生命科学・化学専攻 Department of Life Science and Chemistry

生命工学創薬領域 Medicinal Chemistry and Biotechnology Division

Medicinal Chemistry	/ and Biotechnology	y Division	As of April 1, 2020		
役職	教員名	教育 • 研究分野 Educational and Research Area			
Title	Name	名称 Specialization	内容 Theme		
Professor	Masato Ikeda	Biomolecular Chemistry	Education and research on nanobiotechnology based on molecular machinery and supramolecular materials		
Professor	Hiroshi Ueda	Medical molecular engineering	Education and research on cellular response mechanisms through biological membranes		
Professor	Hiroshi Takemori	Therapeutic Science	rapeutic Science Education and research for understanding of disease mechanisms and energy metabolism		
Professor	Kyoji Furuta	Biofunctional molecule chemistry Education and research on molecular design and synthesis of bioactive substances			
Professor	Yoko Morita	Biochemistry of Signal Transduction	Education and research on the molecular mechanisms of intracellular signal transduction in the development and aging of the central nervous system		
Professor	Takashi Yokogawa	Gene expression engineering	ene expression engineering Education and research on the engineering of the protein synthesis systems		
Associate Professor	Satoshi Ohno	Gene expression engineering	Education and research on development of methods for the synthesis of novel proteins		
Associate Professor	Kentaro Oh-hashi	Biochemistry of signal transduction	Education and research on cellular stress responses and signal transduction		
Associate Professor	Hiroko Koyama	Bioorganic chemistry Education and research on design and synthesis of functional <i>in vivo</i> molecular probe			
Assistant Professor	Yoshiaki Kitamura	Biomolecular Chemistry Education and research on development of new methodologies in organic synthesis for drug discovery and chemical biology			
Assistant Professor	Aya Shibata	Biomolecular Chemistry	Education and research of the development of functional molecule using nucleic acids		

生命工学化学領域

Applied Chemistry and Biotechnology Division

役職	教員名	教育 - 研究分野 Educational and Research Area		
Title	Name	名称 Specialization	内容 Theme	
Professor	Kaori Ando	Organic Reaction Chemistry	Education and research on development of new synthetic methods and the reaction mechanism	
Professor	Tetsuro Fujisawa	Structural Biophysics	Education and research on protein dynamics probed by synchrotron radiation	
Professor	Toshiaki Murai	Synthetic Organic Chemistry Education and research of syntheses of valuable organic compounds and development of synthetic reactions		
Professor	Toyokazu Yoshida	Bioprocess engineering Education and research on functional analysis of novel enzymes and application to the synthesis of useful compounds		
Professor	Lee Wah Lim	Instrumental and separation chemistry	Education and research on optimization and application of separation and instrumental analytical systems/devices	
Associate Professor	Natsuhisa Oka	Design of functional molecules	Education and research on design, synthesis, and applications of functional organic molecules	
Associate Professor	Keiichi Kameyama	Biophysical Chemistry Education and research on characterization of biologically related supramolecular assemblies		
Associate Professor	Fumitoshi Shibahara	Design of Transformation in Organic Synthesis Education and research on design of transformations for organic synthesis of valuable compounds		
Associate Professor	Koichi Mitsukura	Biocatalysis and green chemistry Education and research on chemo-biocatalytic synthesis of useful compounds and on screening for novel enzymes and thier applications		
Associate Professor	Hidekazu Miyaji	Supramolecular Chemistry	Education and research on molecular recognition and artificial construction of biological functions by supramolecules	

