Matchgates and classical simulation of quantum circuits
R. Jozsa & A. Miyake

Mathematical analysis of spark ignition engine operation via the combination of the first and second laws of thermodynamics
I. Sezer & A. Bilgin

Nonlinear feedback auxiliary signals for system interrogation and damage detection
K. D’Souza & B. I. Epureanu

The structure of Taylor’s constraint in three dimensions
P. W. Livermore, G. Ierley & A. Jackson

A law of large numbers for nearest neighbour statistics
D. Evans

Frictionless multiple impacts in multibody systems. I. Theoretical framework
C. Liu, Z. Zhao & B. Brogliato

Diamagnetism of an electron gas in superlattices
B. M. Askarov, S. R. Figarov, M. M. Makhmudov & V. R. Figarov

Periodic and decaying solutions in discrete nonlinear Schrödinger with saturable nonlinearity
A. Pankov & V. Rothos

A symmetry treatment of Danzerian rigidity for circle packing
P. W. Fowler, S. D. Guest & T. Tarnai

Estimates of the bistable region in metal cutting
Z. Dombovary, R. E. Wilson & G. Stepan

The entropy dissipation method for spatially inhomogeneous reaction–diffusion-type systems
M. Di Francesco, K. Fellner & P. A. Markowich

Fast algorithms for Helmholtz Green’s functions
G. Beylkin, C. Kurcz & L. Monzón

On the Riemann property of angular lattice sums and the one-dimensional limit of two-dimensional lattice sums
R. C. McPhedran, J. J. Zucker, L. C. Botten & N. A. P. Nicorovici

On stability of rotordynamic systems with rotor–stator contact interaction
M. O. T. Cole

Errata

3089-3379