List of Researchers on FY 2019 Joint Usage/Research for Zero Emission Energy

2019/04/22

Categories	Reference number	Title of Research Project (Japanese)	Title of Research Project (English)	Affiliation	Principle Researcher	Key Person in IAE
Planned joint research	ZE31A-01	ヒドロニウム溶媒和イオン液体のプロトニック特性改善	Improvement of Protonic Properties of Hydronium Solvate Ionic Liquids	Kyoto University	Atsushi Kitada	Masato Katahira
Planned joint research	ZE31A-02	イオン照射場標準の開発	Standardarization of Ion-Irradiation Field	Tohoku University	Ryuta Kasada	Kiyohiro Yabuuchi
Planned joint research	ZE31A-03	照射ステンレス鋼における溶質クラスター形成過程の解明	Study of formation process of solute clusters in stainless steel with ion irradiation	RINE/ University of Fukui	Ken-ichi Fukumoto	Kiyohiro Yabuuchi
Planned joint research	ZE31A-04	セルロース系バイオマスの機能化のための環境調和型アミノ化手法の開発	Development of an eco-conscious amination process for functionalization of cellulose biomass	Yokohama National University	Minoru Takeda	Masato Katahira
Planned joint research	ZE31A-05	太陽電池級シリコン製造を目的とした液体Si-Zn合金からのシリコンの結晶成長	Crystal Growth of Silicon from Liquid Si-Zn alloy for the Production of Solar-grade Silicon	Kyoto University	Kouji Yasuda	Toshiyuki Nohira
Planned joint research	ZE31A-06	酵素活性中心に導入した光増感金属錯体の光誘起電子移動反応	Photoinduced electron-transfer reactions of metal complexes as photosensitizers bound to the active site of enzyme	Nara Women's University	Hiroshi Takashima	Eiji Nakata
Planned joint research	ZE31A-07	高性能ナトリウム二次電池開発のための負極－電解質界面の構築	Development of anode/electrolyte interface for advanced Na-ion battery	Tottori University	Hiroki Sakaguchi	Toshiyuki Nohira
Planned joint research	ZE31A-08	カリウムイオン電池開発のための化合物系負極の創製と 溶融塩電解質との適合性に関する研究	Study on development of compound-based anode for K-ion battery and on compatibility with molten salt electrolyte	Tottori University	Yasuhiro Domi	Takayuki Yamamoto
Planned joint research	ZE31A-09	色素－金属ナノ粒子複合膜における光特性に及ぼす磁場と金属ナノ粒子の効果	Effects of Magnetic Field and Metal Nanoparticles on Photoproperties of Dye-Metal Nanoparticle Composite Films	Sojo University	Hiroaki Yonemura	Hiroshi Sakaguchi

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Planned joint research	ZE31A-10	省エネルギー型発光素子用材料の設計と開発	Design and development of functional organic materials for energy conservation-directed light-emitting devices	Kyoto Institute of Technology	Masaki Shimizu	Hiroshi Sakaguchi
Planned joint research	ZE31A-11	速度変調セル付属型高周波電子銃を用いた小型テラヘルツレーザー開発とその利用に関する研究	Development of a compact THz laser and its applications using energy-chirping-cell attached rf electron gun	Photon Science Center, The University of Tokyo	Kazuyuki Sakaue	Heishun Zen
Planned joint research	ZE31A-12	中赤外自由電子レーザーによるバイオマス関連物質の超効率的分解反応の開拓	Development of hyper-efficient degradation method of baiomass-related compounds by using mid-infrared free electron laser	IR-FEL Research Center ,Tokyo University of Science	Takayasu Kawasaki	Heishun Zen
Planned joint research	ZE31A-13	微小積層試料の熱拡散率評価手法の開発	Development of thermal diffusivity evaluation method using miniature laminated specimens.	Osaka Prefecture University	Masafumi Akiyoshi	Tatsuya Hinoki
Planned joint research	ZE31A-14	耐酸化性ベリライドの価電子構造	Valence electric structures of oxidation resistant beryllides	National Institutes for Quantum and Radiological Science and Technology	Masaru Nakamichi	Keisuke Mukai
Planned joint research	ZE31A-15	フォトニック結晶レーザーによる光渦を用いた横方向流れの精密分析技術の検討と計測システムの開発および実験	Feasibility study and development of novel technique of measuring tranverse velocity field using optical vortex emitted from photonic crystal laser	Kyoto Institute of Technology	Haruhiko Himura	Shinichiro Kado
Planned joint research	ZE31A-16	ODS合金の酸化物粒子照射下安定性の研究	Stability of oxide particles in oxide dispersion strengthened (ODS) alloys under irradiation	Hokkaido University	Naoko OONO-HORI	Kiyohiro Yabuuchi
Planned joint research	ZE31A-17	中赤外自由電子レーザーによるエネルギー機能半導体における選択的格子振動励起	Mode-selective phonon excitation in semiconductors of energy functionality with mid-infrared free-electron laser	Kyoto University	Kan Hachiya	Hideaki Ohgaki
Planned joint research	ZE31A-18	DNA–無機ハイブリッドナノ材料を利用した光エネルギー変換システム	Photoenergy Conversion System Based on Hybrid DNA/Inorganic Nanomaterials	University of Hyogo	Kazushige Yamana	Takashi Morii

