

■テニュアトラック推進本部(工学テニュア)業績一覧 2017年

【査読付学術原著論文】 7件

題目	著者	掲載誌, 巻, 号(出版年月)頁
Fabrication and Characterization of Fe/Polyurethane Nanofiber Actuator Prepared by Electrospinning	Sakamoto, Hiroaki;Amaya, Satoshi;Sunahase, Yuki;Suye, Shin-ichiro	JOURNAL OF FIBER SCIENCE AND TECHNOLOGY,73,6 (2017.06)135-138
NMR investigation about heterogeneous structure and dynamics of recombinant spider silk in the dry and hydrated states	Tasei, Y., Nishimura, A., Suzuki, Y., Sato, T. K., Sugahara, J., Asakura, T.	Macromolecules,50,20 (2017.10)8117-8128
スケッチマップにおける建築記号の多義性に着目した共起性の評価-フランシュコンテ大学を対象とした建築記号の解釈としての認知地図の分析-	木曾久美子	日本建築学会計画系論文集,vol.82,No.742 (2017.12)3081-3091
Characterization of protein adsorption on stretched polyurethane nanofibers prepared by electrospinning	Morita Yuko, Sakamoto Hiroaki, Suye Shin-ichiro	RSC Advances,260 (2017.12)705-709
Current Collapse Reduction in AlGaIn/GaN HEMTs by High-Pressure Water Vapor Annealing	J. T. Asubar, Y. Kobayashi, K. Yoshitsugu, Z. Yatabe, H. Tokuda, M. Horita, Y. Uraoka, T. Hashizume, and M. Kuzuhara	IEEE Transactions on Electron Devices,62 (2015.08)2423-2428
Impact of oxygen plasma treatment on the dynamic on-resistance of AlGaIn/GaN high-electron-mobility transistors	J. T. Asubar, Y. Sakaida, S. Yoshida, Z. Yatabe, H. Tokuda, T. Hashizume, and M. Kuzuhara	Applied Physics Express,8 (2015.10)111001-1-111001-4
An Electrochemical DNA Sensing System Using Modified Nanoparticle Probes for Detecting Methicillin-Resistant Staphylococcus aureus.	Sakamoto Hiroaki;Amano Yoshihisa;Satomura Takenori;Suye Shin-Ichiro	Methods in molecular biology (Clifton, N.J.),1572, (2017)13-22

【査読付国際会議論文】 18件

題目	著者	掲載誌, 巻, 号(出版年月)頁
Effect of Reverse Bias Annealing on the Properties of AlGaIn/GaN MIS-HEMTs with Recessed-gate Structure	W. Gamachi, K. Ishii, J. T. Asubar, H. Tokuda, and M. Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2017) (2017.06)88-89
Reduced Current Collapse in Multi-Fingered AlGaIn/GaN MOS-HEMTs with Dual Field Plate	Ryota Yamaguchi, Yudai Suzuki, Joel Asubar, Hirokuni Tokuda and Masaaki Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2017) (2017.06)92-93
Analytical derivation of interface state density from sub-threshold swing in AlGaIn-GaN metal-insulator-semiconductor high-electron mobility transistors	Hirokuni Tokuda, Joel T. Asubar, and Masaaki Kuzuhara	Japanese Journal of Applied Physics,56 (2017.09)104101-1-104101-5
Correlation of AlGaIn-GaN high-electron-mobility transistors electroluminescence characteristics with current collapse	Shintaro Ohi, Taisei Yamazaki, Joel T. Asubar, Hirokuni Tokuda, and Masaaki Kuzuhara	Applied Physics Express,11 (2018.01)024101-1-024101-4
Suppressed Current Collapse in High Pressure Water Vapor Annealed AlGaIn/GaN HEMTs	Y. Kobayashi, J. T. Asubar, K. Yoshitsugu, H. Tokuda, M. Horita, Y. Uraoka, and M. Kuzuhara	CS MANTECH, Tech Dig.,2015 (2015.05)185-188
Correlation between Electroluminescence and Current Collapse in AlGaIn/GaN HEMTs	S. Ohi, Y. Sakaida, J. T. Asubar, H. Tokuda, and M. Kuzuhara	CS MANTECH, Tech Dig.,2015 (2015.05)265-268
Improved Current Collapse in AlGaIn/GaN HEMTs with 3-Dimensional Field Plate Structure	A. Suzuki, K. Akira, J. T. Asubar, H. Tokuda and M. Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2015) (2015.06)36-37
Cu/Al/Mo/Au and Ni/Al/Mo/Au ohmic contacts for AlGaIn/GaN heterostructures	A. Sasakura, J. T. Asubar, H. Tokuda, and M. Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2015) (2015.06)42-43
Current Collapse in AlGaIn/GaN HEMTs with a GaN Cap Layer	S. Yoshida, Y. Sakaida, J. T. Asubar, H. Tokuda, and M. Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2015) (2015.06)48-49
High Drain Current and Low On-Resistance in AlGaIn/GaN HEMTs with Au-Plated Ohmic Electrodes	Y. Suzuki, K. Tone, J. T. Asubar, H. Tokuda, and M. Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2015) (2015.06)52-53
Highly Reduced Current Collapse in AlGaIn/GaN HEMTs by Combined Application of Oxygen Plasma Treatment and Field-plate Structures	J. T. Asubar, S. Yoshida, H. Tokuda, and M. Kuzuhara	Japanese Journal of Applied Physics,55 (2016.03)04EG07-1-04EG07-5
Large As sublattice distortion in sphalerite ZnSnAs ₂ thin films revealed by x-ray fluorescence holography	K. Hayashi, N. Uchitomi, K. Yamagami, A. Suzuki, Y. Yoshizawa, J. T. Asubar, N. Hapoo, S. Hosokawa	Journal of Applied Physics (2016.03)125703-1-125703-9
AlGaIn/GaN HEMTs on Free-standing GaN Substrates with Breakdown Voltage of 5 kV and Effective Lateral Critical Field of 1 MV/cm	J. Ng, J. T. Asubar, H. Tokuda, M. Kuzuhara	CS MANTECH, Tech Dig. (2016) 215,2016 (2016.05)215-218
Breakdown degradation of AlGaIn/GaN HEMTs with multi-finger gate patterns	T. Yamazaki, Y. Suzuki, S. Ohi, J. T. Asubar, H. Tokuda, and M. Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2016) (2016.06)96-97
Effect of metal electrode edge irregularities on breakdown voltages of AlGaIn/GaN HEMTs	S. Makino, S. Ohi, J. T. Asubar, H. Tokuda, and M. Kuzuhara	IEEE International Meeting for Future of Electron Devices Kansai (IMFEDK 2016) (2016.06)94-95
Pushing the GaN HEMT towards its theoretical limit	J. T. Asubar, J. Ng, H. Tokuda, M. Kuzuhara	Compound Semiconductor Magazine,22 (2016.10)26-31
Highly-stable and low-state-density Al ₂ O ₃ -GaN interfaces using epitaxial n-GaN layers grown on free-standing GaN substrates	S. Kaneki, J. Ohira, S. Toiya, Z. Yatabe, J. T. Asubar, and T. Hashizume	Applied Physics Letters,109 (2016.10)162104-1-162104-5
AlGaIn/GaN MIS-HEMTs with high on/off current ratio of over 5 × 10 ¹⁰ achieved by ozone pretreatment and using ozone oxidant for Al ₂ O ₃ gate insulator	H. Tokuda, J. T. Asubar, and M. Kuzuhara	Japanese Journal of Applied Physics,55 (2016.11)120305-1-120305-4

