

## 物理学科

氏名	所属	職名	取得学位	専門分野	主な論文・著作・業績
佐藤 英一	物理学科	教授	博士（工学）	放射線科学	<p>Kami, S., Sato, E., Kogita, H., Numahata, W., Hamaya, T., Nihei, S., Arakawa, Y., Oda, Y., Kodama, H., Hagiwara, O., Matsukiyo, H., Osawa, A., Enomoto, T., Watanabe, M., Kusachi, S., Sato, S., Ogawa, A.: Zero-dark-counting X-ray photon detection using a YAP(Ce)-MPPC detector and its application to computed tomography using gadolinium contrast media/ Rad. Phys. Chem. 100: 1-7(2014).</p> <p>Arakawa, Y., Sato, E., Kogita, H., Hamaya, T., Nihei, S., Numahata, W., Kami, S., Oda, Y., Hagiwara, O., Matsukiyo, H., Osawa, A., Enomoto, T., Watanabe, M., Kusachi, S., Sato, S., Ogawa, A.: Investigation of X-ray photon-counting using ceramic-substrate silicon diode and its application to gadolinium imaging/ Jpn. J. Appl. Phys. 53: 072201-1-5 (2014).</p> <p>Sato, E., Oda, Y., Kodama, H., Hagiwara, O., Matsukiyo, H., Osawa, A., Enomoto, T., Watanabe, M., Kusachi, S., Sato, S., Ogawa, A.: Investigation of dark-count-less Lu<sub>2</sub>(SiO<sub>4</sub>)<sub>3</sub>-multipixel-photon detector and its application to photon counting X-ray computed tomography using iodine media/ Jpn. J. Appl. Phys. 52: 092401-1-6 (2013)</p> <p>Sato, E., Oda, Y., Abudurexiti, A., Hagiwara, O., Matsukiyo, H., Osawa, A., Enomoto, T., Watanabe, M., Kusachi, S., Sato, S., Ogawa, A., Onagawa, J.: Demonstration of enhanced iodine K-edge imaging using an energy-dispersive X-ray computed tomography system with a 25 mm/s-scan linear cadmium telluride detector and a single comparator/ Appl. Rad. Isot., 70: 831-836 (2012)</p> <p>Sato, E., Sugimura, S., Endo, H., Oda, Y., Abudurexiti, A., Hagiwara, O., Osawa, A., Matsukiyo, H., Enomoto, T., Watanabe, M., Kusachi, S., Sato, S., Ogawa, A., Onagawa, J.: 15 Mcps photon-counting X-ray computed tomography system using a ZnO-MPPC detector and its application to gadolinium imaging/ Appl. Rad. Isot., 70: 336-340 (2012)</p>
小松 真	物理学科	講師	博士（工学）	人間医工学・電気電子工学・流体力学	<p>M. Komatsu, K. Takayama, K. Ohtani, T. Saito, " Effect of debris fragments on direct initiation of spherical detonation waves in stoichiometric oxygen/hydrogen mixtures ", Proceedings of the Combustion Institute, Volume 31 Issue 2, 2437-2443, 2006.</p> <p>Makoto Komatsu, Eiichi Sato: Dissection of polyacrylamide gel with water jet driven by spark discharge, Proc. 49th JSMBE, PS1-3-3, 2010.</p> <p>文部科学省科学研究費補助金「課題名：コアンドジェット制御を利用した多目的外科切開器具の提案と開発（課題番号20700383，若手研究B）」2008-2010年 特許2003-111766「名称：噴流生成装置」</p> <p>小松真，佐藤英一：Penetration into gel and dissection along soft material of water jet generated by interaction between suctioned water and shock wave , 50th JSMBE , 東京電機大学 神田キャンパス 2011年4月29日～5月1日</p>

