

International Organized Sessions

High Temperature Processes

2013/09/18 Lecture Room 1

Innovations in measurement of high temperature property and application to materials production process

- 09:20 ~ 09:25
Opening address M.Susa(Tokyo Inst. of Tech.)
- 09:25 ~ 10:35 Chairperson:N.Saito(Kyushu Univ.),S.Sukenaga(Tohoku Univ.)
- 09:25 ~ 09:55
Int. 1 (Invited Lecture)Structure and dynamics of oxide and fluoride melts:
an in-situ high-temperature nuclear magnetic resonance point of view ... 684
CEMHTI-CNRS OP.Florian·V.S.Kanian·A.Rakhmatullin·A.L.Rollet·J.P.Coutures·C.Bessada
- 09:55 ~ 10:15
Int. 2 Application of multinuclear solid-state NMR to structural analysis of slag ... 686
NSSMC OK.Kanehashi
- 10:15 ~ 10:35
Int. 3 Reduction of iron oxides in mould flux with additions of strong reducing agents ... 688
Tokyo Inst. of Tech. OM.Wang·R.Endo·Y.Kobayashi·M.Susa
- 10:45 ~ 11:55 Chairperson:Y.Kobayashi(Tokyo Inst. of Tech.),R.Endo(Tokyo Inst. of Tech.)
- 10:45 ~ 11:15
Int. 4 (Invited Lecture)Comprehensive understanding of surface and interface of liquid iron and its alloys ... 689
Korea Univ. OJ.Lee
- 11:15 ~ 11:35
Int. 5 Composition dependence of surface tension of reciprocal oxide-fluoride melts ... 690
Osaka Univ. OM.Suzuki·T.Tanaka·S.Tanaka, NSSMC M.Hanao·H.Yamamura
- 11:35 ~ 11:55
Int. 6 Viscosity of CaO-SiO₂-Al₂O₃-K₂O system ... 691
Tohoku Univ. OS.Sukenaga, Kyushu Univ. T.Higo, NSSMC K.Kanehashi, Tohoku Univ. H.Shibata, Kyushu Univ. N.Saito·K.Nakashima
- 13:10 ~ 14:50 Chairperson:M.Nakamoto(Osaka Univ.),M.Suzuki(Osaka Univ.)
- 13:10 ~ 13:40
Int. 7 (Invited Lecture)Characterisation of phase equilibria and dynamic steady state freeze linings in complex ... 693
metallurgical slags
The Univ. of Queensland OE.Jak·A.F.Mehrdadi·P.C.Hayes
- 13:40 ~ 14:00
Int. 8 Temperature dependence of emissivity and electrical resistivity of carbon fiber ... 697
AIST OK.Higuchi·H.Watanabe·N.Yamada·N.Iwashita
- 14:00 ~ 14:20
Int. 9 Noncontact measurements of normal spectral emissivity,heat capacity and thermal conductivity of ... 698
liquid cobalt
Tohoku Univ. OJ.Takano·H.Higashi·M.Uchikoshi·M.Isshiki·M.Ohtsuka·H.Fukuyama
- 14:20 ~ 14:50
Int. 10 Reduction of radiative heat transfer by valence control of iron ions in mould flux ... 700
Tokyo Inst. of Tech. OR.Maehashi·R.Endo·Y.Kobayashi·M.Susa
- 15:00 ~ 16:30 Chairperson:H.Fukuyama(Tohoku Univ.),T.Yoshikawa(The Univ. of Tokyo)
- 15:00 ~ 15:30
Int. 11 (Invited Lecture)Thermophysical properties of liquid Cr-Fe-Ni alloys ... 701
DLR OJ.Brillo·H.Kobatake
- 15:30 ~ 15:50
Int. 12 Marangoni effect on solution growth of SiC by temperature difference method using Fe-Si solvent ... 704
The Univ. of Tokyo OS.Kawanishi·T.Yoshikawa·K.Morita

15:50 ~ 16:10

Int. 13 Electric resistivity and conduction mechanism of Sb_2Te_3 -GeTe system in liquid state ... 705

Tokyo Inst. of Tech. O.R.Endo·S.Maeda·S.Kumamoto·Y.Kobayashi·M.Susa, AIST M.Kuwahara

16:10 ~ 16:30

Int. 14 Effect of agitation on crystallization behavior of super-cooled melts characterized by electrical capacitance measurement ... 706

Kyushu Univ. O.N.Saito, Tohoku Univ. S.Sukenaga, Fukuoka Inst. of Tech. Y.Ohta, Kyushu Univ. K. Nakashima

16:30 ~ Closing remark H.Fukuyama(Tohoku Univ.)