環境社会基盤工学専攻

Department of Civil and Environmental Engineering

環境領域 Environmental Stud	境領域 vironmental Studies Division As of April 1, 2020				
役職	教員名	参育・研究分野 Educational and Research Area			
Title	Name	名称 Specialization	内容 Thome		
Professor	Tomoyuki Ohtani	Engineering Geology	Geothermal resource geology and fault rock study of active fault		
Professor	Kohji Kamiya	Groundwater engineering	Education and research for groundwater resources management		
Professor	Koichi Kobayashi	Maintenance Engineering	Education and research on evaluation of materials and their deterioration for building infrastructure maintenance systems		
Professor	Seirou Shinoda	Water environmental system dynamics	er environmental system dynamics Education and research work on a system dynamics for the transfer and circulation of water and substance in the water environment		
Professor	Akiyoshi Takagi	Regional Planning	Education and research on regional planning based on socio-economic evaluation of safety, comfort and convenience		
Professor	Ichiro Tamagawa	Hydrometeorology	Energy and water exchange betweem land and atmosphere and atmospheric boundary layer		
Professor	Fusheng Li	Environmental and water quality engineering	Water quality; Water and wastewater treatment; Pollution control; Solid waste treatment and reuse		
Associate Professor	Toshiharu Kojima	Hydrology	Education and investigation of rainfall-runoff process and related various phenomena with remote sensing and GIS		
Associate Professor	Yuki Kojima	invironmental Soil Physics Education and research relevant to coupled heat, water, and chemical transfer in vadose zone			
Associate Professor	Yoshifumi Demura	Urban History, Landscape Planning	Spatial and Historical Study of Urban and Humanized Landscape, Landscape Design		
Associate Professor	Kayako Hirooka	environmental sanitary engineering	Research and Education on recovery of energy and material from wastewater and solid waste, and Energy-saving wastewater treatment technology		

防災領域 <u>Disaster Reduction Studies Division</u>

役職	Studies Division	教育 -研究分野 Educational and Research Area		
Title	Name	名称 Specialization	内容 Theme	
Professor	Yuichi Uchida	Concrete structures	Education and research on the behavior of reinforced concrete elements and of structures	
Professor	Minoru Kunieda	Construction Materials	Advanced construction materials and structures for resilient infrastructures	
Professor	Fumitaka Kurauchi	Transport System Design	Research and education on planning, designing and evaluating transport system for improving its efficiency, safety and sustainability	
Professor	Satoru Kojima	Engineering Geology	Education and research on geological process and natural hazard characteristic of mobile belt like Japanese Islands	
Professor	Kazuhide Sawada	Geotechnical Engineering	Engineering technique and information for prevention or reduction of geo-disaster	
Professor	Nobuoto Nojima	Earthquake Engineering	Seismic Hazard and Risk Assessment and its Application to Earthquake Disaster Prevention and Mitigation	
Professor	Shigeyuki Murakami	Bridge Engineering	Education and Study on Satability, Ductility and Maintainance of Bridge Structures	
Professor	Atsushi Yashima	Geo-Hazard Mitigation	Education & Research on Mitigation of Geo-Hazard	
Associate Professor	Koji Kinoshita	Steel Structural Engineering, Fracture Mechanics, Earthquake Engineering	Seismic performance and fatigue performance of bridges: linear and nonlinear analytical techniques for bridges subject to dynamic loads, earthquake and aging protective systems, and experimental large-scale bridges testing	
Associate Professor	Masumitsu Kuse	earthquake engineering	Prediction of ground motion, Estimation of the fault model based on the strong motion records	
Associate Professor	Maki Koyama	Disaster Risk Reduction, Earthquake Engineering	Mechanism of human casualties and building disaster resilient communities	
Associate Professor	Morihiro Harada	River Engineering	River basin management harmonized with disaster prevention and environmental conservation	
Assistant Professor	Keisuke Ohashi	River Engineering	Computational Grain Sizing, Discharge measurement, and Surface Water-Groundwater Interaction	
Assistant Professor	Kazuhiro Miyachi	Steel Structure, Structural Mechanics	Education and research on evaluation of corrosion and fatigue of suspended bridge cable	

