

4th Asian Workshop on Nano/Micro Forming Technology

Oct. 26-29, Nikko Hotel , Toyohashi city, JAPAN

Oct. 26 17:30-19:00 Reception

Technical sessions

No	Time	Title	Authors
Session 1 Oct. 27 9:00-10:40 (Chairpersons: Prof. Y. Saotome, Prof. K.F. Zhang)			
A01	9:00-9:20	The microstructural evolution of nano-grain ni-al powder during mechanical alloying and sintering forging	<u>K.F. Zhang</u> , G.H. Xu (HIT, China)
A02	9:20-9:40	Mechanical property of ceramic micro samples manufactured by powder injection molding	<u>Z. Lu</u> , K.F. Zhang (HIT, China)
A03	9:40-10:00	Preparation and superplasticity of Al ₂ O ₃ /Ni-Co nanocomposites	<u>G.f. Wang</u> (HIT, China)
A04	10:00-10:20	Digital image correction for shear banding in bulk metallic glasses	<u>S.H. Joo</u> (Postech, Korea), H. Kato (Tohoku Univ, Japan), S.H. Lee, H. S. Kim(Postech, Korea)
A05	10:20-10:40	Nanoimprint of 18 nm-pitch ultrafine pattern on metallic glass with mold fabricated by focused ion beam and reactive ion etching	<u>Y. Fukuda</u> , Y. Saotome, N. Nishiyama, K. Takenaka, N. Saidoh (Tohoku Univ), E. Makabe (BMG Co.) , A. Inoue (Tohoku Univ, Japan)
Session 2 Oct. 27 10:50-12:10 (Chairpersons: Prof. H.S. Kim, Dr. T. Makino)			
A06	10:50-11:10	Numerical simulation and experimental study on micro-indentations	<u>G.C. Wang</u> , W. Zheng (ShanDong Univ, China), Z.Y. Jiang, D.B. Wei (UOW, Australia)
A07	11:10-11:30	Measuring local stress-strain behavior using nanoindentation	<u>H.J. Jeong</u> , D.H. Lim, B.-C. Suh (Postech), J. H. Hahn, J. H. Je, N. J. Kim (KRISS), and H. S. Kim (Postech, Korea)
A08	11:30-11:50	Measurement of mechanical property of material formed in micro/meso-scale	T. Makino, <u>H.Y. Fung</u> , Y. Fukui (NIT, Japan)
A09	11:50-12:10	Size effects in sheet metal forming with miniaturization	<u>D.B. Shan</u> , C.J. Wang, J. Xu, B. Guo (HIT, China)
Session 3 Oct. 27 13:10-14:30 (Chairpersons: Prof. M. Yang, Prof. G. Wang)			
A10	13:10-13:30	Effect of microstructure of metal foils on frictional behavior in micro deep drawing	<u>T. Shimizu</u> (TIRI), M. Ogawa, K. Manabe (TMU, Japan)
A11	13:30-13:50	Plasma etching with metallic masking for micro-patterning onto DLC coated mold-dies	<u>T. Aizawa</u> (SIT, Japan), <u>N. T. Redatioao</u> , E. E. Yunata (Brawijaya Univ, Indonesia)
A12	13:50-14:10	Fine imprinting onto plastics by micro-patterned DLC-coated mold-die	<u>T. Aizawa</u> (SIT), K. Itoh (MFL Co. llc, Japan)
A13	14:10-14:30	Exotic mechanical properties of metal-doped nano-columnar DLC coating	<u>S. Yukawa</u> , T. Aizawa (SIT, Japan)
Session 4 Oct. 27 14:40-16:00 (Chairpersons: Prof. M. Yoshino, Dr. G. H. Kim)			
A14	14:40-15:00	Micro hole piercing for ultra fine grain stainless steel	<u>T. Komatsu</u> , H. Kobayashi (Komatsu Seiki Kosakusho Co.), S. Torizuka(NIMS), S. Nagayama (Tokushu Kinzoku Excel co., Japan)
A15	16:10-16:30	Burr formation characteristics of low temperature micro cutting process with SM45C	<u>G.-H. Kim</u> , J.-I. Son, J.-W. Lee, G.-S. Yoon, J.-D. Kim (KIIT), T.-I. Seo (Univ. of Incheon, Korea)
A16	15:20-15:40	Fabrication of multilayer nano dot array structures by combination of coating, nano plastic forming and annealing process	<u>Z.X. Li</u> , A. Yamanaka, M. Yoshino (TIT, Japan)
A17	15:40-16:00	Design and fabrication of roll mold for mounting miniature chips to bendable substrate	<u>J.-W. Lee</u> , G.-H. Kim, G.-S. Yoon, C.-W. Lee, S.-H. Yoo (KIIT, Korea)
Session 5 Oct. 27 16:10-17:30 (Chairpersons: Prof. D.B. Shan, Dr. T.Furushima)			
A18	16:10~16:30	Effect of low frequency vibration on metallic surface deformation	<u>Y. Bai</u> , K. Nishikawa (TMU), M.K.Roy (IIIT-MD, India) , M. Yang (TMU, Japan)
A19	16:30~16:50	Application of heat assistance to microforming	<u>H. Tanabe</u> , M. Yang (TMU, Japan)
A20	16:50~17:10	Evaluation of deformation characteristic in ultrasonic vibration assisted foil bending	<u>S. Kosuge</u> , M. Yang (TMU, Japan)
A21	17:10~17:30	Micro laser dieless drawing process of copper alloy tubes	<u>T.Furushima</u> , Y. Noda and K. Manabe (TMU, Japan)

Oct. 27 18:30- Banquet