

Research Institute of Basic Sciences
Incheon National University

Newsletter

인천대학교 기초과학연구소 뉴스레터
한국연구재단 지정 대학중점연구소

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2024-1 운영위원회		
직위	학과(부)	성명
소장	화학과	김태현
운영위원	수학과	문병수
	화학과	김형준
	물리학과	박승룡
	해양학과	김연정
	생명과학부	이종구
상임연구원	기초과학연구소	강유리
박사후연구원	기초과학연구소	장 훈

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2023년도 연구소 실적 현황

1-1. 연구소 지원 현황 (2023.01.01 ~ 2023.12.31)

연구책임자	소속	과제명	지원기관
권태현	화학과	고분자전해질 전기화학 소자 고내구화를 위한 자가 표면 재생형 레독스 나노 산화방지제 개발 : 2년차	한국연구재단
권형욱	생명과학부	내츄라지과립(스피노사드)제품의 살충효과 평가 : 1년차	주식회사 팜클
		잡스뉴올킬스마트유제(델타메트린)제품의 살충효과 평가	주식회사 팜클
그레고리 아이작 피터슨	화학과	불 밀 그라인딩을 이용한 고체상 기계화학적 반응성에 미치는 고분자 물성의 영향 : 3년차	한국연구재단
김규원	화학과	아미노산 기반 첨가제를 활용한 다차원 나노구조의 제조와 이 나노구조를 이용한 전기화학 및 분광학적 응용 : 2년차	한국연구재단
김성연	교육대학원	특성화고 미래 인재 양성을 위한 지속가능 산업수학의 디지털 지식 기반 적응형 교육 구현 : 2년차	한국연구재단
김연정	해양학과	비토양조건하에 분해가능한 생분해성 바이오플라스틱 제조 및 제품화기술 개발 : 2년차	한국산업기술 평가관리원
		생분해성 플라스틱의 해양 생태독성평가 외주용역 : 1년차	한국건설생활 환경시험연구원
김장균	해양학과	information and samples regarding the evaluation of a microporous based membrane, fiber, weave, knit, tape or twine as a cultivation substrate in seaweed cultivation. : 1년차	W.L.Gore & Associates, Inc.
		해조류 기원 생물촉진물질 처리에 따른 양식 해조류의 고온 내성 증대와 유전적 메커니즘 연구 : 2년차	한국연구재단
		기수습지 가치증진을 위한 조성 및 복원 기술개발 : 1년차	한국환경산업기술원
김진호	화학과	Quaternized Trimethylamine이 그래프팅된 장 기유치용 혈액투석카테터 개발 : 1년차	중소기업 기술정보진흥원
		Quaternized Trimethylamine이 그래프팅된 장 기유치용 혈액투석카테터 개발 : 2년차	중소기업 기술정보진흥원
		아조/하이드라진의 산화환원을 이용하는 유산소 산화반응에 관한 연구 : 3년차	한국연구재단
		다질소 헤테로 고리 화합물 합성을 위한 유산소 산화적 고리화 반응 개발 : 1년차	한국화학연구원

1-1. 연구소 지원 현황 (2023.01.01 ~ 2023.12.31) -계속-

연구책임자	소속	과제명	지원기관
김태현	화학과	분자구조의 제어를 통한 고성능 이산화탄소 분리막 소재 개발 : 2년차	한국연구재단
		그린수소 생산을 위한 음이온교환막을 활용한 5kW급 수전 해장치용 막전극 접합체 개발 : 3년차	한국산업기술 평가관리원
김형준	화학과	인공지능기반 태양전지 소재 설계를 위한 양자 수준 검증 시스템 구현 및 적용 : 1년차	한국과학기술 정보연구원
		단일항 분열 과정 내 전하 이동 상태의 역할을 이해하기 위한 양자화학 방법론 개발 : 2년차	한국연구재단
박미라	기초과학연구소	동토 바이러스의 다양성 및 온난화에 따른 반응 연구 : 3년차	한국연구재단
박지숙	기초과학연구소	해조류 군집과 주변 퇴적물의 탄소흡수원 적용 가능성 평가 : 2년차	한국연구재단
방지원	화학과	다중엑시톤 거동 제어 가능한 콜로이드 반도체 나 소소재 디자인 및 레이저용 이득매질 및 고효율 광촉매 소재 개발 : 2년차	한국연구재단
		초대형 마이크로 LED 디스플레이 제작을 위한 초 고화질 장수명 색변환 소재공정 및 핵심 모듈 개발 : 2년차	한국산업기술 평가관리원
유성민	수학과	버그만 계량을 가지는 복소 다양체의 기하학 : 1년차	한국연구재단
임태은	화학과	고결착/비전자전도 특성 기반 고용량 이차전지 양극 소재 계면 형성 기능성 전해액 첨가제 개발 : 2년차	한국연구재단