物質・ものづくり工学専攻 Department of Materials Science and Processing

物質化学領域

Materials Chemistr	As of April 1,				
役職	教員名	教育 • 研究分野 Educational and Research Area			
Title	Name	名称 Specialization	内容 Theme		
Professor	Shigeyuki Uemiya	Reaction and separation engineering	Research and education on reaction and separation materials for environmentally-friendly chemical reaction processes		
Professor	Masahiro Ebihara	Physicochemical Properties of Coordination Compounds	Structure and physicochemical properties of coordination compounds and their assembled ones		
Professor	Yutaka Ohya	Inorganic Materials Chemistry and Engineering	Education and researches on processing and properties of ceramics		
Professor	Shoichi Kutsumizu	Soft Matter Chemistry	Development of self-assembled materials such as liquid-crystalline and polymeric materials and elucidation of their structure-property relationship		
Professor	Mamoru Koketsu	Functional Organic Molecular Chemistry	Study on preparation, analysis and characterization of functional organic molecule		
Professor	Osamu Sakurada	Processing of Inorganic Materials	Study and education on processing, characterization and analysis of inorganic materials		
Professor	Mutsuhiro Shima	Materials Science	Materials science with particular focus on investigating structure-property relationships in functional magnetic nanomaterials and composites		
Professor	Takashi Sugiura	Photoelectrochemistry	Synthesis and characterization of semiconductors for photoelectrochemical application		
Professor	Akiyoshi Takeno	Functional polymer materials	Education and research on the functional polymer materials covering structure-property relationship and control		
Professor	Takayuki Ban	Inorganic Materials Chemistry	Education and research on the syntheses of ceramic nanomaterials by solution processes and their characterization methods		
Professor	Kazumasa Funabiki	Design of Functional Organic Molecule	Study and education on the synthesis of useful organic molecules and evalution of their properties		
Associate Professor	Kazuhiro Uemura	Coordination Chemistry	Education and Studies on the Synthesis and Physical Properties of Novel Assembled Coordination Compounds		
Associate Professor	Yasunori Oumi	Separation materials and engineering	Development of the design method and function elucidation of separated materials for realizing low environmental load process		
Associate Professor	Hiroshi Kimura	Polymer&Surface Chemistry	Education and research relevant to behavior and functional development of surface in polymeric system		
Associate Professor	Kenichi Komura	Materials for Catalyst & Catalysis Chemistry	Education and research on catalyst design for environmental benign chemical process.		
Associate Professor	Yuji Naruse	Structual organic chemistry	Research and education on design of molecules and reactions and their applications for materials		
Associate Professor	Kazuhiro Manseki	Materials science for photoenergy conversion	Development of solar cells and photocatalysts using organic-inorganic hybrid systems		
Associate Professor	Manabu Miyamoto	Reaction and Separation Engineering	Catalysis, adsorption and membrane separation using porous materials		
Associate Professor	Yohei Miwa	Chemistry in Molecular Assembly	Research and Education in Field of Self-Assemble Polymers and Liquid Crystals		
Assistant Professor	Toshiyasu Inuzuka	Natural Product Chemistry	Isolation, structure elucidation and biological activity evaluation of novel natural products		
Assistant Professor	Taro Udagawa	Quantum and computational chemistry	Development of computational methods for quantum mechanics and its applications		
Assistant Professor	Yasuhiro Kubota	Organic Functional Chemistry	Molecular design and synthesis of functional dyes		
Assistant Professor	Chika Takai	Design of Functional Inorganic Nanoparticles	Research and Education on Design of Functional Inorganic Nanoparticles and Control of their Dispersibility		
Assistant Professor	Shinya Takahashi	Synthesis and properties of functionalized interface materials	Education and research on molecular design of polymeric materials with functionalized interface and its control of functionality		
Assistant Professor	Keisuke Yamada	Spintronics	Education and research on fabrication of nano magnetic materials and evaluation of these physical properties		
Assistant Professor	Michiyuki Yoshida	Ceramic Materials	Education and research for structural and material design based on powder technology		

