

## Oral presentations

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- O01 Grain boundary dynamics and dislocation interaction in materials**  
IKUHARA Yuichi  
The University of Tokyo
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- O02 Hierarchical ductile damage simulation for structural performance-based material design**  
OHATA Mitsuru  
Osaka University
- 
- O03 Ductile fracture in dual phase steel**  
AZUMA Masafumi  
Nippon Steel and Sumitomo Metal Co.
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- O04 Improvement of mechanical properties of multi-phase structural steels by controlling microscopic deformation and fracture behavior**  
ISHIKAWA Nobuyuki \*, Kyono Yasuda, Haruo Nakamichi, Shigeru Endo, Seishi Tsuyama, Tatsuya Morikawa, Kenji Higashida  
JFE Steel Co.
- 
- O05 Influence of inclusion on fatigue of bearing steel**  
KOCHI Takuya  
Kobe Steel, Ltd.
- 
- O06 Quenching and partitioning steel**  
SPEER John \*, David Matlock, Emmanuel De Moor, Radhakanta Rana  
Colorad School of Mines
- 
- O07 Ductile damage: micro-mechanisms and macro-influences**  
TASAN Cem \*, D. Yan, M. Koyama, M-M. Wang, M. Diehl, J.P.M. Hoefnagels, M.G.D. Geers, F. Roters, D. Raabe  
Max Planck Institute for Iron Research
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- O08 Assessment of ductile fracture via 3D/4D image-based approaches**  
TODA Hiroyuki \*, Akihide Hosokawa, Dowon Seo, Masakazu Kobayashi  
Kyushu University
- 
- O09 Micromechanics of hydrogen-induced fracture: from experiments and modelling to prognosis**  
SOFRONIS Petros \*, Akihide Nagao, Mohsen Dadfarnia, Shuai Wang, May L. Martin, Brian P. Somerday, Reiner Kirchheim, Ian M. Robertson  
University of Illinois at Urbana-Champaign
- 
- O10 High temperature deformation dynamics in crystalline materials**  
MITSUHARA Masatoshi \*, Hideharu Nakashima  
Kyushu University
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- O11 In situ straining experiments at low and high temperatures in Fe and Fe alloys**  
CAILLARD Daniel  
CEMES-CNRS
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- O12 Dislocation motion and related nano-mechanical behavior of bcc iron**  
OHMURA Takahito \*, Ling Zhang, Takuya Suzuki, Nobuaki Sekido  
National Institute for Materials Science
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**O13    Micromechanical characterization of hierarchical micro/nano structures in steels**

MINE Yoji \*, Kazuki Takashima  
Kumamoto University

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**O14    Toward bridging dislocation behaviors and materials fracture**

HIGASHIDA Kenji \*, Masaki Tanaka  
Kyushu University

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**O15    Atomic simulation of the role of the interface on mechanical properties of pearlite steel**

SHIMOKAWA Tomotsugu \*, Masashi Okabe  
Kanazawa University

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**O16    First-principles calculation of screw dislocation core in bcc iron**

ITAKURA Mitsuhiro \*, Hideo Kaburaki, Masatake Yamaguchi  
Japan Atomic Energy Agency

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