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31)

연번	제목	저자명	게재지명	게재일자
1	SIMULTANEOUS APPROXIMATION OF MULTIVARIATE FUNCTIONS BY SUPERPOSITION OF A SIGMOIDAL FUNCTION	함남우	Journal of Analysis and Applications	2023-09-01
2	Selberg's central limit theorem of L-functions near the critical line	이윤복	JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS	2023-11-01
3	Nonexistence of periodic peaked traveling wave solutions to a rotation mu-Camassa-Holm equation with Coriolis effect	문병수	NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS	2023-04-01
4	Qualitative properties of solution to a viscoelastic Kirchhoff-like plate equation	문병수	JOURNAL OF MATHEMATICAL PHYSICS	2023-05-01
5	Unipotent Quantum Coordinate Ring and Prefundamental Representations for Types A_{n-1} and D_{n-1}	장일승	INTERNATIONAL MATHEMATICS RESEARCH NOTICES	2023-01-19
6	Crystal base of the negative half of the quantum superalgebra $U_q(\mathfrak{gl}(m n))$	장일승	JOURNAL OF ALGEBRA	2023-12-01
7	Zeta functions of Integral Nilpotent Quiver Representations	이승재	INTERNATIONAL MATHEMATICS RESEARCH NOTICES	2023-02-20
8	Expansive operators and Drazin invertibility	김인현	Rendiconti del Circolo Matematico di Palermo	2023-02-28
9	Isometric, Symmetric and Isosymmetric Commuting d-Tuples of Banach Space Operators	김인현	Results in Mathematics	2023-06-01
10	m-isometric tensor products	김인현	Concrete Operators	2023-01-01
11	Contractive symmetric matrix completion problems related to graphs	김인현	LINEAR & MULTILINEAR ALGEBRA	2023-07-03
12	Multiple Solutions to a Non-Local Problem of Schrödinger-Kirchhoff Type in R^N	김인현	Fractal and Fractional	2023-08-17
13	Operators A, B for which the Aluthge transformation AB is a generalised n-projection	김인현	Bulletin of the Korean Mathematical Society	2023-11-26
14	Size estimation of nanoparticle using diffused laser scattering in Mie regime	최수봉	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2023-03-01
15	Probing the optical near-field of plasmonic nanostructure using scanning thermal microscopy	최수봉	NANOTECHNOLOGY	2023-03-05
16	Selective Mapping of Tip-Launched Near-Field Scattering of Surface Plasmon Polaritons for Retrieving Dispersion Relation in Silver Nanoflakes	최수봉	ACS Applied Nano Materials	2023-02-24
17	Enhancing optical contrast of sub-wavelength optical image using graphene oxide coated probe in scanning thermal microscopy	최수봉	APPLIED PHYSICS LETTERS	2023-05-25
18	Collective magnetic Higgs excitation in a pyrochlore ruthenate	박승룡	NPJ Quantum Materials	2023-08-11
19	Linear scaling relationship of Néel temperature and dominant magnons in pyrochlore ruthenates	박승룡	PHYSICAL REVIEW B	2023-08-31
20	Correlation of the crystal features, magnetic parameters, and electronic structure of Bi-substituted $BaFe_{12-x}Bi_xO_{19}$ hexaferrites: Theoretical background	엇후 도르츠	Ceramics International	2023-05-15