設計生産領域 Materials Processing Division

Materials Process	terials Processing Division				
役職 Title	教員名	教育 ·研究分野 Educational and Research Area			
	Name	名称 Specialization	内容 Theme		
Professor	Yoshihiko Uematsu	Strength and Fracture of Materials	Research and education for the understanding of fracture mechanisms of engineering materials, improvement of structural reliability and fracture prevention.		
Professor	Hiroyuki Kousaka	Functional Surface Manufactureing	Resrach and education on functional surface manufacturing focusing on tribology and plasma technologies		
Professor	Asami Nakai	Engineering of Composites Education and research on basic theory on molding, structure, properties, and functions of composite materials and its application			
Professor	Kisaragi Yashiro	Computational Materials Science	Research and education on various computational approaches for deformation and fracture of solid materials		
Professor	Minoru Yamashita	Plasticity engineering	Research and education of elastic plastic deformation and plastic forming process of solid materials, and their numerical simulation		
Professor	Zhigang Wang	Combined forming processes	Development of combined forming processes to make precise products with complicated shapes		
Associate Professor	Yoshihiro Inoue	Complex Turbulent Shear Flow	Research and education of instrumentation system development and data analysis for turbulent structures in complex shear flows		
Associate Professor	Toshifumi Kakiuchi	Strength and Fracture of Materials Education and study on evaluation of strength in materials used for machine structures.			
Associate Professor	Makoto Niikawa	Processing engineering Research and education on various processing phenomena focusing on die and mold			
Associate Professor	Yoshinori Yoshida	dvanced Structural Materials Study on engineering stractural materials and its control deformation processing technology			

知能理工学専攻 Department of Intelligence Science and Engineering

知能機械領域 Intelligent Mechanical Engineering Division

知能機械領域 Intelligent Mecha	DiteIge構成調測 UnitedDateStateStateStateStateStateStateStateS				
- 役職 Title	教員名	載宵 ·研究分野 Educational and Research Area			
	Name	名蒂 Specialization	内容 Theme		
Professor	Satoshi Ito	Engineering of intelligent control systems	Education and research on motor control systems of humans and robots		
Professor	Minoru Sasaki	Electromechanical control engineering	Education and research on computer-controlled electromechanical systems, robotics engineering and modern control theory		
Professor	Takeshi Miyasaka	Space Propulsion Engineering	Education and Research on plasma and physical gas dynamics of space propulsion systems		
Professor	Takayoshi Yamada	Industrial Robotics and Mechatronics	ndustrial Robotics and Mechatronics Education and Research on Robotics, Mechatronics, and Robotic Assembly		
Professor	Hironao Yamada	Computer Control Engineering	Education and research on computer control engineering, image processing, human support engineering		
Professor	Hidehiko Yamamoto	Intelligent Production Engineering	Education and Reserach on Intelligent Systems Development for Factory's Design, Controls and Operations		
Associate Professor	Kazuaki Ito	Motion control	Education and research on advanced motion control for mechatronic systems		
Associate Professor	Takuya Kawamura	Human informatics	Education and Research on Perceptual information processing (Tactile sensor, Contact sensing processing), Experimental psychology (Tactile sensation, Sensitivity), Mechatronics		
Associate Professor	Hirohisa Tamagawa	Polymeric materials	Volymeric materials Education and Research on Fabrication of electroactive polymer, Elucidation of electric characteristics of hydrophillic polymer		
Associate Professor	Gakuji Nagai	Computational Engineering	Computational Engineering Education and Research on Strength of Materials, Finite Element Method for Smart Materials, High Performance Computing, Visualization		
Associate Professor	Tetsuya Mouri	Intelligent Machanical Engineering	Education and Research on System Integration of Robotics and Virtual Reality		
Associate Professor	- Kojiro Matsushita	Human Assist Robotics	Education and research on motion & bio-signal analysis and autonomous robots for human assist		

