Vol.8 table of contents (2015)

Vol.8 No.1

Research papers

Proposal for technology architecture analysis — Application of an analysis method to the development of car navigation systems — T. Nomi and H. IKEDA	1 - 15
Clean and practical oxidation using hydrogen peroxide — Development of catalysis and application to fine chemicals —	
Y. Kon, S. Tanaka and K. Sato	16 - 28
Development of plastic certified reference materials (CRMs) to cope with restrictions on hazardous substances — CRMs for analysis of heavy metals and brominated flame retardants regulated by RoHS directive — A. HIOKI, M. OHATA, S. MATSUYAMA and S. KINUGASA	29 - 42
Development of forging process for magnesium alloy continuous cast bars — Forging process utilizing grain refinement —	
N. SAITO, H. IWASAKI, M. SAKAMOTO, K. KANBARA and T. SEKIGUCHI	43 - 55

Vol.8 No.2

Research papers

Research papers				
Development of material testing equipment in high pressure gaseous hydrogen and international collaborative work of a testing method for a hydrogen society				
 Toward contribution to international standardiz 	ation —	T. IIJIMA, T. ABE and H. ITOGA	61 - 69	
Research on social benefits resulting from NEDO p — Study of the top 70 NEDO Inside Products — M. YAMASHITA, Y. YURUGI, N. I	J	YOSHIDA, T. ISSHIKI, and M. TAKESHITA	70 - 89	
Application of laser Compton photon beam to nond	estructive tests			
— A spin-off technology from nuclear physics —	esti delive tests			
11 opin off teenmetely from meteen physics		H. TOYOKAWA	90 - 96	
Detection of influenza viruses with the waveguide — Development of a palmtop sized sensor —	mode sensor			
1	K. Awazu, M. Fu	JJIMAKI, S. C. B. GOPINATH and X. WANG	97 - 107	

Vol.8 No.3

Research papers

Development of thin-film multi-junction thermal converters

— Establishing metrological traceability system for AC voltage standard

— -- H. FUJIKI, Y. AMAGAI and H. SASAKI 113 - 132

Green photonics for laser-based manufacturing

— Photonics contributes to a sustainable society in the "photon century" —

— -- H. NIINO 133 - 146

An IT system development framework utilizable without expert knowledge: MZ Platform

— Toward end user development in manufacturing industry —

— -- H. SAWADA, H. TOKUNAGA, Y. FURUKAWA 147 - 157

Vol.8 No.4

Research papers

Development of an in-solution observation method using atmospheric scanning electron microscopy (ASEM)

— Interdisciplinary research between semiconductor fabrication technology and biological electron microscopy —

— -- T. OGURA, H. NISHIYAMA, M. SUGA and C. SATO 162 - 173

Effects of cooperation between a small and medium enterprise and AIST

— Impacts of the idea of "Monozukuri" on technicians —

— --- T. KOMATSU and S. NAKANO 174 - 186

Advanced ignition technology for the achievement of high thermal efficiency of internal combustion engine

— A demonstration of laser ignition in natural gas engines —

— --- E. TAKAHASHI, H. KOJIMA and H. FURUTANI 187 - 195

Development of a rapid analytical system for glycans using a multistage tandem mass spectral database

— Toward an era where everyone can analyze glycan structure without specialist knowledge —

— --- A. KAMEYAMA, N. KIKUCHI, S. NAKAYA and S. FUNATSU 196 - 210

Health care application of gas sensors

— Medical devices of breath analysis —

— --- W. Shin, T. Itoh and N. Izu 211 - 219