

LIST OF PAPERS

NIK ROSLI ABDULLAH, RIZALMAN MAMAT, P. ROUNCE, M. L. WYSZYNSKI, A. TSOLAKIS, H.M. XU, G. TIAN THE EFFECT OF INJECTION PRESSURE AND STRATEGY IN A JAGUAR V6 DIESEL ENGINE	9
KAROL FRANCISZEK ABRAMEK MEASUREMENTS OF MAXIMUM CRANKCASE PRESSURE FOR EVALUATION OF THE PISTON-RINGS- CYLINDER ASSEMBLY	23
HENRYK BOROWCZYK, PAWEŁ LINDSTEDT, JERZY MANEROWSKI PREMISES FOR A PRACTICAL COMPUTER-AIDED PARAMETRIC METHOD OF EVALUATION OF THE TECHNICAL OBJECT RELIABILITY	29
LUCYNA BRZOWSKA, KRZYSZTOF BRZOWSKI MODELLING OF AVERAGE EXHAUST POLLUTANT EMISSION INTENSITY ON A ROAD	39
GRZEGORZ BUDZIK, JERZY JASKÓLSKI, MAREK USTROBIŃSKI, KONRAD FIJOLEK, MIROSLAW KWAŚNIAK, ROBERT MIERZWA SAFETY INCREASE ON CROSSROADS IN RZESZÓW BY INSTALLATION OF LIGHT SIGNALING WITH AUTOMATIC ROADS TRAFFIC MEASUREMENTS	49
GRZEGORZ BUDZIK, BOGDAN KOZIK, JACEK PACANA DETERMINING OF MODEL SIMILARITY FOR FLEXSPLINE OF HARMONIC DRIVE WITH THE USE OF FEM AND EXTENSOMETER METHOD	55
HEINZ BURTSCHER, ANDREAS MAYER, SIEGFRIED LORETZ, ALEJANDRO KELLER, MARKUS KASPER, JAN CZERWINSKI AIR QUALITY FILTRATION IN VEHICLE CABINS	61
A. CHARCHALIS, J. KREFFT MAIN DIMENSIONS SELECTION METHODOLOGY OF THE CONTAINER VESSELS IN THE PRELIMINARY STAGE	71
PRZEMYSŁAW CWIKOWSKI, ANDRZEJ TEODORCZYK THE LATEST ACHIEVEMENTS IN GASOLINE AND DIESEL INJECTION TECHNOLOGY FOR THE INTERNAL COMBUSTION ENGINES	79
MARIUSZ CYGNAR, MAREK ALEKSANDER, ALEKSANDER MAZURKOW, GRZEGORZ BUDZIK THE RESEARCH OF ROTATING SETS IN TURBOCHARGERS, THE INFLUENCE OF RELATIVE WIDTH OF SLIDING BEARINGS WITH A FLOATING RING ON STATIC AND DYNAMIC PROPERTIES	91
TOMASZ FIGLUS, ANDRZEJ WILK APPLICATION OF FEM METHOD IN REDUCTION OF GEAR TRANSMISSION HOUSING VIBRATION	97

JAN FILIPCZYK, HENRYK MADEJ THE METHODS OF ASSESSMENT OF CAR TECHNICAL CONDITION REGARDING ENVIRONMENTAL PROTECTION	103
MAREK FLEKIEWICZ, BARTOSZ FLEKIEWICZ NEW DIAGNOSTIC METHODS OF ALTERNATIVE LPG/CNG INJECTION SYSTEMS	109
WIESŁAW GALOR THE ROLE OF NAVIGATIONAL RISK ASSESSMENT DURING SHIP'S MANOEUVRING IN LIMITED WATERS	117
JERZY GIRTLEK PROBABILITY MEASURES OF LIKELIHOOD OF DIAGNOSIS OF THE TECHNICAL STATE OF MAIN COMBUSTION ENGINES OF SEA-GOING SHIPS	125
ALEKSANDER GÓRNIK, ANDRZEJ KAŻMIERCZAK USABILITY OF COMPUTER SOFTWARE FOR SAFETY DETERMINATION BY SIMULATING A "CAR TO CAR" AND A "LARGE VEHICLE TO CAR" ACCIDENT	133
KRZYSZTOF GÓRSKI, WINCENY LOTKO PRELIMINARY RESEARCH OF THE DIESEL KNOCK PHENOMENON WITH USING OF THE CRANKSHAFT ACCELERATION METHOD	141
WITOLD GRZEGOZEK, JAROSŁAW SZCZYGIEL AN ATTEMPT OF THE APPLICATION OF MATCHING PURSUIT MP WITH GABOR DICTIONARY FOR EVALUATION OF RIDE COMFORT DISTURBANCE LEVEL	149
ATTILA GUBOVITS, GERGELY BARI VALIDATION PROCESS FOR ESP BASED ELECTRIC STEERING SYSTEM	159
JAROSŁAW HAJDUK, ANDRZEJ HOMZIUK, MACIEJ KULIŃSKI, RYSZARD SABAK PROBLEMS OF CONTROL OF MINI UNMANNED AERIAL VEHICLE (MINIUAV)	167
VĽADIMÍR HLAVŇA, TOMÁŠ KRAKOVSKÝ THE EMISSION FACTOR AND A VEHICLE RUN-IN PERIOD	175
ANDRZEJ IRZYCKI, PIOTR KALINA, KRZYSZTOF SNOPKIEWICZ IMPROVEMENT OF AXIALLY SYMMETRICAL PLASMA REACTOR STRUCTURE WITHIN A FRAMEWORK OF PARTICLES POLLUTION DECREASE IN ENGINE'S EXHAUST	183
JACEK JACHOWSKI, PRZEMYSŁAW KRATA SHIP'S HEELING MOMENT DUE TO LIQUID SLOSHING IN TANKS – 3D ATTITUDE	191