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Planned joint research	ZE31A-19	重水素プラズマ慣性静電閉じ込め装置(IEC)を用いた核物質探知のための放射線計測技術の開発	Development of radiation measurement method for the detection of special nuclear materials with IEC device	Institute for Integrated Radiation and Nuclear Science, Kyoto University	Tsuyoshi Misawa	Satoshi Konishi
Planned joint research	ZE31A-20	シリコン膜の溶融塩電析法による安価な太陽電池製造プロセスの開発	Electrodeposition of Si films in molten salts for low-cost manufacturing of solar cells	The University of Tokyo	Xiao Yang	Toshiyuki Nohira
Planned joint research	ZE31A-21	軸対称トーラスからヘリカル軸トロイダルプラズマ配位への遷移現象の解析	Analysis of transition from axisymmetric torus to helical axis toroidal plasma	Kyoto Institute of Technology	Akio Sanpei	Kazunobu Nagasaki
Planned joint research	ZE31A-22	酸化物/窒化物セラミックスの電子/格子励起同時効果	Synegistic effects of electronic excitation and displacement damage in oxide/nitride ceramics	Kyushu university	Kazuhiro Yasuda	Kiyohiro Yabuuchi
Planned joint research	ZE31A-23	核融合炉ブランケット用機能性被覆中の水素同位体透過挙動に対する重イオンおよびヘリウム高温照射複合効果	Combined effect of high-temperature irradiation with heavy ion and helium on hydrogen permeation behavior in functional coating for fusion reactor blanket	Shizuoka University	Takumi Chikada	Kiyohiro Yabuuchi
Planned joint research	ZE31A-24	核融合Li含有固体増殖材料の価電子構造解析	Valence electron structure of Li-containing ceramic breeder for fusion application	Hirosaki University	Kazuya Sasaki	Keisuke Mukai
Planned joint research	ZE31A-25	タングステン中の照射欠陥生成および水素同位体捕捉における合金元素の影響	Influence of alloying elements on radiation damage formaiton and hydrogen isotope trapping in tungsten	Hydrogen Isotope Research Center, Organization for Promotion of Research, University of Toyama	Yuji Hatano	Tatsuya Hinoki
Planned joint research	ZE31A-26	有機薄膜太陽電池の高効率化を目指した有機ー無機ハイブリッド膜の開発	Development of Organic-Inorganic Hybrid Film toward High-Performance Organic Thin-Film Solar Cells	The University of Shiga Prefecture	Tsuyoshi Akiyama	Hiroshi Sakaguchi
Planned joint research	ZE31A-27	先進エネルギーシステム用高延性ODSフェライト鋼の開発	Development of high ductile ODS ferritic steel for advanced energy system	Kurume College	Noriyuki Iwata	Kiyohiro Yabuuchi

