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主要担当授業科目	本科:卒業研究, パワーエレクトロニクス, 工学実験 専攻科:特別研究, 絶縁設計工学, 技術英語講読 エネルギー変換論, 電磁気学特論
資格・受賞等	論文賞(海洋音響学会) 中学・高校教諭 Best Poster Award (ICISIP2017)
社会・学会活動	電子情報通信学会 電気学会 応用物理学会 IEEE
研究シーズ 研究テーマ	1. 水中音響技術 ・超磁歪材料を用いた低周波音源 ・海洋音響トモグラフィ 2. 光ファイバセンサ 3. エネルギーハーベスティング ・ワイヤレスパワー伝送 ・HEMS(Home Energy Management System)への適用
共同研究・技術相談・開発等の実績	1. NEDO委託研究 「ハーベスティングHEMS」の研究
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主な著書・論文・特許等

【著書・論文】

- (1) Takashi Yoshikawa, "Design for 5mW Class Solar Thermal Power Generator", ICEE2022 (International Council on Electrical Engineering) Proceedings, pp.903-907, 2022.7.
- (2) Takashi Yoshikawa, "The Efficiency Estimation Method for Harvesting Energy Charged into Capacitor", International Conference on DC Microgrids ICDCM 2019 (Matsue), IEEE Xplore, pp.511-514, 2019.
- (3) Takashi Yoshikawa, Yuuki Kamuro, "A Simple Interpretation for the Repeating WPT Characteristics", IEICE Technical Committee on Microwaves On line Journal (Proceedings of TJMW), No.TH2-02, 2019.
- (4) Takashi Yoshikawa, Yuuki Kamuro, "Feasibility Study of Wireless Power Transfer Characteristics between Resonate Coils at both Specified Scope End", (Grand International Conference & Exposition Asia Conference (Bangkok)), IEEE Xplore (Printing), 2019.
- (5) Takashi Yoshikawa, Yuuki Kamuro, "Next Approach of HEMS WPT", (Progress In Electromagnetics Research Symposium Abstracts, Toyama, PIERS), IEEE Xplore, 765-769, 2018.
- (6) Takashi Yoshikawa "Novel Concept "HEMS E Project" Challenge", ATLANTIS PRESS, Advances in Intelligent Systems Research (AISR), Vol.145, PP.233-237, 2017.
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- (10) Takashi Yoshikawa, "HEMS with Energy Harvesting and Wireless Power Transmission", ICEE(International Conference on Electrical Engineering Proceedings, Okinawa, , 2016.7.
- (11) Takashi Yoshikawa, "Many Kinds of Energy Source in Our Surroundings at Home", Springer Proceedings in Energy on ENEFM 2014, PP.307-312, 2015.
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- (13) Takashi Yoshikawa, "HEMS performed by a sensor network having an effectively wireless power supply", IEEE ICMM2012 (International Conference on Microwave Magnetics), Frankfurt (German), P44, Abstracts p.121, 2012.8.
- (14) Takashi Yoshikawa, Ikuo Awai, "A Novel Design for HEMS consisting of Sensor Network Nodes with Energy Harvesting and Wireless Power Transmission", AIGM2012.
- (15) Takashi Yoshikawa, Shota Saraya, "HEMS Assisted by a Sensor Network Having an Efficient Wireless Power Supply", IEEE Trans. on Magnetics, 2012.
- (16) Takashi Yoshikawa, "Novel Concept for HEMS Apparatus", Elsevier Science Direct 2012 Energy Procedia 14,
- (17) Takashi Yoshikawa, Ikuo Awai, "HEMS with Resonant-type Wireless Power Transmission", IMWS-IWPT9-1 Proceedings, PP.167-170, 2011.5.  
(他137件)

【特許】 特許出願: 40件