

The 19th Takayanagi Kenjiro Memorial Symposium

Research Institute of Electronics, Shizuoka University

Toward Advanced Imaging Science Creation

– From quantum physics to photonic and medical applications –

DATE November 21 and 22, 2017, **Registration Fee: Free**

Location S-PORT, Hamamatsu Campus, Shizuoka University
3-5-1 Johoku, Naka-ku, Hamamatsu 432-8011, Japan.

Tuesday, November 21

10 : 00

Opening (Chair: Yukinori Ono)

Kiyoshi Ishii (President of Shizuoka University)

Hidenori Mimura (Director of Research Institute of Electronics, Shizuoka University)

10 : 15

Plenary Talks 1 (Chair: Futoshi Iwata)

Invited Talk **1. Towards Ubiquitous Infrared Imaging**
Achyut Dutta (Banpil Photonics, USA)

Invited Talk **2. Laser feedback interferometer and its application for profilometry**
Yidong Tan (Tsinghua University, China)

Invited Talk **3. Valley and Spin Polarisation in a Silicon Transistor**
Kei Takashina (Bath University, UK)

12 : 15

Lunch

13 : 30

Poster Presentations by Young Researchers

To be determined

15 : 30

Special Talks on Network-Type Joint Research (Chair: Tetsuo Sasaki)

- Invited Talk **1. *4H-SiC MOSFETs and Logic Inverters for Harsh Environment Electronics***
Shin-Ichiro Kuroki (Hiroshima University, Japan)
- Invited Talk **2. *Surgical Robot Systems using Pneumatic Actuators***
Kotaro Tadano (Tokyo Institute of Technology, Japan)
- Invited Talk **3. *Investigation of the Influenza Virus Detection System Using Sialic Acid Receptor***
Yukichi Horiguchi (Tokyo Medical and Dental University, Japan)

17 : 20

Reception (Chair: Masakazu Kimura, Trustee of Shizuoka University)

North Cafeteria, Hamamatsu Campus, Shizuoka University

Wednesday, November 22

9 : 30

Plenary Talks 2 (Chair: Hiroshi Inokawa)

- Invited Talk **1. *All-Inorganic CsPbBr₃ Perovskite Quantum-Dot Nanocomposites (MP-PQDs) with High Stability and Wide Color Gamut Used for Backlight Display***
Ru-Shi Liu (National Taiwan University, Taiwan)
- Invited Talk **2. *Intrinsic localised Modes in Nano Ferroelectrics***
Arindam Biswas (NSHM Knowledge Campus, India)

10 : 50

Coffee Break

11 : 00

Talks by Young Researcher of RIE (Chair: Daniel Moraru)

- 1. *Frequency-domain analysis in fluorescence lifetime, tissue, and time-of-flight ranging with ultra-high-speed multi-tap charge modulation pixels***
Keiichiro Kagawa (Research Institute of Electronics, Shizuoka University, Japan)
- 2. *Transformation from Plasmon induced transparency to induced absorption through the control of coupling strength in metal-Insulator-metal structure***
Youichiro Neo (Research Institute of Electronics, Shizuoka University, Japan)

11 : 50

3. *Development of a radiation tolerant compact image sensor using CdTe based photodiode and field emitter array*

Tomoaki Masuzawa (Research Institute of Electronics, Shizuoka University, Japan)

12 : 15

Lunch

13 : 30

Lectures by Takayanagi Prize Winners 1 (Chair: Hideki Asai)

Invited Talk **1. *Almost Instantaneous Fixed-to-Variable Length Codes***
Hirosuke Yamamoto (The University of Tokyo, Japan)

Invited Talk **2. *Ultra-Low-Noise Wide-Dynamic-Range CMOS Image Sensors for Scientific Applications***
Min-Woong Seo (Shizuoka University, Japan)

14 : 40

Coffee Break

14 : 50

Lectures by Takayanagi Prize Winners 2 (Chair: Wataru Inami)

Invited Talk **3. *Fabrication techniques for metallic nanostructures and its applications to surface plasmon enhanced optical devices***
Atsushi Ono (Shizuoka University, Japan)

Invited Talk **4. *Development of a Healthcare Monitoring System Combined with Ambulatory and Non-conscious Physiological Measurements and its Application to Medical Care and Rehabilitation***
Kosuke Motoi (Shizuoka Institute of Science and Technology, Japan)

Invited Talk **5. *A Study toward 3D Micro-Nanomanipulation inside Electron Microscope***
Masahiro Nakajima (Nakajima Steel Pipe Co. Ltd. Japan)

16 : 20

Closing

Yukinori Ono (Symposium Chair)

Organizer: Research Institute of Electronics, Shizuoka University

Information: <http://www.rie.shizuoka.ac.jp/> Contact: TEL 053-478-1301 FAX 053-478-1651

E-MAIL rie-soumu@adb.shizuoka.ac.jp