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**Titles of Papers Published in the  
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〈Materials and Fracture · CAE and Applied Mechanics · Dynamics and Control · Production and Design Engineering Divisions〉

〈Original Papers〉

- Weldability and Optimum Welding Conditions on the 4 Lap Spot Welded Joint of High Strength Steel Sheets in Automobile ..... Il-Hyun Kwon, Hoi-Hyun Kim, Seung-Se Baek, Seong-Mo Yang and Hyo-Sun Yu
- Design of Lightweight CAD Files with Dimensional Verification Capability for Web-Based Collaboration ..... In-Ho Song and Sung-Chong Chung
- 3D Wear Analysis of Valve Assemblies by Using the Machine Vision ..... Chang-Woo Park and Sung-Chong Chung
- Limit Loads for Pipe Bends under Combined Pressure and in-Plane Bending Based on Finite Element Limit Analysis ..... Chang-Sik Oh and Yun-Jae Kim
- Structural Layout Optimization Strategy Considering Assemblage ..... Gang-Won Jang, Guk Jin Choi, Myungjin Kim and Yoon Young Kim
- Stress Classification Using Artificial Neural Networks and Fatigue Life Assessment ..... Sung-Wook Jung, Yoon-Suk Chang, Jae-Boong Choi and Young-Jin Kim
- Using the Finite Element Method, 3 Dimensional FE Analysis of Residual Stress by Cold Expansion Method in the Plate Having Adjacent Holes ..... Jae-Soon Jang, Won-Ho Yang and Myoung-Rae Cho
- Estimation Method of Local Elastic-Plastic Strain at Thinning Area of Straight Pipe Under Tension Loading ... Young Wha Ma, Joong Hyok An, Yun Jae Kim and Kee Bong Yoon
- A Study on Bursting Properties of Short-Fiber Reinforced Chloroprene Rubber ..... Lee Dong-Joo and Ryu Sang-Ryeoul
- Design and Performance Investigation of Bypass-Type MR Shock Dampers ..... Yun-Joo Nam, Dong-uk Kim, Myeong-Kwan Park and Yuk-Hyung Lee
- A Calibration and Uncertainty Analysis on the Load Monitoring System for a Low Speed Shaft and Rotor Blade of a Wind Turbine ..... Yoonsu Nam, Mooyeol Park and Neungsoo Yoo
- Plastic Limit Loads for Through-Wall Cracked Pipes Using 3-D Finite Element Limit Analyses ..... Nam-Su Huh and Young-Jin Kim
- Influence of Applied Electric Fields and Drive Frequencies on The Actuating Displacement of a Plate-type Piezoelectric Composite Actuator ..... Sung-Choong Woo and Nam Seo Goo
- Structural Optimization of a Joined-Wing Using Equivalent Static Loads ..... Byung-Soo Kang, Hyun-Ah Lee, Yong-Il Kim and Gyung-Jin Park

Topology Optimization for a Knuckle Using Design Space Adjustment and Refinement  
..... In Gwon Jang, Yong Gyun Yu and Byung Man Kwak  
Residual Stress of the Lower Control Arm Subjected to Cyclic Loading  
..... Woojong Kang and Gihoon Kim

〈**Technical Paper**〉

Development of a Linear Motor Dynamometer for Positioning Control Performance Test  
... Eung-Suk Lee, Chang-Yul Roh, Myung-Hwan Rho, Ju-Kyung Kim and Jong-Jin Park

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

〈**Original Papers**〉

A Study on the Local Heat Transfer Characteristics for Circular Tubes Using Heat Transfer Promoter ..... Hwa-Kil Kwon and Seong-Yeon Yoo  
Thermal and Chemical Quenching Phenomena in a Microscale Combustor (I)  
..... Kyu Tae Kim, Dae Hoon Lee and Sejin Kwon  
Thermal and Chemical Quenching Phenomena in a Microscale Combustor (II)  
..... Kyu Tae Kim, Dae Hoon Lee and Sejin Kwon  
Experimental Analysis of Bubble Dynamics Induced by Pulsed-Laser Heating of Absorbing Liquid  
..... Deoksuk Jang, Jonggan Hong, Dongsik Kim and Sung-Hoon Choa  
Direct Numerical Simulation of Gravity Currents  
..... Jae Ryong Lee, S. Balachandar and Man Yeong Ha  
A Study on Mixing Enhancement by Rotating and Oscillating Stirrers in the Micro Channel  
..... Sang-joon An, Yong-dae Kim and Joo-sung Maeng  
Simulation of Turbulent Flow Over Square Cylinder Using Lattice Boltzmann Method  
..... Kim Hyung Min  
Effect of Vane/Blade Relative Position on Heat/Mass Transfer Characteristics on the Tip and Shroud for Stationary Turbine Blade ..... Dong-Ho Rhee and Hyung Hee Cho  
An Experimental Study on the Combustion and Emission Characteristics of the Early Injection in a Gasoline Direct Injection Engine Using Controlled Auto Ignition Combustion Method  
..... Changhee Lee, Youngjong Choi and Kihyung Lee  
An Experimental Study on the Extend of the Operating Region and Emission Characteristics Through the Stratified Combustion Using Controlled Auto-Ignition Method  
..... Changhee Lee, Haeyoung Jeoung and Kihyung Lee  
Performance Analysis of a Reheat-cycle Gas Turbine for Combined Cycle Power Plants Using a Simulation Software for Chemical Process Plants  
..... Min Ki Park, Jeong Lak Sohn and Sung Tack Ro  
Laminar Flow over Two Spheres in a Tandem Arrangement ..... Dongjoo Kim  
Effect of Main Operating Conditions on Cathode Flooding Characteristics in a PEM Unit Fuel Cell  
..... Han-Sang Kim and Kyoungdoug Min