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Planned joint research	ZE31A-28	低放射化核融合炉材料の重照射効果に関する研究	High-Fluence Irradiation Behavior of Reduced Activation Fusion Reactor Materials	National Institutes for Quantum and Radiological Science and Technology	Hiroyasu Tanigawa	Tatsuya Hinoki
Planned joint research	ZE31A-29	核融合炉構造材料中のバブル・ボイド形成に対する損傷速度効果のモデル計算と実験による研究	Modeling and Experimental Study on Damage Rate Effects on Bubbles/Voids Formation in Fusion Reactor Structural Materials	University of California Santa Barbara	Takuya Yamamoto	Kiyohiro Yabuuchi
Planned joint research	ZE31A-30	タングステン中の水素同位体挙動に及ぼす高エネルギーHe照射影響	Effect of high energy He ion implantation on hydrogen isotope behavior in tungsten	Shizuoka University	Yasuhisa Oya	Tatsuya Hinoki
Planned joint research	ZE31A-31	核融合炉における間欠的プラズマ照射によるタングステン材料の水素同位体吸蔵	Hydrogen Isotope Retention in Tungsten by Continual Pulsed Plasma Irradiation in Fusion Reactor	Osaka University	Yoshio Ueda	Tatsuya Hinoki
Planned joint research	ZE31A-32	核融合炉への応用に向けたタングステン材料の高ネルギー粒子照射効果に関する研究	Study of high energy particle irradiation effects on Tungsten materials for fusion applications	Tohoku University	Akira Hasegawa	Kiyohiro Yabuuchi
Planned joint research	ZE31A-33	セラミックスの腐食反応性に及ぼす格子欠陥の影響	The role of lattice defects in ceramics on the corrosion	Tohoku University	Sosuke Kondo	Tatsuya Hinoki
Planned joint research	ZE31A-34	照射導入点欠陥クラスターの焼鈍時の安定性に関する実験的評価	Evaluation of the stability of irradiation induced point defect clusters during annealing	Fukushima college	Shiro Jitsukawa	Tatsuya Hinoki
Planned joint research	ZE31A-35	核融合炉用低放射化バナジウム合金の析出制御による強化と延性向上	Strengthening and improvement of ductility by precipitation control for low-activation vanadium alloy for fusion reactors	National Institute for Fusion Science	Takuya Nagasaka	Kiyohiro Yabuuchi
Planned joint research	ZE31A-36	プノンペンでの系統接続太陽光システムの最大効率化に関する研究	Maximizing energy production from a household grid-connected PV system in Phnom Pehh, Cambodia	Institute of Technology of Cambodia	Vannak Vai	Hideaki Ohgaki

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Planned joint research	ZE31A-37	バイオリファイナリーのためのセルラーゼ糖質結合モジュールとリグニンの相互作用の超高感度ＮＭＲによる解析	Interaction analysis between cellulase carbohydrate-binding module and lignin by ultra-high sensitivity NMR for biorefinery	Kyoto University	Takashi Watanabe	Masato Katahira
Planned joint research	ZE31A-38	超高速時間スケールで高度な分子秩序を特徴とする、高分子結晶領域における励起子形成と解離過程の解明	Elucidation of exciton formation and dissociation processes exclusively in polymer crystalline domain, featuring high-degree of molecular ordering in ultrafast time-scale	Kyoto University	Jaehong Park	Kazunari Matsuda
Proposal based project	ZE31B-01	Ribosomal Shunting誘起法の確立	Development of a system that induces Ribosomal Shunting	Kumamoto University	Yousuke Katsuda	Takashi Morii
Proposal based project	ZE31B-02	溶融塩を用いた水素同位体分離技術の研究	Study of Hydrogen Isotope Separation Technology by Molten Salt	Hokkaido University	Hisayoshi Matsushima	Toshiyuki Nohira
Proposal based project	ZE31B-03	Bacillus属が分泌生産する新規抗菌性環状リポペプチドの構造解析と抗菌活性評価	Identification and characterization of novel antimicrobial cyclic lipopeptides derived from Bacillus sp.	Tokyo University of Agriculture	Kenji Yokota	Tomijiro Hara
Proposal based project	ZE31B-04	糖アルコール類相変化蓄熱材の熱的性質に関する研究	Thermal properties of sugar alcohol phase change material	Kobe University	Makoto Shibahara	Tatsuya Hinoki
Proposal based project	ZE31B-05	液体金属中の垂直円柱バンドル発熱体の自然対流熱伝達に及ぼすワイヤスペーサの影響(その2)	Influence of Wire Spacer on Natural Convection Heat Transfer from Vertical Rod Bundle in Liquid Metal (Part 2)	Kobe University	Koichi Hata	Takashi Nakajima
Proposal based project	ZE31B-06	磁力線情報を基にした高速カメラデータの解析	Analysis of high-speed camera data based on magnetic flux information	Hiroshima University	Nobuhiro Nishino	Hiroyuki Okada
Proposal based project	ZE31B-07	レーザーパルスの最適制御による光化学反応の高効率化	Highly efficient photochemical reactions induced by optimal laser pulses	Tohoku University	Yukiyoshi Ohtsuki	Takashi Nakajima

