank-Nicholson technique for solving differential equations", *Computer Journal*, vol 10, no 2, August 1967, pp 195-197.
13. **(J)** Davison, E.J., "Reality of eigenvalues for a class of real unsymmetric matrices", *Matrix and Tensor Quarterly*, vol 13, no 1, September 1967, pp 15-16.
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15. **(J)** Davison, E.J., Varaiya, P.P., Silverman, L.M., "Controllability of a class of nonlinear time-variable systems", *IEEE Trans on Automatic Control*, vol AC-12, no 6, December 1967, pp 791-792.
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18. **(J)** Davison, E.J., "The numerical solution of large systems of linear differential equations", *AICHE Journal*, vol 14, no 1, January 1968, pp 46-50.
19. **(CA)** Davison, E.J., Monro, D.M., "A computation technique for finding time optimal controls", *Hawaii International Conference on System Sciences*, January 1968, pp 341-344.
20. **(J)** Davison, E.J., "The stability of an n th-order nonlinear time-varying differential system", *IEEE Trans on Automatic Control*, vol AC-13, no 1, January 1968, pp 99-102.
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22. **(J)** Davison, E.J., "Some sufficient conditions for the stability of a linear time-varying system", *International J of Control*, vol 7, no 4, April 1968, pp 377-380.
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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.
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48. **(J)** Davison, E.J., "On pole assignment in linear systems with incomplete state feedback", *IEEE Trans on Automatic Control*, vol AC-15, no 3, June 1970, pp 348-351.
49. **(C)** Quintana, V.H., Davison, E.J., "A time-weighted gradient method for computing optimal controls", *JACC*, Georgia, June 1970, pp 43-50.
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78. **(CA)** Wang, S.H., Davison, E.J., "Canonical forms of linear multivariable systems", *Sixth Asilomar Conference on Circuits and Systems*, November 1972, pp 301-304.
79. **(J)** Davison, E.J., Ball, D., "On the global controllability of perturbed controllable systems", *IEEE Trans on Automatic Control*, vol AC-17, no 6, December 1972, pp 825-826.
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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).

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106. **(C)** Goldenberg, A., Davison, E.J., “The feedforward and robust control of a general servomechanism problem with time lag”, *8th Annual Princeton Conference on Information Sciences and Systems*, March 1974, pp 80-84.
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131. **(J)** Davison, E.J., “A generalization of the output control of a linear multivariable system subject to arbitrary disturbances”, *IEEE Trans on Automatic Control*, vol AC-20, no 6, December 1975, pp 788-792.

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