【講演】 8件

題目	発表者	会議名, 発表番号記号, 開催地, 抄録集等名 (開催年月)
無機ナノ粒子と結合ペプチドの相互作用解析	鈴木悠	17-1NMR研究会 (2017.05)
Conformation of silk fibroins stored in silk glands studied by solution NMR	Suzuki, Y., Asakura, T.	Sheffield Silk Conference (2017.07)
天然液状絹のNMR構造解析	鈴木悠, 朝倉哲郎	第66回高分子討論会 (2017.09)

テニユアトラック推進本部

天然液状絹のNMR構造解析	鈴木悠	第62回固体NMR・材料フォーラム (2017.10)
Suppression of insulin aggregation by zwitterionic polymers: Mechanistic insights	Rajan, R., Suzuki, Y., Matsumura, K.	Materials Research Society fall meeting (2017.11)
Conformation and dynamic properties of silk fibroin in a silk gland	Suzuki, Y.	255th ACS national meeting (2018.03)
プローブ修飾ナノ粒子を利用したMRSAの高感度なバイオセンシングシステムの構築	一木 啓志, 坂元 博昭, 里村 武範, 末 信一郎	電気化学会第84回大会 (2017.03)
生体分子を高配向固定化したカーボンナノ材料の開発	松崎祥平, 高村映一郎, 坂元博昭, 里村武範, 末信一郎	電気化学会第84回大会 (2017.03)

【著書】 1件

題目	著者	出版社(出版年月)
ACS Books "Stereochemistry and Global Connectivity: The Legacy of Ernest Eliel" Solution NMR structure and conformation of silk fibroins stored in Bombyx mori and Samia cynthia ricini silkworms	Asakura, T., Suzuki, Y., Nishimura A.	ACS (2017.11)

【特許】 1件

題目	発明者	特許番号(登録日)
プローブ修飾ナノ粒子を用いた有害微生物の高感度バイオセンシング	坂元 博昭, 末 信一郎, 里村 武範,	6198040 (2017.09)

【資料・解説等】 3件

題目	著者	掲載誌, 巻, 号, 頁(出版年月)
家蚕およびエリ蚕液状絹の立体構造	鈴木悠	アグリバイオ, 1, 6, 70-73 (2017.06)
AlGaN/GaN HEMT Technology for High-Voltage and Low On-Resistance Operation	M. Kuzuhara, J. T. Asubar, H. Tokuda	Japanese Journal of Applied Physics, 55, 070101-1-070101-12 (2016.06)
Insulated gate and surface passivation structures for GaN-based power transistors	Z. Yatabe, J. T. Asubar, and T. Hashizume	Journal of Physics D: Applied Physics, 49, 393001-1-393001-19 (2016.09)