

**Titles of Papers Published in the
Transactions of the Korean Society of Mechanical
Engineers
(Vol. 30, No. 4, 2006)**

**〈Materials and Fracture · CAE and Applied Mechanics · Dynamics and Control · Production
and Design Engineering Divisions〉**

〈Original Papers〉

- Design of a Dexterous Anthropomorphic Robot Hand
..... Hojune Chi, Sanghun Lee, Byungjune Choi and Hyouk-Ryeol Choi
- Development of Tactile Sensor for Detecting Contact Force and Slip
..... Byungjune Choi, Sungchul Kang and Hyouk Ryeol Choi
- A Multi-chip Microelectrofluidic Bench for Modular Fluidic and Electrical Interconnections
..... Sunghwan Chang, Sang Do Suk and Young-Ho Cho
- The Structural Design for Nonlinear Hyperelastic Materials Based on CFD
..... Young-Chul Park, Dae-seok Jung, Ji-young Kim and Jong-moon Lee
- Analysis of Design Parameter of Structural Modification using Change of Dynamic Characteristics
..... Jung Youn Lee, Jae-Eung Oh and Jung Woo Lee
- Assessment of In-plane Size Effect of Nuclear Materials Based on Damage Mechanics
..... Yoon-Suk Chang, Tae-Rin Lee, Jae-Boong Choi,
Chang-Sung Seok and Young-Jin Kim
- Mechanical Properties of Dissimilar Friction Welded Steel Bars in Relation to Post Weld Heat
Treatment Yu-Sik Kong and Seon-Jin Kim
- Analysis of a Plate-type Piezoelectric Composite Unimorph Actuator Considering Thermal
Residual Deformation Sung-Choong Woo and Nam Seo Goo
- A Study on the Measurement of Fracture Resistance Characteristics for Steam Generator Tubes
..... Yoon-Suk Chang, Nam-Su Huh, Min-Yong Ahn, Young-Jin Kim,
Seong-Sik Hwang and Joung-Soo Kim
- Finite Element Analysis of Nd:YAG Pulse Laser Welding for AISI 304 Stainless Steel Plate
..... Gi Jeong Nam, Kwan Woo Kim, Jin Uk Hong, Jae Hoon Lee,
Jeong Suh and Hae Yong Cho
- Gait Study on the Normal and ACL Deficient Patients After Ligament Reconstruction Surgery
Using Chaos Analysis Method
..... Jae Hun Ko, Kwon Son, Byung Young Moon and Jeung Tak Suh
- Modal Analysis of Rotor System with Anisotropic Stator and Asymmetric Rotor in the Presence of
Breathing Crack Dong-Ju Han

〈Technical Paper〉

- A Study on the Light Cylinder Using Chemical Milling
..... Jong-Woong Lee, Joon-Tae Yoo, Jong-Hoon Yoon, Young-Soon Jang,
Yeong-Moo Yi and Suk-bong Kang

Analysis of Isometry of the Anterior Cruciate Ligament for Optimal Ligament Reconstruction
 Jung Hong Park, Kwon Son, Jeung Tak Suh and Byung Young Moon
 The Optimal Design for Noise Reduction of the Intake System in Automobile Using
 Kriging Model Hyoun-Jin Sim, Je-Seon Ryu, Kyung-Joon Cha and Jae-Eung Oh
 Analytical and Experimental Studies on the Natural Frequency of a Composite Train Carbody
 Jung-Seok Kim, Jong-Cheol Jeong, Sea-Hyun Cho and Seong-II Seo

〈**Thermal Engineering · Fluid Engineering · Energy and Power Engineering Divisions**〉

〈**Original Papers**〉

The Characteristics of the Particle Position Along an Optical Axis in Particle Holography
 Yeon-Jun Choo and Bo-Seon Kang
 Experimental Study on Flow Structure of Wake Behind a Rotationally Oscillating Circular
 Cylinder Jung Yeop Lee and Sang Joon Lee
 Evaluation of a Wafer Transportation Speed for Propulsion Nozzle Array on
 Air Levitation System In Ho Moon and Young Kyu Hwang
 In Vivo Measurements of Blood Flow in a Chicken Embryo Using Micro PIV Technique
 Chang Sub Yeo, Kyu Yeon Han and Sang Joon Lee
 Numerical Simulation of Chemically Reacting Laminar and Turbulent Flowfields Using
 Preconditioning Scheme
 Bong-Ha Song, Gyo-Soon Kim, Yun-Ho Choi, Byung-Ohk Rhee
 Effect of Blade Tip Geometry on Heat Transfer Coefficients on Gas Turbine Blade Tips and Near
 Tip Regions Jae Su Kwak
 Numerical Study on the Characteristics of Natural Convection Flows in a Cubical Cavity
 Hyon Kook Myong
 Oscillatory Instability of Low Strain Rate Edge Flame
 Kang Tae Kim, June Sung Park, Jeong Park, Jeong Soo Kim,
 Chang Bo Oh and Sang In Keel
 A Study on the Performance Characteristics of a New Bi-directional Micropump Using
 Piezoelectric Actuator Jong Won Choi, Jae Sung Yoon and Min Soo Kim
 A Study on Characteristics for Performance and Exhaust Emissions on Changes of Fuel Properties
 and Application of EGR Method in Diesel Engines Seunghun Choi and Youngtaig Oh
 Performance Evaluation of Large Eddy Simulation for Recirculating and Swirling Flows
 Cheol-Hong Hwang and Chang-Eon Lee

〈**Technical Paper**〉

Investigation on the Effective Calibration of Annubar
 Sejong Chun, Yong Moon Choi, Hae Man Choi, Ji Chul Choi, Kyung Ki Hong,
 Sang Woo Han and Woong Sun Kim
 The Prediction of Etching Characteristics Using Spray Characteristics in Etching Process of
 Lead-Frame Heungcheol Jeong, Gyungmin Choi and Duckjool Kim