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Proposal based project	ZE31B-08	抗菌特性における電界紡糸型ポリ乳酸／酸化亜鉛繊維布の配向の影響	Effect of the orientation of poly(lactic acid)/zinc oxide electrospun fibers on the antimicrobial properties	Faculty of science at Sriracha, Kasetsart University, Thailand	Tongsai Jamnongkan	Tomijiro Hara
Proposal based project	ZE31B-09	NMRを利用した機能性RNAおよびペプチドの開発	Development of functional peptides and RNAs by using NMR	Chiba Institute of Technology	Taiichi Sakamoto	Takashi Nagata
Proposal based project	ZE31B-10	中赤外自由電子レーザーからの超短パルス列によって実現されるプルシアンブルーおよび類似化合物における架橋シアノ基の高次振動励起状態の形成	Higher vibronic excited states of bridging cyanides in prussian blue realized by ultra short pulse train from a mid infrared free electron laer	Yamagata University	Mamoru Kitaura	Heishun Zen
Proposal based project	ZE31B-11	ヘリオトロンJ装置におけるニューラルネットワークを用いたHe I CT像の再構築手法の開発	Development of HeI image reconstruction technique using neural network in Heliotoron J	Kagawa College	Hayato Kawazome	Shinichiro Kado
Proposal based project	ZE31B-12	核融合炉材料表面における水素の基本的な挙動についてのコンピュータシミュレーション	Behavior of hydrogen on the surface of fusion reactor materials by computer simulations.	University of the Ryukyus	Hirotomo Iwakiri	Kazunori Morishita
Proposal based project	ZE31B-13	狭帯域検出器を用いたコヒーレント放射光出力測定による電子バンチ長評価の研究	Study of electron bunch length by measuring coherent synchrotron radiation with narrow-band detectors	National Institute of Advanced Industrial Science and Tecnology	Norihiro Sei	Hideaki Ohgaki
Proposal based project	ZE31B-14	単一電子ビーム照射技術開発による微視的トラック構造研究	Development of single-electron irradiation technique for microscopic track structure study	Kyushu university	Yusuke Uozumi	Hideaki Ohgaki
Proposal based project	ZE31B-15	ディジタルECEによる微細温度構造の観測	Observation of fine temperature structure by using digital ECE	Research Institute for Applied Mechanics , Kyushu university	Shigeru Inagaki	Kazunobu Nagasaki
Proposal based project	ZE31B-16	原子炉圧力容器鋼材に形成される微小クラスタ-解析	Analysis of radiation indudced nano-clustesr in RPV steels	Research Institute for Applied Mechanics , Kyushu university	Hideo Watanabe	Kiyohiro Yabuuchi

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Proposal based project	ZE31B-17	ハロ酸脱ハロゲン化酵素の酵素反応機構解析	Analysis of reaction meachanism of haloacid dehalogenase	Nagahama Institute of Bio-Science and Technology	Takashi Nakamura	Takashi Morii
Proposal based project	ZE31B-18	特殊なマイクロ空間内で形成された階層性分子組織構造の構造評価	Structural studies on hierarchical molecular architectures created in microfluidic device	Kyoto Prefectural University	Munenori Numata	Eiji Nakata
Proposal based project	ZE31B-19	熱変換用BN/CNTs放熱シートの研究・開発	R&D of BN/CNTs heat dissipation sheets as heat transfer	National Institute for Materials Science	Kazuya Shimoda	Tatsuya Hinoki
Proposal based project	ZE31B-20	細胞内エネルギー産生システムを制御するRNA編集技術の開発	Development of an RNA editing technology for regulating an intracellular energy production system.	Fukuoka University	Masatora Fukuda	Takashi Morii
Proposal based project	ZE31B-21	薬用植物における微生物群集構造と生物農薬への応用に関する研究	Study on the microbial community structure in medical plant and its application to biological pesticides	Shimane University	Makoto Ueno	Tomijiro Hara
Proposal based project	ZE31B-22	養殖エビの生育、品質、衛生向上における、色素生産性および非生産性バチルス属細菌胞子投与の協同的効果	Cooperative effects of pigmented and non-pigmented Bacillus spores on growth, quality and health of shrimp	VNU University of Science,Vietnam National University, Hanoi	Anh Thi Van Nguyen	Yumiko Takatsuka
Proposal based project	ZE31B-23	大気圧プラズマを用いた活性ラジカル生成と輸送の制御	Production and transport control of reactive radicals with atmospheric pressure plasma	Osaka Prefecture University	Hiroto Matsuura	Shinichiro Kado
Proposal based project	ZE31B-24	超音波誘導型細胞質内物質導入法の開発とその機構解析	Analysis of the mechanism of ultrasound-enhanced cellular internalization of bioactive molecules	Okayama University	Takashi Ohtsuki	Eiji Nakata
Proposal based project	ZE31B-25	イオン照射による欠陥が非照射領域に及ぼす残留弾性歪の非破壊評価	Nondestructive evaluation of residual elastic strain on non-irradiated areas by defects caused by ion irradiation	Hokkaido University	Tamaki Shibayama	Tatsuya Hinoki

