

**Room G #107****8:30-10:30****[Fr-G1]** Advanced and Highly Efficient Inorganic Photovoltaics Materials and Structures I**Session Chairs:**Yong-Duck Chung (ETRI, Korea),
Chan-Wook Jeon (Yeungnam Univ., Korea)**Fr-G1-1 [Invited]****8:30-8:55****Influence of Na Accumulation at the Localized Grain-Boundary in CIGS Absorbers**JinWoo Lee¹, Ryan Kaczynski¹, Jane Van Alsburg¹, Yejiao Wang¹, Bo Sang¹, Jeffrey Bitt¹, and Daniel Goran²¹Global Solar Energy Inc., USA, ²Bruker Nano GmbH, Germany**Fr-G1-2 [Invited]****8:55-9:20****Effects of Alkali Metals in Cu(In,Ga)Se₂ Thin Films and Solar Cells**Shogo Ishizuka
AIST, Japan**Fr-G1-3 [Invited]****9:20-9:45****Study of Defects in Cu(In,Ga)(S,Se)₂-based Solar Cells**Takeaki Sakurai and Katsuhiko Akimoto
Univ. of Tsukuba, Japan**Fr-G1-4 [Invited]****9:45-10:10****Micro- and Nanometer Scale Cu(In,Ga)Se₂ for Photovoltaic Devices**Sascha Sadewasser
INL, Portugal**Fr-G1-5 [Invited]****10:10-10:35****Above 19% cell efficiency in Cu(In,Ga)Se₂ solar cell by employing an alkaline post deposition treatment (PDT) with Na₂S as an alkaline source**Seung Tae Kim¹, Byung Tae Ahn¹, Ki Hwan Kim², and Jae Ho Yun²¹KAIST, Korea, ²KIER, Korea**Room H #108****8:30-10:30****[Fr-H1]** Thin-Film Transistors**Session Chairs:**Chang-Yong Nam (BNL, USA),
Jae Kyeong Jeong (Hanyang Univ., Korea)**Fr-H1-1 [Invited]****8:30-9:00****Improvement in Performance of Metal Oxide Thin-Film Transistors by Modifying a Channel Composition and Structure**Jae Kyeong Jeong
Hanyang Univ., Korea**Fr-H1-2****9:00-9:15****Characterization of the Self-Heating Effect in IGZO Thin Film Transistors using Pulse Measurements**Manh-Cuong Nguyen¹, Sang-woo Kim¹, Jaekyeong Jeong², Rino Choi¹, Nuri On², Hyungmin Ji¹, Hoang-Thuy-An Nguyen¹, Sujin Choi¹, Jonggyu Cheon¹, Kyoung-Mun Yu¹, Seong-Yeong Cho¹, and Jin-Hyun Kim¹¹Inha Univ., Korea, ²Hanyang Univ., Korea**Fr-H1-3****9:15-9:30****A New Solution-Processable BODIPY-Acetylene Semiconductor for N-Channel Organic Field-Effect Transistors**Dongil Ho and Choongik Kim
Sogang Univ., Korea**Fr-H1-4****9:30-9:45****Influence of High Doping Concentration on Contact Resistivity Measurement with Transmission Line Model and Circular Transmission Line Model**Hyunsu Shin, Seran Park, Eunjung Ko, and Dae-Hong Ko
Yonsei Univ., Korea**Fr-H1-5****9:45-10:00****Effect of Oxygen Content on the Stability of Nitrogen-Doped P-Type ZnO Films Fabricated by Reactive Magnetron Sputtering**Faizan Husian, Jian-yuan Chen, and Jyh-Shiarn Cherng
Ming Chi Univ. of Tech., Taiwan