

■特任教授・特命教授・シニアフェロー 業績一覧 2017年

【査読付学術原著論文】 11件

題目	著者	掲載誌、巻、号(出版年月)頁
A new cross section adjustment method of removing systematic errors in fast reactors	竹田 敏一, 横山賢治, 杉野和輝	Annals of Nuclear Energy,109 (2017.06)698-704
Rattling of oxygen ions in a sub-nanometer sized cage convert terahertz radiation to visible light	Yoshitake Toda, Shintaro Ishiyama, Eduard Khutoryan, Toshitaka Idehara, Satoru Matsuishi, Peter V. Sushko, Hideo Hosono	American Chemical Society Nano,11 (2017.11)12358-12364
Theoretical Study on the 1.185 THz Third harmonic Gyrotron	O. Dumbrajs and T. Idehara	Journal of Infrared, Millimeter and Terahertz Waves,39 (2018)177-182
Excitation of Hybrid Space-Surface Waves in Clinotrons with Non-Uniform Grating	E.M. Khutoryan, Y.S. Kovshov., A.S. Likhachev, S.S.Ponomarenko, S.A. Kishko, K.A. Lukin, V.V. Zavertanniy, T.V. Kudinova, S.A. Vlasenko, A.N. Kuleshov and T. Idehara	Journal of Infrared, Millimeter and Terahertz Waves,39 (2018)236-249
Influence of Reflections on Frequency Tunability and Mode Competition in the Second-Harmonic THz Gyrotron	E.M. Khutoryan, T. Idehara, M.M. Melnikova, N.M. Lyskin, O. Dumbrajs	Journal of Infrared, Millimeter and Terahertz Waves,38 (2017)824-837
Simultaneous Stabilization of Gyrotron Frequency and Power by PID Double Feedback Control on the Acceleration and Anode Voltages	E.M. Khutoryan, T. Idehara, A.N. Kuleshov, Y. Tatematsu, Y. Yamaguchi, Y. Matsuki, T. Fujiwara	Journal of Infrared, Millimeter and Terahertz Waves,38 (2017)813-823
Strong yellow emission of high-conductivity bulk ZnO single crystals irradiated with high-power gyrotron beam	Kosaku Kato, Hongsong Qiu, Eduard Khutoryan, Yoshinori Tatematsu, Masahiko Tani, Toshitaka Idehara, Yuusuke Yamaguchi, Masafumi Fukunari, Yuto Maeda, Kyoya Takayama, Yuki Minami, Melvin John Empizo, Takayuki Kurihara, Kohei Yamano, Toshihiko Shimizu, Keisuke Takano, Nobuhiko Sarukura, Tsuguo Fukuda, Masashi Yoshimura, and Makoto Nakajima	Applied Physics Letters,111,3 (2017)031108
Gyrotrons for High-Power Terahertz Science and Technology at FIR UF	Toshitaka Idehara, Svilen Petrov Sabchevski	Journal of Infrared, Millimeter and Terahertz Waves,38 (2017)62-86
Development and Application of Gyrotrons at FIR UF	Toshitaka Idehara, Svilen Petrov Sabchevski	IEEE Trans. Plasma Science (2017)1-8
A Novel THz-Band Double-Beam Gyrotron for High-Field DNP-NMR Spectroscopy	Toshitaka Idehara, Mikhail Glyavin, Alexei Kuleshov, Svilen Sabchevski, Vladimir Manuilov, Vladislav Zaslavsky, Irina Zotova, and Anton Sedov	Review of Scientific Instruments,88 (2017)094708
Simultaneous Stabilization of Gyrotron Frequency and Power by PID Double Feedback Control on the Acceleration and Anode Voltages	E. M. Khutoryan, T. Idehara, A. N. Kuleshov, Y. Tatematsu Y. Yamaguchi Y. Matsuki T. Fujiwara	Journal of Infrared, Millimeter, and Terahertz Waves,38,1, (2017.01)

【査読付国際会議論文】 1件

題目	著者	掲載誌、巻、号(出版年月)頁
Shear capacity evaluation of footing beams with large web opening for maintenance based on stress transfer mechanism	Katsumi Kobayashi	Proc. of 16th World Conference on Earthquake Engineering (2017.01)paper no. 195