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Proposal based project	ZE31B-26	イオン照射されたパイロクロア型酸化物中のHeおよびH捕捉過程の解明	Clarification on retention processes of He and H in ion irradiated pyrochlore oxides	Meijo University	Bun Tsuchiya	Tatsuya Hinoki
Proposal based project	ZE31B-27	高強度テラヘルツ波および中赤外レーザによる材料のアブレーション閾値測定	Measurement of the ablation thershold fluence of materials interacted with intense THz waves and mid-infrared laser	Kyoto University	Masaki Hashida	Heishun Zen
Proposal based project	ZE31B-28	爆発接合材（Cu/SS）の照射効果の研究	Effect of irradiation on explosion bonded Cu/steel joint	University of Science and Technology Beijing	Somei Ohnuki	Kiyohiro Yabuuchi
Proposal based project	ZE31B-29	イオン照射したタングステンの表面硬さに及ぼす水素の効果	Effect of hydrogen on surface hardness in ion-irradiated tungsten	Kagoshima University	Koichi Sato	Kiyohiro Yabuuchi
Proposal based project	ZE31B-30	RNA origami手法を利用するグアニン四重鎖構造を介したRNA構造・機能制御	Staple Antisense-Induced RNA Folding for Specific Gene Regulation	Hirosaki University	Masaki Hagihara	Takashi Morii
Proposal based project	ZE31B-31	四重鎖を基盤とした遺伝子発現調節法の開発	Development of quadruplex-based gene expression regulation method	Yokohama National University	Yoichiro Tanaka	Takashi Nagata
Proposal based project	ZE31B-32	エネルギー変換デバイス応用へ向けた2D-3Dハイブリッド量子井戸構造の創製	Fabrication of 2D-3D hybrid quantum well structure towards energy conversion devices	Ritsumeikan University	Shinichiro Mouri	Kazunari Matsuda
Proposal based project	ZE31B-33	二次元原子層物質複合構造の物性解明	Physical properties of heterostructures of 2D materials	University of Tsukuba	Susumu Okada	Kazunari Matsuda
Proposal based project	ZE31B-34	超分子相互作用を用いた細胞分裂タンパク質FtsZの集合構造制御：DNAナノ構造上への展開	Supramolecular assembling regulation of bacterial cell division protein FtsZ on DNA nanostructures	Osaka University	Akira Onoda	Eiji Nakata