SAMUEL JOHNSON, JACLYN NESBITT, SEONG-YOUNG LEE, JEFFREY D. NABER PREMIXED COMBUSTION OF ACETYLENE-HYDROGEN FUEL MIXTURES FOR THERMODYNAMIC STATE GENERATION IN A CONSTANT VOLUME COMBUSTION VESSEL	199
ZDZISŁAW JUDA RANGE AND ACCELERATION ANALYZE OF AN ELECTRIC DRIVEN CITY CAR WITH ADVANCED ENERGY STORAGE	209
ANDRZEJ KAŻMIERCZAK, ANNA JANICKA, MARCIN TKACZYK, RADOSŁAW WRÓBEL CONTOUR OF VIBROACOUSTIC MAP IN DIAGNOSES OF ENGINE'S FAILURE	217
BOGDAN KOZIK, GRZEGORZ BUDZIK, JACEK PACANA ANALYSIS OF POSSIBILITY OF APPLYING ATYPICAL MESHING IN DRIVING UNITS OF CARS	225
MACIEJ KOZŁOWSKI WAVELET ANALYSIS OF ONE-DIMENSIONAL TRACTION SIGNALS	231
PAWEŁ KRASOWSKI PRESSURE AND VELOCITY DISTRIBUTION IN SLIDE JOURNAL BEARING GAP BY LAMINAR UNSTEADY LUBRICATION	239
PAWEŁ KRASOWSKI PRESSURE AND CAPACITY FORCE IN SLIDE JOURNAL PLANE BEARING LUBRICATED OIL WITH MICROPOLAR STRUCTURE	247
JERZY LEWITOWICZ ENGINEERING AVAILABILITY OF AIRCRAFTS	255
PAWEŁ LINDSTEDT, EDWARD ROKICKI, HENRYK BOROWCZYK, PAWEŁ MAJEWSKI APPLICATION OF THE CORRELATION FUNCTION AND FOURIER TRANSFORMATION TO EVALUATION OF TECHNICAL CONDITION DEMONSTRATED BY BLADES OF A ROTOR MACHINE DURING THE OPERATION PROCESS	263
MACIEJ LISOWSKI MODELLING OF THE INLET SYSTEM AND EXAMINATION OF THE EFFECT OF INLET PIPE LENGTH ON ENGINE OPERATION PARAMETERS	271
WINCENTY LOTKO, RUSLANS SMIGINS, KRZYSZTOF GÓRSKI THE EFFECT OF DIESEL/ETHANOL BLENDS ON VARIATIONS OF SELECTED COMBUSTION PARAMETER	279
SEBASTIAN ŁAWNICZAK, PRZEMYSŁAW SIMIŃSKI HYDROPNEUMATIC SUSPENSION MODELLING FOR WHEELED ARMoured FIGHTING VEHICLE	285
JERZY MAŁACHOWSKI COMPUTATIONAL STUDIES OF GAS PIPELINE JUNCTION IN UNUSUAL OPERATING SCENARIO	299