【講演】 13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)
Uncertainty Estimation of Neutronics Parameters in Minor Actinides Transmutation Fast Reactors	竹田敏一, 佐野忠史	M&C2017 (2017.04)
CORE CONCEPT OF MINOR ACTINIDES TRANSMUTATION FAST REACTOR WITH IMPROVED SAFETY	藤村幸治, 糸岡聰, 大木繁夫, 竹田敏一	ICAPP2017, 福井市, 京都市 (2017.04)
あと施工アンカーの原位置せん断試験装置の開発 その1 試験装置設計の基本的考え方	小林 克巳	日本建築学会大会学術講演梗概集, C-2, 365-366 (2017.08)
RC造大開孔梁のせん断終局耐力に対する開孔周囲補強筋の役割について (その3)	小林克巳	日本建築学会大会学術講演梗概集, C-2, 475-476 (2015.09)
High power THz technologies opened by high frequency gyrations covering Sub-THz to THz region	T. Idehara, A. Kuleshov, E. Khutoryan, Y. Tatematsu, Y. Matsuki, T. Fujiwara, S. Asai, T. Suehara, T. Yamazaki, A. Miyazaki	9th International Kharkiv Symposium on Physics and Engineering of Microwaves, Millimeter and Submillimeter Waves (MSMW2016),Kharkiv(Ukraine) (2016.06)
Stabilizations of Gyrotron frequency and power by PID double feedback control on the acceleration and anode voltages	E. M. Khutoryan, T. Idehara, A. N. Kuleshov, Y. Tatematsu, Y. Yamaguchi, Y. Matsuki, T. Fujiwara	9th International Kharkiv Symposium on Physics and Engineering of Microwaves, Millimeter and Submillimeter Waves (MSMW2016),Kharkiv(Ukraine) (2016.06)
Gyrotron FU II for a radiation source of THz ESR spectroscopy with a high field pulse magnet	T. Idehara, I. Ogawa, S. Mitsudo., Y. Fujii, M. Hagiwara, T. Kida, M. Takata	9th International Kharkiv Symposium on Physics and Engineering of Microwaves, Millimeter and Submillimeter Waves (MSMW2016),Kharkiv(Ukraine) (2016.06)
Influence of reflections on frequency stability, tunability and mode competition in the second-harmonic THz gyrotron	Eduard M. Khutoryan, Toshitaka Idehara., Maria M. Melnikova., Andrey G. Rozhnev ;	41st International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz2016),Copenhagen(Denmark) (2016.09)
Frequency-tunable, terahertz gyrotron for the direct measurement of the transition of positronium	Tsun-Hsu Chang., Toshitaka Idehara	41st International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz2016),Copenhagen(Denmark) (2016.09)
Development and preliminary tests of a second harmonic double-beam continuous wave gyrotron with operating frequency of 0.79 THz	Mikhail Yu. Glyavin., Vladimir N. Manuilov., Irina V. Zotova., Eduard M. Khutorian., Andrei M. Malkin., Mikhail V. Morozkin., Roman M. Rozenthal., Anton S. Sedov., Aleksander I. Tsvetkov., Vladislav Yu. Zaslavsky., Naum S. Ginzburg., Toshitaka Idehara	41st International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz2016),Copenhagen(Denmark) (2016.09)
Development and applications of high power THz radiation sources — Gyrotrons	Toshitaka Idehara	41st International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz2016),Copenhagen(Denmark) (2016.09)

Gyrotron output frequency and power stabilization by PID feedback control on the acceleration and anode voltages	E. M. Khutoryan., T. Idehara., A. N. Kuleshov., Y. Tatematsu., Y. Yamaguchi., Y. Matsuki., T. Fujiwara	41st International Conference on Infrared, Millimeter, and Terahertz waves(IRMMW-THz2016),Copenhagen(Denmark) (2016.09)
RC造大開孔梁のせん断終局耐力に対する開孔周囲補強筋の役割について（その4）	小林克巳	日本建築学会大会学術講演梗概集.. C-2, 111-112 (2016.09)

【資料・解説等】 1件

題目	著者	掲載誌、巻、号、頁(出版年月)
先進材料のキャビテーション壊食	服部修次	機械の研究,69,10,848-858 (2017.10)