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Proposal based project	ZE31B-35	ミトコンドリアのエネルギー産生システムの理解を目指した細胞内温度センサーの開発	Development of intracellular thermosensors for the understanding of energy production in mitochondria	Kyoto University	Reiko Sakaguchi	Takashi Morii
Proposal based project	ZE31B-36	近赤外ゼーマン分光法を用いたヘリウム原子23S-23P発光線強度の空間分布計測	Spatially resolved measurement of helium atom 23S-23P emission line intensity using near-infrared Zeeman spectroscopy	Kyoto University	Taiichi Shikama	Shinichiro Kado
Proposal based project	ZE31B-37	水素化チタン粒子からの水素脱離手法の効率化に向けた研究	Research for improving the efficiency of hydrogen release from titanium hydride particles	Akashi College	Yoshihiro Kajimura	Juro Yagi
Proposal based project	ZE31B-38	細胞内エネルギー代謝に関係するタンパク質の細胞内動態観察を可能とする基盤技術の創生	A small-molecule-based technology for live-cell imaging of energy metabolism.	Kyoto University	Shinichi Sato	Takashi Morii
Proposal based project	ZE31B-39	NADPH再生系をともなったアゾレダクターゼによるアゾ色素連続分解過程のリアルタイムNMR法を用いた解析	Real-time NMR analysis of the continuous degradation process of azo dyes using azoreductase in cooperation with the NADPH regeneration system.	Health Sciences University of Hokkaido	Masataka Horiuchi	Takashi Nagata
Proposal based project	ZE31B-40	デジタルイメージング手法と原子分子過程を踏まえたヘリオトロンプラズマ揺動情報の抽出	Digital Imaging Spectrometry for Visible Spctra in Fusion Plasma Based on the Atomic/Molecular Process	Institute of Electro-Magnetic Application	Masaru Irie	Shinichiro Kado
Proposal based project	ZE31B-41	選択的格子振動励起を利用したSiCの電気化学溶解によるナノポーラス化	Nanopore formation by electrochemical dissolution of SiC caused by selective activation of lattice vibration	Kyoto University	Kazuhiro Fukami	Masahiro Kinoshita
Proposal based project	ZE31B-42	高効率・高機能エネルギー変換に向けたナノ物質の基礎物性の解明	Study of nanomaterials torward efficient and high-performance energy conversion	Hosei University	Satoru Konabe	Yuhei Miyauchi
Proposal based project	ZE31B-43	先進ヘリカル配位における中性粒子ビーム入射を用いた高性能プラズマ生成研究	Study of high performance plasmas using neutral beam injection in advanced heliotorn configuration	University of Tsukuba	Masayuki Yoshikawa	Shinji Kobayashi

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Proposal based project	ZE31B-44	核融合炉用低放射化フェライト鋼の照射損傷モデリング	Modeling and simulation study on radiation damage of reduced activation ferritc/martensitic steel for fusion application	National Institutes for Quantum and Radiological Science and Technology	Yoshiyuki Watanabe	Kazunori Morishita
Proposal based project	ZE31B-45	外部刺激応答型タンパク質集合体のデザイン・構築	Design and construction of external stimuli-responsive protein materials	Kyoto University	Yuta Suzuki	Eiji Nakata
Proposal based project	ZE31B-46	高圧条件下における凝縮熱伝達が壁温度に及ぼす影響	Evaluation of effect of condensation heat transfer on wall temperature under high pressure conditions	Hokkaido University	Yasunori Yamamoto	Kazunori Morishita
Proposal based project	ZE31B-47	超微小引張試験法によるイオン照射された低放射化フェライト鋼の機械的特性評価	Mechanical Property of Ion-irradiated RAFMs by Ultra Micro-tensile Test	National Institutes for Quantum and Radiological Science and Technology	Masami Ando	Kiyohiro Yabuuchi
Proposal based project	ZE31B-48	Sarawakにおける再生可能エネルギーによる電力供給と住民のQOLに関する研究	Study on Rural Electrification by Renewable Energy in Sarawak and it's Impact on QOL	Unversity of Malaya, Malaysia	Nasrudin Abd Rahim	Hideaki Ohgaki
Proposal based project	ZE31B-49	高規則性シリコンロッド集合体ターゲットと高強度レーザーとの相互作用による高エネルギー密度プラズマ生成と閉じ込め	Generation of high energy density plasma state by the interaction between highly ordered silicon rod array target and high power laser	Kyoto University	Yasuaki Kishimoto	Hiroshi Sakaguchi
Proposal based project	ZE31B-50	高温プラズマでの乱流計測のための多チャンネル分光計測システムの開発	Development of multi-channel spectroscopic system for turbulence measurement	Kyushu university	Akihide Fujisawa	Shinsuke Ohshima
Proposal based project	ZE31B-51	動的不均一相を用いたイオントロニクス素子の研究	Iontronic devices using dynamic heterogeneous phase	University of the Ryukyus	Nobuaki Yonekura	Takashi Nakajima

