

Unit Name

Quantum Wave Microscopy Unit
Professor Tsumoru Shintake

Collaborations

Keiichi Namba, Fumiaki Makino, Graduate School of Frontier Biosciences, JEOL YOKOGUSHI Research Alliance Laboratories, Osaka University, Japan, Protein Crystal Imaging with Precession TEM

Yuji Imamiya, Mitsubishi Heavy Industries Machinery Systems, Ltd, Japan, OIST EUV Lithography Project

Yutaro Okada, Kyocera Corporation, Japan, OIST EUV Lithography Project

Yusuke Ohashi, Kitano Seiki Co., Ltd., Japan, OIST EUV Lithography Project

Takemasa Sakaguchi, Graduate School of Biomedical and Health Sciences (Medicine), Hiroshima University, Japan, A biochemical and electron microscopy study of the ethanol susceptibility of enveloped pathogenic viruses

(1) Yabin Qi (2) Luis Katsuya Ono, (1) Global Institute of Future Technology, Shanghai Jiao Tong University
(2) OIST, (1) PRC (2) Japan, Protein Crystal Imaging with Precession TEM

Research Personnel

Masao Yamashita, Staff Scientist

Takeshi Mise, Staff Scientist

Jun Fujita, Research Unit Technician

Shuji Misumi, Research Unit Technician

Ayumi Maegawa, Research Unit Technician

Seita Taba, Research Unit Technician

Noriko Ishizu, Temp, n/a

Ishika Kain, Research Intern (7/10/2024-3/28/2025)

Scholarly Contributions and Creative Productions (by Faculty)

Presentation at Conference

1. Shintake, T.
加速器、電子線を繋ぐ私の40年、そして今 革新的なEUVリソグラフィー先端半導体製造技術へ / My 40 Years Experience in Accelerator, Connecting the Electron Beam, and Heading towards Innovative EUV Lithography Technology for Advanced Semiconductors
Optics & Photonics Japan (OPJ), Tokushima, 9-11 December 2025
2. Shintake, T.
単純2枚ミラーEUV反射光学系の各種収差補正問題とEUV露光装置の国産化計画 / Various Aberration Correction Issues in Simple Two-Mirror EUV Reflective Optical Systems and the Domestic Production for EUV Lithography Systems
The 50th Optical Symposium, Tokyo, 18-20 June 2025

Seminars

1. Shintake, T.
エネルギー効率を飛躍的に高める革新的な EUV リソグラフィー先端半導体製造技術について
Highly Energy-Efficient Innovative EUV Lithography Technology for Advanced Semiconductors
PTES, SPSJ, 13 November 2025
2. Shintake, T.
OIST EUV Lithography Makes Mobile Phone Chip Fabrication Easier and Faster
The Provost Lecture Series, OIST, 12 September 2025
3. Shintake, T.
先端半導体向け EUV 露光装置の国産化に向けて (zoom)
Towards Domestic Production of EUV Lithography for Advanced Semiconductors
JOEM, 30 July 2025
4. Shintake, T.
革新的 EUV リソグラフィー技術
Innovative EUV Lithography Technology, JACI, 2 June 2025

Honors, Awards & Fellowships

2025 Semiconductor of the Year 2025
Sangyo Times, Inc.