知能情報学領域

Informatics Divisi	formatics Division				
役職 Title	教員名	後 第 - 第93(2) 野 Educational and Research Area			
Title	Name	名称 Specialization	内容 Theme		
Professor	Hiroshi Kamabe	Information Theory and Coding Theory	Information Theory and Coding Theory for Input Constrained Channels and Application of Theory of Symbolic Dynamical System		
Professor	Keiichirou Kusakari	Program Theory	Research on computational models that are mathematical models and define the semantics of functional programs, and formal verification of functional programs		
Professor	Fumihiko Saitoh	Image Engineering	Learning and research for image sensing system and image recognition algorithm		
Professor	Masahiro Tanaka	Computer Simulation	Education and research on computational methods, numerical techniques, and algorithms in computer simulation		
Professor	Satoru Hayamizu	Media Informatics	Education and research on media informatics		
Professor	Takeshi Hara	Medical Image Analysis and Processing	Quantitative imaging and computerized analysis for medical images		
Professor	Miwako Mishima	Discrete Mathematics and its Applications	Education and research on digital communications, cryptography, and their underlying algebra and combinatorics		
Professor	Yasunari Yokota	Signal and Image Processing Education and study related to processing and analysis for sound, biological signals, images, and videos.			
Professor	Tadashi Yamaguchi	Numerical Analysis	Education and Research on Coupled Analysis between Recent Finite Element Method and Various Equations		
Associate Professor	Kunihito Kato	Computer Vision	Image processing, Image recofnition, Computer Vision		
Associate Professor	Yoshihiro Kaneko	Network Theory	Education and research based on graph-theoretic network system		
Associate Professor	Ryugo Kijima	Human Computer Interaction	Human sensation and perception for interfacing to computer, especially for Virtual Reality.		
Associate Professor	Motoki Shiga	Data Science	Theory of statistical data analysis and its applications on science and engineering		
Associate Professor	Xiangrong Zhou	High-dimensional medical image processing	Education and research on automatic recognition, extraction, modeling and application of human body information from high-dimensional medical images		
Associate Professor	Yu Suzuki	Data Engineering	Education and research of data analysis based on data centric approach		
Associate Professor	Satoshi Tamura	Multimodal processing	Integration, application and information processing of multiple modalities such as audio and visual ones		
Associate Professor	Kazunori Terada	Intelligent Interaction	Education and research on intelligent interaction between human-human and human-machine		
Associate Professor	Michiko Harayama	Information networks	Computer network architechture of the Internet.		
Associate Professor	Tadahiro Matsumoto	Natural Language Processing	Education and research on computer processing and representations of natural language		
Associate Professor	Masami Mohri	Coding Theory and Network Security	Fundamental theory for improving security and reliability of media communications and its application to communication service		
Assistant Professor	Hidekazu Fukai	Biological Signal Processing	Studies on from systems biology to cognition by signal processing and statistical science		
Assistant Professor	Shan Lu	Information theory and coding theory for multiuser communications	Research and education on the evaluation of the theoretical limits and encoding/decoding methods to approaching the theoretical limits for multiuser communications		

芯用数学物理領域					
Applied Mathematic	cs and Physics Division 改員名	徽首·研究分野 Educational and Research Area			
Title	Name	名称 Specialization	內容 Thome		
Professor	Masato Aoki	Computational Materials Science	Modeling and prediction of materials by theoretical and computational methods		
Professor	Hiroyuki Usami	Differential equations	ferential equations Asymptotic analysis of ordinary differential equations and partial differential equations		
Professor	Atsushi Kameyama	Dynamical Systems	amical Systems Mathematics of vector fields, discrete dynamical systems, and chaos		
Professor	Takamichi Terao	Computational science and engineering	mputational science and engineering Computational physics (colloids, soft materials, metamaterials), molecular simulations, high-performance computing		
Associate Professor	Nobuo Kashiwagura	Materials science	Education and research on thin film semiconductor and functional ceramics		
Associate Professor	Takako Kuzumaki Kobayashi	Number theory	Education and the study on classical algebraic number theory and analytic number theory		
Associate Professor	Shintaro Kondo	Mathematical analysis	Education and research on mathematical analysis of nonlinear differential equations describing plasma phenomena and reaction diffusion equations		
Associate Professor	Hideo Sakamoto	quantum many-body physics	Quantum many-body problems, nuclear structure, collective motions and particle interactions		
Associate Professor	Hiroshi Takaba	Radio Astronomy	Study and education of Radio Astronomy and technical research on it		
Associate Professor	Takahiro Nitta	Biophysics, Polymer physics	ophysics, Polymer physics Research and education on soft materials and biomaterials		
Associate Professor	Kouji Yamamuro	he theory of stochastic processes Education and the study of mathematical theory of additive processes			
Assistant Professor	Shota Ono	heoretical condensed matter physics A theoretical study of ultrafact phenomena in condensed matters, e.g., Nonequilibrium dynamics of elementary excitations, thermalization, etc./ A theoretical study of annocacle physics, e.g., Noncorbons, 20 materials, organic solar cells, etc.			
Assistant Professor	Hiroshi Sudou	Radio astronomy	Astrometry, blackhole astronomy		

