

**Titles of Papers Published in the
Transactions of the Korean Society of Mechanical
Engineers**

(Vol. 30, No. 12, 2006)

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

〈Original Papers〉

- Improvement of Connection Force in Hydro-Embedding Process Through the Rotational Piercing
of the Connection Element Bong-Joon Kim, Dong-Kyu Kim,
Dong-Jin Kim and Young-Hoon Moon
- Biomechanical Analysis of Lumbar Interspinous Process Fixators and Design of Miniaturization
and Advanced Flexibility Jung Hong Park, Soon Heo, Kwon Son and Sung Jae Lee
- 3-D Finite Element Modeling of Fiber Reinforced Rubber Composites using a Rebar Element
..... Se-Hwan Jeong, Jung-Han Song, Hoon Huh, Jin-Woong Kim and Jin-Young Kim
- Degradation of Thermal Creep by Hydrides of Zr-2/5Nb Pressure Tube
..... Dong Joon Oh, Young Wha Ma, Kee Bong Yoon and Young Suk Kim
- A Study on the Reliability Evaluation of Shot Peened Aluminium Alloy Using Accelerated Life
Test Ji-Hun Nam, Min-Woo Kang and Seong-Kyun Cheong
- Prediction of the Torque Capacity for Tubular Adhesive Joints with Composite Adherends
..... Je Hoon Oh
- Development and Evaluation of ESP Systems for Enhancement of Vehicle Stability during
Cornering (II) Jeonghoon Song
- Finite Element Analysis for Electron Optical System of a Field Emission SEM
..... Keun Park, Man-Jin Park, Dong-Hwan Kim and Dong-Young Jang
- Comparison Study of 2-DOF Parallel Mechanisms: Workspace Optimization and Kinematic
performance Yun-Joo Nam, Yuk-Hyung Lee and Myeong-Kwan Park
- Simulation of Extremely Low Cycle Fatigue Fracture in Ductile Cast Iron
..... Min gun Kim and Bok kyu Lim
- Reduction of Structure-borne Noises in a Two-Dimensional Cavity using Optimal Treatment of
Damping Materials Doo-Ho Lee
- Parametric and Combination Resonances of a Straight Pipe with Pulsatile Flow
..... Sung Chul Hong
- Feasibility Verification of a Non-Contact Vibration Sensor for Rotating Shafts Endowed with
Rotational-Encoder Capability Hocheol Lee, Myong Ho Kim and Jung Yang Park
- Compression Characteristics and Energy Absorption of Composite Egg-Box Panels
..... Jee-Gyu Chung and Seung-Hwan Chang
- Atomic Force Microscope for Standard Length Metrology
..... Dong-Yeon Lee, Dong-Min Kim and Dae-Gab Gweon
- Structural Integrity Evaluation of SG Tube with Surface Wear-type Defects
..... Jong-Min Kim, Nam-Su Huh, Yoon-Suk Chang, Young-Jin Kim,
Seong-Sik Hwang and Joung-Soo Kim

- An improved finite element method by adding arbitrary nodes in a domain
 Hyun-Gyu Kim
- Structural and Thermal Sensitivity Analysis of a High-Precision Centerless Grinding Machine for
 Machining Ferrules Seok-II Kim and Won-Jae Lee
- A Micro Mixer with Recirculation Zones Jongkwang Lee, Youngdae Kim,
 Jaehoon Choe and Sejin Kwon

〈**Technical Paper**〉

- Development of a Fizeau Interferometer System for Measuring the Profile of Large Optical Lens
 Eung-Suk Lee, Kwang-Hwan Bae, Ki-Am Lee and Ok-Hyun Kim
- 2006 Author Index of the Transactions of the KSME A KSME Editorial
- 2006 Author Index of the Journal of Mechanical Science and Technology KSME Editorial

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

〈**Original Papers**〉

- Flow Range Extension of Light Oil Flowmeter Standard System with Build-Up Technique
 Ki Won Lim and JongOh Choi
- Heat/Mass Transfer for Impingement/Effusion Cooling System with Circular Guide
 Sung Kook Hong and Hyung Hee Cho
- Analysis of Wave Decay Characteristics of Viscoelastic Compliant Coating
 Victor M. Kulik, Kwang Hyo Jung, Ho Hwan Chun and Inwon Lee
- A Study on Heat Transfer According to Inclined Angle and Surface Performance Using Turbulent
 Impingement Jet with a Liquid Crystal Transient Method
 Changhee Lee, Kyoungbin Lim and Sanghoon Lee
- Experimental Study on the Thermal Performance of Piezoelectric Fan in an Enclosure
 Sang Hee Park and Moon Chul Choi
- Characteristics of Exhaust Gas Temperature and Harmful Emission During Cold Start Transient
 Operation in an SI Engine Yong-Seok Cho, Dae-Chul Jeong,
 Young-Joon Park and Duk-Sang Kim
- Correlation of Critical Air Temperature for Frost Delay on a Cold Plate
 Jung-Soo Kim, Yoo-Yil Kim, Kwan-Soo Lee and Ook-Joong Kim
- Fabrication and Performance Evaluation of MEMS Methanol Reformer for Micro Fuel Cells
 Taegy Kim and Sejin Kwon
- Condensation Heat Transfer Characteristics of R-134a with Wall Thickness and Surface Roughness
 on Stainless Steel Horizontal Plain Tubes Jaehyeok Heo, Rin Yun,
 Yongtaek Lee and Yongchan Kim
- Improvement of Oxidation-resisting Characteristic for SOFC Interconnect Material by Use of Thin
 Film Coating Changbo Lee and Joongmyeon Bae
- Numerical Study of Density-stratified Flow Past Two 3D Hills
 Choon-Bum Choi and Kyung-Soo Yang

〈**Technical Papers**〉

- Numerical Study for the Effect of Inlet Humidity Condition at PEMFC Channel
 Dong-ryul Lee, Joongmyeon Bae and Dewan Hasan Ahmed
- Study on Film Boiling Heat Transfer of Spray Cooling in Air-Water Full Cone Spray System
 Yeung-Chan Kim and Seung-Min Yun
- 2006 Author Index of the Transactions of the KSME B KSME Editorial
- 2006 Author Index of the Journal of Mechanical Science and Technology KSME Editorial