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
21	First-Principles and Experimental Studies of Structural, Electronic, and Magnetic Properties of Nickel Substituted Magnesium Ferrite Spinel	엠후 도르츠	Journal of Surface Investigation	2023-04-01
22	Excellent Energy Storage Performance of (Sc _{0.5} Ta _{0.5}) ₄ + Modified (Bi _{0.5} Na _{0.5})TiO ₃ -based Ceramics Modulated by the Evolution of Polar Phases	엠후 도르츠	Journal of Materials Chemistry A	2023-07-04
23	Electrochemical manipulation of spin reorientation in FePO ₄ by Li-ion intercalation	엠후 도르츠	JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS	2023-11-15
24	Understanding the oxidation chemistry of Ti ₃ C ₂ T _x (MXene) sheets and their catalytic performances	엠후 도르츠	Journal of Energy Chemistry	2023-09-28
25	Electrically-driven magnetization reorientation at the Fe/PbTiO ₃ interface	엠후 도르츠	Journal of Physical Chemistry C	2023-11-17
26	Fe-Ni based alloys as rare-earth free gap permanent magnets	엠후 도르츠	ACTA MATERIALIA	2023-10-09
27	Enhancing heat generation ability and magnetic properties of MgFe ₂ O ₄ with Ni substitutes for biomedical applications	엠후 도르츠	Materials Today Chemistry	2023-11-30
28	Etchant-based chemical doping of large-area graphene and the optical characterization via terahertz time-domain spectroscopy	박영미	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2023-01-01
29	Terahertz conductivity of high-quality indium films deposited using a substrate cooling method	박영미	CURRENT APPLIED PHYSICS	2023-08-01
30	Unusual stacking sequence of MoS ₂ and WS ₂ vertical heterostructures in one-pot chemical vapor deposition growth	한강희, 문병희	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2023-01-01
31	Etchant-based chemical doping of large-area graphene and the optical characterization via terahertz time-domain spectroscopy	한강희	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2023-01-01
32	GeAs as an emerging p-type van der Waals semiconductor and its application in p-n photodiodes	한강희, 문병희	NANOTECHNOLOGY	2023-05-17
33	Hybrid graphene electrode for the diagnosis and treatment of epilepsy in free-moving animal models	김정우	NPG Asia Materials	2023-02-17
34	Enhanced Electron Correlation and Significantly Suppressed Thermal Conductivity in Dirac Nodal-Line Metal Nanowires by Chemical Doping	김정우	Advanced Science	2023-01-01
35	Optoelectronic Manifestation of Orbital Angular Momentum Driven by Chiral Hopping in Helical Se Chains	김정우	ACS Nano	2023-09-29
36	Spin and valley-polarized multiple Fermi surfaces of α -RuCl ₃ /bilayer graphene heterostructure	김정우	APPLIED PHYSICS LETTERS	2023-10-01
37	First-principles study on the d-band center of Pt alloyed with 3d transition metals	김정우	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2023-10-18
38	Recent Advances and Challenges toward Efficient Perovskite/Organic Integrated Solar Cells	이진호	Energies	2023-01-01
39	Perovskite and organic bulk heterojunction integrated solar cells: a mini review	이진호	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2023-02-01
40	Enhanced performance of organic and perovskite solar cells using simple linear polyethyleneimine with reduced chemical reactivity	이진호	SYNTHETIC METALS	2023-05-01

