

Contents

I.K. ILIEV, H.I. BELOEV, D.I. ILIEVA, AND J. BADUR: A novel method for calculating greenhouse gas emissions from the combustion of energy fuels	3
P. DEKA AND A. SZŁĘK: Thermal energy storage in buildings: Opportunities and challenges	21
D. KARDAŚ, I. WARDACH-ŚWIĘCICKA, AND A. GRAJEWSKI: Partially transient one-dimensional thermal-flow model of a heat exchanger, upwind numerical solution method and experimental verification	63
I.A. ABDULGHAFOR AND M.J. MNATI: Design of thermoelectric radiant cooling – photovoltaic panels system in the building	85
O. BENBRIKA, A. BENSENOUCI, M. TEGAR, AND K.R.A. ISMAIL: Thermodynamic assessment of thermochemical cycle for hydrogen production based on water decomposition with binary copper chlorine couple	109
J. KARWACKI, R. KWIDZINSKI, AND P. LEPUTA: Performance analysis and PCM selection for adsorption chiller aided by energy storage supplied from the district heating system	135