

- [05] 2019/10/25@Sendai in Japan  
The 15th Symposium of Japanese Research Community on X-ray Imaging Optics  
**Development and application of hard X-ray spectro-ptychography**  
○M. Hirose, T. Higashino, N. Ishiguro, Y. Takahashi
- [04] 2019/10/16@Rochester in USA  
SPIE OPTIFAB (2019)  
**Measurement of a concave spherical mirror with 50 mm radius of curvature by three dimensional nanoprofiler using normal vector tracing**  
○Y. Toyoshi, K. Hashimoto, J. Kang, K. Endo
- [03] 2019/09/24@Barcelona in Spain  
World Congress on Laser, Optics and Photonics, (2019)  
**Freeform measurements with sub-nanometer precision by non-contact three-dimensional nanoprofiler based on normal vector tracing method**  
○J. Kang and K. Endo
- [02] 2019/07/18@Changchun in China  
Light Conference (2019)  
**Non-contact three-dimensional profiler with sub-nanometer precision using normal vector method**  
○J. Kang and K. Endo
- [01] 2019/06/24@Munich in Germany  
SPIE Optical Metrology (2019)  
**Absolute distance measurement of optical path length of non-contact three-dimensional nanoprofiler based on normal vector tracing method by tandem white-light interferometer**  
○J. Kang, T. Kitayama, R. Kizaki, Y. Toyoshi, K. Hashimoto, A. Winarno, K. Takamasu, K. Yamamura, K. Endo