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
41	Impact of solvents on doctor blade coatings and bathocuproine cathode interlayer for large-area organic solar cell modules	이진호	Heliyon	2023-07-12
42	High efficiency CZTSSe solar cells enabled by dual Ag-p assivation approach via aqueous solution process	김준호	Journal of Energy Chemistry	2023-02-01
43	Identifying the relationships between subsurface absorber defects and the characteristics of kesterite solar cells	김준호	Carbon Energy	2023-03-10
44	Efficiency Improvement of Narrow Band Gap Cu(In,Ga)(S,Se) ₂ Solar Cell with Alkali Treatment via Aqueous Spray Pyrolysis Deposition	김준호	ACS Applied Materials & Interfaces	2023-05-04
45	Effects of alkaline earth metal doping on garnet Li ₇ La ₃ Zr ₂ O ₃	김준호	Results in Physics	2023-10-01
46	High Efficiency Kesterite Solar Cells Through a Dual Treatment Approach: Improving the Quality of both Absorber Bulk and Heterojunction Interface	김준호	Advanced Energy Materials	2023-11-24
47	Efficient synthesis of pyrrolo[1,2- α]quinoxalines mediated by ethyl 2-(4-nitrophenyl)azocarboxylate	김진호	NEW JOURNAL OF CHEMISTRY	2023-01-23
48	One-Pot Synthesis of 1,3,4-Oxadiazines from Acylhydrazides and Allenolates	김진호	MOLECULES	2023-04-29
49	Discovery of dual inhibitors of pan-RAF and VEGFR2	김진호	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2023-06-14
50	A preparative small-molecule mimic of liver CYP450 enzymes in the aliphatic C-H oxidation of carbocyclic N-heterocycles	김진호	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2023-07-10
51	Improvement of the metabolic stability of pan-RAF/VEGFR2 dual inhibitors	김진호	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2023-09-03
52	1,1,2,2-Tetrafluoroethyl-2,2,3,3-tetrafluoropropyl ether as an advanced electrolyte additive for SiOx-based lithium-ion batteries	임태은	Journal of Alloys and Compounds	2023-01-10
53	Investigation of reduced lithium titanate spinel as insertion host for rechargeable batteries	임태은	KOREAN JOURNAL OF CHEMICAL ENGINEERING	2023-03-01
54	Fluorine- and Maleimide-functionalized Electrolyte Additive as an Interface Modifier for Ni-rich LNMC/SiOx Batteries	임태은	CURRENT APPLIED PHYSICS	2023-02-01
55	Electroless-deposition of AuPd Alloy on Prussian blue Derived Hematite/AuPd Catalyst: Synergistic Effect and Potent Reusable Catalyst for Treating Environment Pollutants	임태은, 김규원	Materials Science and Engineering B-Advanced Functional Solid-State Materials	2023-04-01
56	Bis(fluorosulfonyl)imide- and Allyl-functionalized Electrolyte Additive as an Interface Stabilizer for Li-metal Batteries	임태은	APPLIED SURFACE SCIENCE	2023-03-30
57	Edge-Protected Ni-Enriched Li _{Nix} Co _y Mn _z O ₂ Cathode Materials by Interface Modification with a Si- and F-Functionalized Surface Modifier	임태은	ACS Sustainable Chemistry & Engineering	2023-03-20
58	A High-Performance Self-Healing Polymer Binder for Si Anodes Based on Dynamic Carbon Radicals in Cross-linked Poly(acrylic acid)	임태은, 김태현	Chemical Engineering Journal	2023-08-01
59	Triallyl Borate as an Effective Separator/Cathode Interphase Modifier for Lithium-ion Batteries	임태은	Journal of Electrochemical Science and Technology	2023-08-31
60	Regulating electrostatic phenomena by cationic polymer binder: Toward scalable high-area-capacity Li battery electrodes	임태은	Nature Communications	2023-09-15

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
61	Tri-functionalized electrolyte additive as an interfacial stabilizer for lithium metal anodes	임태은	Journal of Industrial and Engineering Chemistry	2023-11-25
62	Accurate detection of enzymatic degradation processes of gelatin–alginate microcapsule by 1H NMR spectroscopy: Probing biodegradation mechanism and kinetics	강동구	Carbohydrate Polymers	2023-03-15
63	Multiplexed detection of single-point mutations in unprocessed human serum with SERS-integrated PCR	강동구	SENSORS AND ACTUATORS B-CHEMICAL	2023-11-10
64	Polydiacetylene-based hydrogel beads as colorimetric sensors for the detection of biogenic amines in spoiled meat	김형준	Food Chemistry	2023-03-01
65	Dual-State Emission and Two-Photon Absorption Tuned by Benzonitrile Substitution in 2,3,4,5-Tetraphenyl-1H-Pyrrole	김형준	ChemPhotoChem	2023-06-01
66	Constrained density functional theory calculations for estimation of forward and backward intermolecular charge transfer energy	김형준	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2023-08-01
67	All-natural water-resistant paper coated by chitosan nanowhiskers through hydrophilic-to-hydrophobic self-assembly	김형준	PROGRESS IN ORGANIC COATINGS	2023-05-23
68	Depolymerization of poly(alpha-methyl styrene) with ball-mill grinding	김형준, 그레고리 아이작 피터슨	JOURNAL OF POLYMER SCIENCE	2023-04-01
69	Leveraging Charge-Transfer Interactions in Through-Space Coupled Pentacene Dendritic Oligomer for Singlet Exciton Fission	김형준	Journal of the American Chemical Society	2023-07-24
70	Molecular dynamics interpretation of hydrogen bonds for colorless, water-resistant, tough, and self-healable elastomers	김형준	Journal of Materials Chemistry A	2023-11-01
71	The influence of chain scission on the molecular weight of conjugated polymers in a continuous flow reactor	그레고리 아이작 피터슨	POLYMER DEGRADATION AND STABILITY	2023-09-01
72	Monodisperse Cyclic Polymer Mechanochemistry: Scission Kinetics and the Dynamic Memory Effect with Ultrasonication and Ball-Mill Grinding	그레고리 아이작 피터슨	Journal of the American Chemical Society	2023-07-24
73	Comparing molecular weight models for polymer degradation with ball-mill grinding	그레고리 아이작 피터슨	POLYMER DEGRADATION AND STABILITY	2023-09-27
74	Crystallinity-modulated hollow CeO ₂ -x nanorods as free radical scavengers for long-term photostability in organic photovoltaics	권태현	Journal of Materials Chemistry C	2023-01-19
75	Heterostructured nanocatalysts to boost the hydrogen evolution reaction in neutral electrolyte	권태현	Chem Catalysis	2023-02-16
76	High single Zn-ion conductive porous organic conductors decorated with dense acidic groups via double post-synthetic sulfonations	권태현	Chemical Engineering Journal	2023-08-15
77	Electrocatalytic upcycling of plastic waste	권태현	GREEN CHEMISTRY	2023-11-07
78	Preparation of Palladium-Doped Nickel Phosphide Nanoparticles as Efficient Electrocatalysts for Alkaline Hydrogen Evolution Reaction	방지원	ChemNanoMat	2023-10-12
79	Anion exchange membranes and ionomer properties of a polyfluorene-based polymer with alkyl spacers for water electrolysis	김태현	APPLIED SURFACE SCIENCE	2023-02-01
80	Understanding the Effect of Triazole on Crosslinked PP O-SEBS-Based Anion Exchange Membranes for Water Electrolysis	김태현	Polymers	2023-04-01