エネルギー工**学専攻** Department of Energy Engineering

エネルギー変換領域

nergy Conversion Division As of April 1, 20				
役職 Title	教員名		截肯 · 研究分野 Educational and Research Area	
Title	Name	名称 Specialization	内容 Theme	
Professor	Hiroshi Asano	Energy systems engineering	System analysis and evaluation of energy systems including distributed energy resources and power systems	
Professor	Yoshinori Itaya	Energy Process Engineering	Education and Research on environmental friend efficient energy process utilizing thermal equilibrium or thermodynamically non-equilibrium states	
Professor	Shinji Kambara	Energy and Environmental Engineering	R&D of energy and environmental engineering by plasma chemistry and photochemistry.	
Professor	Tomonao Kobayashi	Natural Energy	Evaluation and prediction of electric power generation of photovoltaic systems based on weather forecasting, and prediction of waves and physical processes in the ocean	
Professor	Masaharu Komiyama	Thermal Engineering	Education and research on development of measuring method of thermal fluid including reactivity and investigation of real phenomena and its application	
Professor	Shuhei Takahashi	Reacting Thermo-fluid Engineering	Education and research on thermo-fluid phenomena with chemical reaction	
Professor	Tsuguhiko Nakagawa	Energy Systems Engineering	Education and research on innovative processes and energy systems integrated with mutual energy conversion of chemical energy, heat and electricity	
Professor	Yuichi Matsumura	Vibration Engineering	Education and research on the elucidation and its application of the occurrence mechanism of acoustics and vibration	
Associate Professor	Satoshi Kikuchi	Fluid Engineering	Education and research of investigations and control of fluid flow phenomena	
Associate Professor	Nobusuke Kobayashi	Energy conversion process	Study and Education on High Efficiency Energy Conversion Process with Solid-Gas Reaction	
Associate Professor	Yasushi Sobajima	Energy-Conversion Optoelectronic Engineering	Study on new process control technologies for high grade photovoltaic device preparation	
Associate Professor	Satoshi Nishida	Light Energy Conversion Process Engineering	Analysis of chemical reactions and gas flow in plasma enhanced CVD process	
Associate Professor	Kohei Furuya	Acoustics and Vibration engineering	Education and research on development of numerical method to predict vibration and acoustic phenomenon and its application.	
Associate Professor	Norimitsu Yoshida	Energy-Conversion Optoelectronic Engineering	Education and rearch on optical and electronic properties of semiconductors for thin film solar cells	
Associate Professor	Jun Yoshino	Natural Energy	Estimation, prediction, and control on natural energy and environment based on high-resolution meteorological and oceanographic models	
Assistant Professor	Kazuhiro Kumabe	Integrated energy-recirculation system engineering	Education and research on developments of highly-efficient and environmentally-friendly energy system and reduction method of environmental pollutant	
Assistant Professor	Yoshinari Kobayashi	Aerospace Engineering, Combustion Engineering	Education and research on combustion science and application to aerospace propulsion systems	

