1. Record Nr. UNINA9910465328703321 Trends in automotive research: selected, peer reviewed papers from **Titolo** the Regional Conference on Automotive Research (ReCAR 2011). December 14-15, 2011, Kuala Lumpur, Malaysia / / edited by Shahrum Abdullah [and six others] Pubbl/distr/stampa Durnten-Zurich:,: Trans Tech Publications,, [2012] ©2012 **ISBN** 3-03813-740-5 Descrizione fisica 1 online resource (369 p.) Collana Applied mechanics and materials, , 1662-7490; ; volume 165 Altri autori (Persone) AbdullahShahrum Disciplina 629.2 Soggetti Motor vehicles - Research Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Trends in Automotive Research; Preface, Acknowledgements and Committee; Table of Contents; Hydrogen Blended with Gasoline, Diesel, Natural Gas (NGV) as an Alternative Fuel for ICE in Malaysia; Effect of Retrogression Medium to the Mechanical Properties of Aluminum Alloy 7075: Clean Automotive Technology: Hydraulic Hybrid Vehicles (HHVs): Prediction of Fatigue Crack Propagation of Rail Material Using 2D Finite Element Modeling; Whole Body Vibrations Exposure to Malaysian Driver Using Novel IKaz Method Fatigue Life Assessment of Aluminium Alloy 6061 Specimen Using Signal Analysis Approach for Automotive Components Effect of Intake Manifold Angle of Port-Fuel Injection Retrofit-Kit to the Performances of an S.I. Engine; New In-Wheel Electric Motor Design for Small Electric Vehicle Using Opera2D; Experimental and Numerical Analysis of Lift and Drag Force of Sedan Car Spoiler; Power Analysis of Light Electric Vehicles Using Fundamental Calculations; Homogenous Charge Compression Ignition (HCCI) Technique: A Review for Application in Two-Stroke Gasoline Engines Effects of Pad Surface Topography on Disc Brake Squeal Automotive Noise Insulation Composite Panel Using Natural Fibres with Different

Perforation Areas; Structural Modification of Disc Brake Judder Using

Finite Element Analysis; Design and Development of Simple Control System for Small Hybrid Electric Vehicle; Corrosion Effect on Car Welded Jointed in Terms of Sea Environment Effect; Experimental and Analytical Durability Assessment of SAE 1045 Steel under Service Loadings; Microstructural Characterization of ZrO2 Layer Coating on Martensitic Stainless Steel

Accurate Prediction of Springback in Forming of BIW Parts New Concept for Reducing Wire-Harness and Implementing Advanced Facilities for Non-Luxury Vehicles via Application of POF; MFI Zeolite Membrane from Rice Husk for Biofuels Production; Verification of 14DOF Full Vehicle Model Based on Steering Wheel Input; Mathematical Model of Eco-Driving for Energy Optimization for Electric Vehicle; Comparing the Effects of Hydrogen Addition on Performance and Exhaust Emission in a Spark Ignition Fueled with Gasoline and CNG

Development of 2D Image Capture Method Software for Recognizing Drivers' Postural Angles Impact Response of Thin-Walled Tubes: A Prospective Review; Characterisation of the Sound and Vibration Signal of Impact Testing on Automotive Component Materials; A Study on Validation of Fatigue Damage Clustering Analysis Technique Based on Clustering Validation Index; Experimental Study of an Internal Heat Exchanger Influence on R134a Automobile Air Conditioning System; Underhood Fluid Flow and Thermal Analysis for Passenger Vehicle Nonlinear State Estimation of Tire-Road Contact Forces Using a 14 DoF Vehicle Model

## Sommario/riassunto

This special issue of Trends in Automotive Research contains papers contributed to the Regional Conference on Automotive Research (ReCAR), held on the 14 and 15th December, 2011, in Kuala Lumpur, Malaysia. The conference was organised by the Centre for Automotive Research (CAR), Faculty of Engineering and the Built Environment, Universiti Kebangsaan Malaysia. Review from Book News Inc.: Abdullah (U. Kebangsaan, Malaysia) compiles 66 papers from the Regional Conference on Automotive Research (ReCAR 2011), held in December 2011 in Kuala Lumpur, Malaysia. The conference focused on the theme ""In