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
81	Development of High-Performance Polymer Electrolyte Membranes through the Application of Quantum Dot Coatings to Nafion Membranes	김태현	ACS Applied Materials & Interfaces	2023-03-29
82	Development of CO ₂ -Philic Blended Membranes Using PIM-PI and PIM-PEG/PPG	김태현	MACROMOLECULAR MATERIALS AND ENGINEERING	2023-05-01
83	Development of crosslinked SEBS-based anion exchange membranes for water electrolysis: Investigation of the crosslinker effect	김태현	INTERNATIONAL JOURNAL OF HYDROGEN ENERGY	2023-07-26
84	Poly(dibenzofuran-p-terphenyl piperidinium)-based anion exchange membranes with enhanced phase separation for water electrolysis	김태현	JOURNAL OF MEMBRANE SCIENCE	2023-12-05
85	1,1-Diethoxyethane as an interfacial-stabilizing solvent for lithium-sulfur batteries	김태현	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2023-11-16
86	Developing Mixed Matrix Membranes with Good CO ₂ Separation Performance Based on PEG-Modified UiO-66 MOF and 6FDA-Durene Polyimide	김태현	Polymers	2023-11-17
87	Development of highly conductive anion exchange membranes based on crosslinked PIM-SEBS with high free volume	김태현	Journal of Materials Chemistry A	2023-11-22
88	Polycarbazole-SEBS-crosslinked AEMs based on two spacer polymers for high-performance AEMWE	김태현	Journal of Materials Chemistry A	2023-12-05
89	In Situ Surface Restructuring of Amorphous Ni-Doped CoMo Phosphate-Based Three-Dimensional Networked Nanosheets: Highly Efficient and Durable Electrocatalyst for Overall Alkaline Water Splitting	김규원	ACS Applied Materials & Interfaces	2023-04-05
90	Crystal structure of bis(trimethylphenylammonium) aqua-oxido-octathiotritungstate, (Me ₃ PhN) ₂ [W ₃ OS ₈ (H ₂ O)]	김강우	ZEITSCHRIFT FUR KRISTALLOGRAPHIE-NEW CRYSTAL STRUCTURES	2023-02-25
91	Crystal structure of potassium bis(pentaseleido- k ₂ Se ₁ , Se ₅)palladate(II), K ₂ [Pd(Se ₅) ₂]	김강우	ZEITSCHRIFT FUR KRISTALLOGRAPHIE-NEW CRYSTAL STRUCTURES	2023-06-27
92	Crystal structure of bis(tetrapropylammonium) dodecarbonyltetratelluridotetraferate(2-), (Pr ₄ N) ₂ [Fe ₄ Te ₄ (CO) ₁₂]	김강우	ZEITSCHRIFT FUR KRISTALLOGRAPHIE-NEW CRYSTAL STRUCTURES	2023-11-17
93	Modeling of microplastics discharged from a station in Marian Cove, West Antarctica	김승규	Marine Pollution Bulletin	2023-01-01
94	Strong regionalism in dinoflagellate cysts in recent sediments from the Chukchi-East Siberian Seas, Arctic Ocean	김승규	PROGRESS IN OCEANOGRAPHY	2023-02-01
95	Microplastics in large marine animals stranded in the Republic of Korea	김승규	Marine Pollution Bulletin	2023-04-15
96	Arctic ocean sediments as important current and future sinks for marine microplastics missing in the global microplastic budget	김승규	Science Advances	2023-07-05
97	Roseovarius pelagicus sp. nov., a facultatively anaerobic bacterium with potential for degrading polypropylene, isolated from Arctic seawater	김승규	INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY	2023-08-10
98	Physiological effects of micro-plastics on the red algae, Grateloupia turuturu and Chondrus sp.	김연정	AQUATIC TOXICOLOGY	2023-08-01
99	Transcriptomic Changes Induced by Low and High Concentrations of Heavy Metal Exposure in Ulva pertusa	김연정, 김장균	Toxics	2023-07-01
100	Oxidative Stress and DNA Damage in Pagrus major by the Dinoflagellate Karenia mikimotoi	김연정, 이재성	Toxins	2023-10-19

