

[H28-02]

J-PARC 物質・生命科学実験施設(MLF)を用いた文化財試料等を対象とする連携研究

Collaborative Research on Cultural Heritage Samples by Using MLF at J-PARC

学術論文（査読あり）

- [1] Yoshinori Shiota, Hiroyuki Hasemi, Yoshiaki Kiyanagi, “Crystallographic analysis of a Japanese sword by using Bragg edge transmission spectroscopy”, Physics Procedia, **88** pp.128 – 133 (2017)

修士論文

- [1] 堀 元紀, 「パルス中性子透過法を用いた日本刀の製造過程試料の結晶組織構造の変化の研究」, 名古屋大学大学院工学研究科 修士論文 (2018)

国際会議

- [1] G. Hori, M. Tanaka, A. Yamazaki, K. Watanabe, Y. Kiyanagi and A. Uritani, “Nondestructive evaluation of the microstructure of iron parts of manufacturing process of a traditional Japanese sword by pulsed neutron transmission spectroscopy”, Neutron Imaging and Neutron Methods in Archaeology and Cultural Heritage 2017(NINMACH 2017) (Budapest, Hungary, October , 2017)

- [2] Kenichi Oikawa, Yoshiaki Kiyanagi, Kenichi Watanabe, Akira Uritani, Genki Hori, Yuho Hirata, Takenao Shinohara, Tetsuya Kai, “Crystallographic characterization on different types of structure (Tsukurikomi) of Japanese swords using pulsed neutron imaging and diffraction methods”, Neutron Imaging and Neutron Methods in Archaeology and Cultural Heritage 2017(NINMACH 2017) (Budapest, Hungary, October , 2017)

- [3] Yoshiaki Kiyanagi, “A pulsed neutron transmission method for metal cultural heritage research - Japanese swords -”, Neutron Imaging and Neutron Methods in Archaeology and Cultural Heritage 2017(NINMACH 2017) (Budapest, Hungary, October , 2017)

国内会議

- [1] 堀元紀, 田中眞奈子, 渡辺賢一, 山崎淳, 鬼柳善明, 瓜谷章, 「パルス中性子透過法を用いた日本刀の製造過程における結晶組織構造の二次元空間分布変化の研究」, 第 12 回 先進原子力科学技術に関する連携重点研究討論会 (群馬, 量子科学技術研究開発機構 高崎量子応用研究所, 2017)