電気エネルギー領域

Electrical	and Energy	System	Engineering	Division

Electrical and Energy System Engineering Division				
役職 Title	教員名	载育 • 研究分野 Educational and Research Area		
nue	Name	名称 Specialization	片頭 Theme	
Professor	Hiroki Ishikawa	Power Electronics	Reseach and education on power conversion and the related applications.	
Professor	Takashi Itoh	Electronic Materials Engineering	Study and education on evaluation of fundamental properties of electronic materials mainly semiconductors and their application to devices such as solar cells	
Professor	Daohong Wang	Electric energy engineering	Lightning physics, Lightning protection, Photovoltaic power	
Professor	Hiroshi Kimura	Information and Communication Technology	Education and research on microwave remote sensing including processing and analysis of radar signals, scattering of EM wave and measurement by EM wave technique	
Professor	Tetsuji Kume	Solid State Physics and Engineering in High Pressure	Education and Investigation on Optical Properties in Functional Materials of Condensed Matter under High Pressure	
Professor	Shigeo Sasaki	High Pressure Materials Science	Education and study of the exploration of novel phenomena for molecular solids and gas hydrate compounds by using high pressure generation technique and the estimation of their physical and electronic properties	
Professor	Nobuyuki Takagi	High voltage engineering	High voltage testing and measurement, Lightning overvoltage, Protection against lightning	
Professor	Makoto Nakamura	Integrated Circuit Engineering	Studies on optical-electrical interface circuits for optical communication systems	
Professor	Chuzo Ninagawa	Smart Grid	Smart grid, Fast automated demand response, Virtual power plant, Building facilities, Machine Learning	
Professor	Hiroyuki Fujiwara	Semiconductor Device Engineering	Fabrication of solar cells based on new materials and construction of solar cell device simulators	
Professor	Hiroki Yoshida	Energy Generation and System	Laser engineering, fusion related quantum optics, renewable energy generation and system	
Associate Professor	Fumitaka Ohashi	Semiconductor engineering	Education and research on characterizations of fundamental properties of novel materials and reliability of photovoltaic modules	
Associate Professor	Hidehiro Ohwa	Dielectric Engineering	Education and research on basic characteristics and applications of electronic materials centering on dielectrics	
Associate Professor	Masafumi Sakata	Structural Materials Science under High Pressure	Education and research on structural change of material and novel electronic properties such as superconductivity under extremely high pressure	
Associate Professor	Yasuhiro Takahashi	VLSI design	Low-voltage and Low-power digital/analog design of cryptographic VLSI using adiabatic logic, and front-end ICs for optical communication	
Associate Professor	Hirotaka Takano	Power Engineering	Energy Management Technologies for Electric Power Suppliers and Consumers	
Associate Professor	Kazuyasu Hamada	System Engineering	System Engineering which investigates common principle among various kinds of real physical systems such as networked or computer controlled systems.	
Associate Professor	Koji Hayashi	Semiconductor Electronics	Study on novel opto-electronic functional materials: Amorphous semiconductor materials, Nano crystals	
Associate Professor	Shintaro Hisatake	Terahertz Photonics	Generation, manipulation, and detection of millimeter-wave and terahertz wave based on photonics technology	
Associate Professor	Kyyoul Yun	Soft magnetic material science	Dissimilar metal bonding and soft magnetic material properties measurement & applications	
Assistant Professor	Ting Wu	Atmospheric Electricity	Lightning physics, lightning observation technology, lightning protection technology	
Assistant Professor	Daisuke Ito	Electrical engineering	Circuit designe and functional systems for high-speed optical communications	
Assistant Professor	Yusuke Kimura	High Pressure Materials Science	Education and study on structures and ionic properties of superionic conductors under high pressure	
Assistant Professor	Tatsuo Suzuki	System Theory	Mathematical System Theory which investigates common principles among various kinds of systems including signal/image processing or aerospace systems.	