ANDREAS MAYER, JAN CZERWINSKI, MARCUS KASPER, GERHARD LEUTERT, NORBERT HEEB, ANDREA ULRICH, FRANCOIS JAUSSE PARTICLE FILTER TEST PROCEDURE AND QUALITY STANDARD FOR DIESEL ENGINES	305
BARTOSZ MICHALAK, ROMAN DOMAŃSKI HONEYCOMB COMPACT HEAT EXCHANGER FOR COMPRESSOR INTERSTAGE COOLING	315
SŁAWOMIR MICHALAK, ANDRZEJ SZELMANOWSKI, ANDRZEJ CIEŚLIK RESEARCH AND MEASURING CAPABILITIES OF THE SYSTEM-INTEGRATION LABORATORY EQUIPMENT TO OPTIMIZE INTEGRATED AVIONICS SYSTEMS	323
ANDRZEJ MŁYNARCZAK MODELLING OF ALKALINITY CHANGES IN LUBRICATING OILS USED IN MARINE DIESEL ENGINES	329
WŁADYSŁAW MITIANIEC, MARIAN FORMA ANALYSIS OF DIRECT FUEL INJECTION IN A SMALL POWER TWO-STROKE ENGINE	337
Ł. MUŚLEWSKI, M. PAJĄK RESEARCH AND ASSESSMENT OF TRANSPORT MEANS OPERATIONAL QUALITY	349
JAROSŁAW MYŚKÓW, TADEUSZ BORKOWSKI DIRECT APPLICATION OF NON-THERMAL PLASMA TO PM REDUCTION FROM MARINE DIESEL ENGINES	361
ADRIAN-IOAN NICULESCU, ANTONI JANKOWSKI, TUDOR SIRETEANU ON „VZN“ DAMPER BEHAVIOUR AT CRASH	369
ANDRZEJ PAZUR, KRZYSZTOF ROGALA, SŁAWOMIR PASZEK LABORATORY EQUIPMENT TO OPTIMISE INTEGRATED COMMUNICATION SYSTEMS FOR MILITARY HELICOPTERS	375
DARIUSZ PIERNIKARSKI KNOCK DETECTION USING SPECTRAL EMISSION OF FLAMES	383
GRZEGORZ RARATA, JAN SZYMCZYK, PIOTR WOLAŃSKI EXPERIMENTS ON THE UPPER EXPLOSION LIMITS OF GASEOUS ALKANES-OXYGEN MIXTURES AT ELEVATED CONDITIONS OF T AND P IN A SPHERICAL VESSEL	393
MARCIN RYCHTER CONDITIONS IN EXHAUST PIPE IN CI ENGINE IN LIGHT OF MONITORING OF CATALYTICAL CONVERTER	401
BRONISŁAW SENDYKA, ANDRZEJ SOCHAN INCREASE OF THE TOTAL EFFICIENCY USING THE ATKINSON CYCLE IN THE SPARK IGNITION ENGINE	407

AGNIESZKA SOBIANOWSKA-TUREK, ANNA JANICKA, CZESŁAW KOLANEK, RADOSŁAW WRÓBEL, MARCIN TKACZYK THE CHEMICAL PROPERTIES OF ALTERNATIVE FUEL FROM AUTOMOBILE SHREDDER RESIDUE (ARS)	413
ZBIGNIEW STĘPIEŃ, STANISŁAW OLEKSIK DEPOSIT FORMING TENDENCY IN SPARK IGNITION ENGINES AND EVALUATION OF GASOLINE DETERGENT ADDITIVES EFFECTIVENESS	421
KRZYSZTOF STYPUŁKOWSKI ADAPTIVE CONTROL SYSTEM OF LIGHT BEAM POSITION OF TRAM'S HEAD LIGHTS	433
WIESŁAW SZYMCZYK, DANUTA MIEDZIŃSKA NUMERICAL ANALYSIS OF AN OPEN CELL FOAM STRUCTURE WITH THE USE OF MODELS BASED ON 2D FINITE ELEMENTS	441
MARCIN TERELAK, ANDRZEJ KAZMIERCZAK OPTIMALIZATION OF HYBRID VEHICLE CONTROL	449
ANDRZEJ TYPIAK REQUIREMENTS FOR MOBILITY OF PLATFORMS AND POWER SUPPLY SYSTEM FOR UNMANNED GROUND VEHICLES	457
ALEKSANDER UBYSZ DRAFT CALCULATION OF FUEL CONSUMPTION AND EMISSION OF CO, HC AND NOX BY A ENGINE CAR IN OPERATIONAL CONDITIONS	465
LESZEK UŁANOWICZ OUTLINE OF THE METHOD FOR PREDICTION OF LIFETIME ACHIEVED BY AVIONIC HYDRAULIC DRIVES OPERATED UNDER REAL FIELD CONDITIONS	473
A. WDZIĘCZNY, Ł. MUŚLEWSKI RESEARCH ON EFFECTIVENESS OF TRANSPORT MEANS OPERATIONAL RELIABILITY AND EFFICIENCY REPAIRS	485
M. WOROPAY, K. MIGAWA, P. BOJAR INITIAL MODEL OF TRANSPORT MEANS AVAILABILITY OF REAL CITY TRANSPORT SYSTEM	495

