

Contents

MATERIALS

Reason analysis of welded joints cracking in membrane wall elements as a basis for manufacturing technology selection of the evaporator collector with new generation low-alloy bainitic steel for boilers with supercritical working parameters 5
J. Dobrzański (Poland)

Influence of silver addition on crystallisation kinetics of the AlSi12CuNiMg alloy 15
M. Krupiński, K. Labisz, B. Krupińska (Poland)

METHODOLOGY OF RESEARCH, ANALYSIS AND MODELLING

The effect of polarization plane rotation on binary superlattice transmission 20
J. Garus, S. Garus, M. Szota, M. Nabiałek, K. Gruszka (Poland)

Simulation of internal stresses coatings deposited onto magnesium alloys by use of FEM 28
A. Śliwa, T. Tański, R. Dziwis, W. Kwaśny, M. Pancielejko (Poland)

MATERIALS MANUFACTURING AND PROCESSING

Towards a design for ecological management and product sustainability – European and Brazilian approaches 34
G.F. Batalha (Brazil), M.T. Roszak (Poland), I.B. da Silva, O.L. Agostinho (Brazil), L.A. Dobrzański (Poland)

Structure and properties of CrN/DLC coating deposited by PVD ARC-cathodes and PACVD technology 40
K. Lukaszewicz, A. Paradecka, J. Wiśniewska (Poland)

Author index 45

Keywords index 46

Publisher's notice 47

Editor's notice 48