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	①Sato,E., Yamaguchi,S., Oda,Y., Sato,Y., Sagae,M., Hagiwara,O.,Matsukiyo, H., Watanabe,M., Kusachi, S., Ehara, S.: Zero-dark-counting X-ray-spectrum measurement using a cerium-doped yttrium aluminum perovskite crystal and a multipixel photon counter with changes in the pixel number/ Med. Imag. Inform. Sci., 32: 15-18 (2015) ②Kami, 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). ③Arakawa, 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). ④Sato, 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 Lu2(SiO4)O-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) ⑤Sato, 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)
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	①Makoto Komatsu, Eiichi Sato：Dissection of polyacrylamide gel with water jet driven by spark discharge, Proc. 49th JSMBE, PS1-3-3 (2010) ②文部科学省科学研究費補助金「課題名：コアンダ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 ③特許2003-111766「名称：噴流生成装置」 ④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 ⑤Makoto Komatsu, Eiichi Sato：Controllability of water jet driven by underwater spark with adjusting density of electrolysis solution, Proc. 51th JSMBE, P2-06-5 (2 pages of electric book, 2012)

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
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	①Oda, 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) ②Oda, 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) ③Yanbe, 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-Kα-excited gadolinium mapping / Jpn. J. Appl. Phys. 52: 092201-1-4 (2013) ④Kodama, 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) ⑤Yamaguchi, S., Sato, E., Oda, Y., Nakamura, R., Oikawa, H., Yabuushi, T., Ariga, H. and Ehara, S.: Zero-dark-counting high-speed X-ray photon detection using a cerium-doped yttrium aluminum perovskite crystal and a small photomultiplier tube and its application to gadolinium imaging / Jpn. J. Appl. Phys. 53: 040304-1-4 (2014)
寒河江　康朗	物理学科	助教	修士	放射線科学、X線機器工学	①Sagae, 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) ②Sato, 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) ③Sato, E., Sagae, M., Osawa, A., Matsukiyo, H., Enomoto, T., Watanabe, M., Imamiya, 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) ④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109回日本医学物理学会学術大会，4月12日，横浜，2012. ⑤寒河江康朗，佐藤英一，小田泰行，佐藤公悦，江原茂：シリコンX線ダイオードと5.0 m同軸ケーブルを用いたX線の検出/ 第103回日本医学物理学会学術大会，4月17日，横浜，2015.