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氏名	所属	職名	取得学位	専門分野	主な論文・著作・業績
小田 泰行	物理学科	助教	博士（工学）	医用生体工学、放射線科学、メディア情報学	<p>Oda, Y., Sato, E., Abudurexiti, A., Hagiwara, O., Osawa, A., Matsukiyo, H., Enomoto, T., Watanabe, M., Nagao, J., Sugimura, S., Endo, H., Sato, S. and Ogawa, A.: High-count-rate X-ray computed tomography system utilizing an oscillation-type linear-YAP(Ce) detector / Proc ICHSIP-29 ISBN978-4-905149-01-9: E05-1-5 (2010)</p> <p>Oda, Y., Sato, E., Abudurexiti, A., Hagiwara, O., Osawa, A., Matsukiyo, H., Enomoto, T., Watanabe, M., Kusachi, S., Sugimura, S., Endo, H., Sato, S. and Ogawa, A., Onagawa, J.: Mcps-range photon-counting X-ray computed tomography system utilizing an oscillating linear-YAP(Ce) photon detector / Nucl. Instr. Meth. A, 643: 69-74 (2011)</p> <p>Oda, Y., Sato, E., Sagae, M., Hagiwara, O., Matsukiyo, H., Osawa, A., Enomoto, T., Watanabe, M., Kusachi, S., Sato, S. and Ogawa, A.: X-ray detection using a ceramic-substrate silicon X-ray diode and its application to computed tomography using gadolinium media / Med. Imag. Inform. Sci. 29: 70-75 (2013)</p> <p>Yanbe, Y., Sato, E., Chiba, H., Maeda, T., Matsushita, R., Oda, Y., Hagiwara, O., Matsukiyo, H., Osawa, A., Enomoto, T., Watanabe, M., Kusachi, S., Sato, S. and Ogawa, A.: High-sensitivity high-speed X-ray fluorescence scanning cadmium telluride detector for deep-portion cancer diagnosis utilizing tungsten-K<sub>α</sub>-excited gadolinium mapping / Jpn. J. Appl. Phys. 52: 092201-1-4 (2013)</p> <p>Kodama, H., Watanabe, M., Sato, E., Oda, Y., Hagiwara, O., Matsukiyo, H., Osawa, A., Enomoto, T., Kusachi, S., Sato, S. and Ogawa, A.: X-ray photon counting using 100 MHz ready-made silicon P-intrinsic-N X-ray diode and its application to energy-dispersive computed tomography / Jpn. J. Appl. Phys. 52: 072202-1-6 (2013)</p>
寒河江 康朗	物理学科	助教	修士	放射線科学、X線機器工学	<p>Sagae, M., Sato, E., Tanaka, E., Hayasi, Y., Germer, R., Mori, H., Kawai, T., Ichimaru, T., Sato, S., Takayama, K., Ido, H.: Quasi-monochromatic x-ray generator utilizing graphite cathode diode with transmission-type molybdenum target/ Jpn. J. Appl. Phys. 44: 446-449 (2005)</p> <p>Sagae, M., Sato, E., Tanaka, E., Mori, H., Kawai, T., Inoue, T., Ogawa, A., Sato, S., Takayama, K., Onagawa, J., Ido, H.: Intense clean characteristic flash x-ray irradiation from an evaporating molybdenum diode/ Opt. Eng. 46: 026502-1-7 (2007)</p> <p>Sato, E., Sagae, M., Enomoto, T., Ogawa, A., Sato, S.: Energy-discriminating K-edge x-ray computed tomography system/ Ann. Rep. Iwate Med. Univ. Center Lib. Arts Sci. 43: 9-15 (2008)</p> <p>Sato, E., Sagae, M., Osawa, A., Matsukiyo, H., Enomoto, T., Watanabe, M., Imaiya, M., Kemuyama, N., Takahashi, K., Sato, S., Ogawa, A., Onagawa, J.: Single-energy embossed radiography utilizing a flat panel detector/ Ann. Rep. Iwate Med. Univ. Center Lib. Arts Sci. 44: 1-7 (2009)</p> <p>寒河江康朗, 佐藤英一, 小田泰行, 佐藤公悦, 江原茂: 家庭用ガイガーカウンターの試作/ 第103回日本医学物理学会学術大会, 4月12日, 横浜, 2012.</p>