Categories	Reference number	Title of Research Project (Japanese)	Title of Research Project (English)	Affiliation	Principle Researcher	Key Person in IAE
Joint usage of facilities	ZE31C-01	ベッセル様数サイクルレーザーパルスによる新奇レーザーナノ加工技術の開拓	Development of novel laser nanoprocessing with Bessel-like few-cycle laser pulses	Tokyo University of Agriculture and Technology	Godai Miyaji	Kazunari Matsuda
Joint usage of facilities	ZE31C-02	木質バイオマス循環資源化のためのリグニンおよびセルロース親和性ペプチドの開発	Exploitaion of Lignin- and Cellulose-Binding Peptide Library toward Biorefinery of Wood Baiomass	Kyoto University	Hikaru Takaya	Takashi Morii
Joint usage of facilities	ZE31C-03	KU-FELを用いた固体の非線形効果の探索	Search for nonlinear effects of solid using KU-FEL	Osaka University/ISIR	Akinori Irizawa	Heishun Zen
Joint usage of facilities	ZE31C-04	軟X線分光分析装置を用いた液体増殖材腐食材料中のリチウム分析	Lithium distribution analysis for the corrosion of liquid breeding material using soft X-ray spectrometer	National Institute for Fusion Science	Teruya Tanaka	Juro Yagi
Joint usage of facilities	ZE31C-05	Fe2O3-Al2O3固溶体負極のAlリッチ領域における過剰容量と反応機構	Excess Capacity and Reaction Mechanism of Fe2O3-Al2O3 Solid Solution Anode at the Al-rich Region	Kyoto University	Shigeomi Takai	Takashi Morii
Joint usage of facilities	ZE31C-06	一電子入射によるシンチレーション発光過程の理解、および、暗黒物質探査用素子の中性子応答評価	Study on emission process of scintillation material using the one electron beam and evaluation of scintillation properties for darkmater search	Tohoku University	Shunsuke Kurosawa	Hideaki Ohgaki
Joint usage of facilities	ZE31C-07	トロイダルプラズマ周辺乱流揺動の統計解析	Statistical analysis on edge turbulence fluctuation data in a toroidal plasma	Research Institute for Applied Mechanics ,Kyushu university	Yoshihiko Nagashima	Shinsuke Ohshima
Joint usage of facilities	ZE31C-08	集光色素アンテナタンパク質複合体フィコビリソームの人工再構成の試み	Artificial reconstruction of cyanobacterial phycobilisome.	Tokyo University of Agriculture	Satoru Watanabe	Eiji Nakata
Joint usage of facilities	ZE31C-09	中赤外線FEL照射実験によるアメリカザリガニ複眼の生物物理学的反応	Bio-Physical Reactions of Crayfish's Compound Eye Stimulated by Mid-Infrared Radiation of Free-Electron Lasers	Nihon University	Fumio Shishikura	Hideaki Ohgaki

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Joint usage of facilities	ZE31C-10	赤外半導体検出器の飽和現象と光源のパルス構造	Saturation of an infrared semiconductor detector and pulse structure of a light source	Japan Synchrotron Radiation Insitute	Yuka Ikemoto	Heishun Zen
Joint usage of facilities	ZE31C-11	ヘリオトロンＪに於ける磁場対応ダブルプローブによる周辺計測	Boundary diagnostics using field corresponding double probe in Heriotron J	JAEA	Kazuya Uehara	Shinsuke Ohshima
Joint usage of facilities	ZE31C-12	コヒーレントTHzアンジュレータ放射の偏光制御と計測	Study for polarization control of coherent THz undulator radiation	Tohoku University	Shigeru Kashiwagi	Heishun Zen
Joint usage of facilities	ZE31C-13	巻貝類 (腹足綱, Gastropoda）の貝殻形成促進による大気中の炭酸ガス固定増進	Enhancement of carbon dioxide gas fixation in the atmosphere by promoting shell formation of snails (gastropoda)	Nihon University	Tetsuro Kono	Hideaki Ohgaki
Joint usage of facilities	ZE31C-14	Late blooming phaseの自由エネルギーの導出	Determination of the free energy of the late-blooming phase	Kumamoto University	Yoshitaka Matsukawa	Kiyohiro Yabuuchi
Research meetings	ZE31D-01	生体機能化学国際シンポジウム：生体エネルギーシステムの理解と応用に向けて	International symposium of Biofunctional Chemistry: Towards the understanding of biological energy system	Kyoto University	Reiko Sakaguchi	Takashi Morii