

APPLIED THERMAL ENGINEERING

DESIGN · PROCESSES · EQUIPMENT · ECONOMICS

Volume 30, Issue 5

April 2010

CONTENTS

- | | | |
|---|-----|---|
| M. NING and M. ZAHEERUDDIN | 385 | Neuro-optimal operation of a variable air volume HVAC&R system |
| D. DAMRONGSAK and N. TIPPAYAWONG | 400 | Experimental investigation of an automotive air-conditioning system driven by a small biogas engine |
| I. KHAZAEI, R. HOSSEINI and S. H. NOIE | 406 | Experimental investigation of effective parameters and correlation of geyser boiling in a two-phase closed thermosyphon |
| M. ABEDI, F. BAKHTIARI-NEJAD, M. SAFFAR-AVVAL, M. ABEDI and A. ALASTY | 413 | A comparative study between linear and sliding mode adaptive controllers for a hot gas generator |
| T. DESRUES, J. RUER, P. MARTY and J. F. FOURMIGUÉ | 425 | A thermal energy storage process for large scale electric applications |
| M. R. HALL and D. ALLINSON | 433 | Transient numerical and physical modelling of temperature profile evolution in stabilised rammed earth walls |
| S. JINDAL, B. P. NANDWANA, N. S. RATHORE and V. VASHISTHA | 442 | Experimental investigation of the effect of compression ratio and injection pressure in a direct injection diesel engine running on Jatropha methyl ester |
| C. J. L. HERMES, C. MELO and F. T. KNABBEN | 449 | Algebraic solution of capillary tube flows. Part I: Adiabatic capillary tubes |
| C. R. CORONADO, A. DE CASTRO VILLELA and J. L. SILVEIRA | 458 | Ecological efficiency in CHP: Biodiesel case |
| A. SALOGNI and P. COLONNA | 464 | Modeling of solid oxide fuel cells for dynamic simulations of integrated systems |
| H. VIDÁL and S. COLLE | 478 | Simulation and economic optimization of a solar assisted combined ejector-vapor compression cycle for cooling applications |
| F. MOREY and P. SEERS | 487 | Comparison of cycle-by-cycle variation of measured exhaust-gas temperature and in-cylinder pressure measurements |

[continued on inside back cover]



ELSEVIER



1359-4311(201004)30:5;1-Y

Indexed/Abstracted in: *Appl. Mech. Rev.*, *Res. Alert*, *Cam. Sci. Abstr.*,
Chemical Abstracts Service, *Curr. Cont./Eng. Tech. & Appl. Sci.*, *Curr. Tech. Ind.*,
EIC Intell., *Eng. Ind.*, *Metals Abstr.*, *Curr. Cont. SCISEARCH Data.*, *TCEA*,

Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

Printed by Polestar Wheatons Ltd, Exeter, UK

APPLIED THERMAL ENGINEERING

DESIGN · PROCESSES · EQUIPMENT · ECONOMICS

Volume 30, Issue 5

April 2010

CONTENTS—continued from outside back cover]

- | | | |
|---|-----|---|
| J. A. HEYNS and D. G. KRÖGER | 492 | Experimental investigation into the thermal-flow performance characteristics of an evaporative cooler |
| V. SRINIVASAN, K.-M. MOON, D. GREIF, D. M. WANG and M.-H. KIM | 499 | Numerical simulation of immersion quench cooling process using an Eulerian multi-fluid approach |
| K. R. DAVIS, J. M. SCHMITT and D. V. PENCE | 510 | Control of an oil-heated, fractal-like branching microchannel desorber |
| K. C. LEONG, H. Y. LI, L. W. JIN and J. C. CHAI | 520 | Numerical and experimental study of forced convection in graphite foams of different configurations |
| K. WANG, F.-Z. SUN, Y.-B. ZHAO, M. GAO and L. RUAN | 533 | Experimental research of the guiding channels effect on the thermal performance of wet cooling towers subjected to crosswinds – Air guiding effect on cooling tower |