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
101	Complete mitochondrial genome of the sea-pen, <i>Cavernularia obesa</i> (Valenciennes, 1850) (Octocorallia: Veretillidae)	이재성	Mitochondrial DNA Part B-Resources	2023-01-02
102	Chronic exposure to environmental concentrations of harmful algal bloom-forming dinoflagellates induces oxidative stress and reduces immune and hepatic functions in red seabream	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2023-04-01
103	The importance of multi-omics approaches for the health assessment of freshwater ecosystems	이재성	Molecular & Cellular Toxicology	2023-01-10
104	Chronic effects of environmental concentrations of antifoulant diuron on two marine fish: Assessment of hormone levels, immunity, and antioxidant defense system	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2023-01-01
105	Comparison of the effects of sublethal concentrations of biofoulants, copper pyrrhione and zinc pyrrhione on a marine mysid - A multigenerational study	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2023-09-01
106	Complete mitochondrial genome of the crinoid <i>Poliometra proluxa</i> (Crinoidea: Comatulida: Antedonidae)	이재성	Mitochondrial DNA Part B-Resources	2023-09-02
107	Acute and chronic effects of the antifouling booster biocide diuron on the harpacticoid copepod <i>Tigriopus japonicus</i> revealed by multi-biomarker determination	이재성	Journal of Marine Science and Engineering	2023-10-01
108	Acute and chronic effects of triclosan on the behavior, physiology, and multigenerational characteristics of the water flea <i>Moina macrocopa</i>	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2023-12-06
109	Transitional traits determine the acclimation characteristics of the coccolithophore <i>Chrysotila dentata</i> to ocean warming and acidification	김일남	ENVIRONMENTAL MICROBIOLOGY	2023-06-01
110	Water mass structure determine the prokaryotic community and metabolic pattern in the Korea Strait during fall 2018 and 2019	김일남	Frontiers in Marine Science	2023-07-21
111	Unraveling prokaryotic diversity distribution and functional pattern on nitrogen and methane cycling in the subtropical Western North Pacific Ocean	김일남	Marine Pollution Bulletin	2023-11-01
112	Assessing photosynthetic uptake of total inorganic carbon in an <i>Ecklonia cava</i> dominated seaweed artificial reef: Population- and community-level metabolisms	김일남	JOURNAL OF APPLIED PHYCOLOGY	2023-11-03
113	Temperature and high nutrients enhance hypo-salinity tolerance of the bloom forming green alga, <i>Ulva prolifera</i>	김장균	HARMFUL ALGAE	2023-03-01
114	<i>Sargassum horneri</i> and <i>Ascophyllum nodosum</i> extracts enhance thermal tolerance and antioxidant activity of <i>Neopyropia yezoensis</i>	김장균, 김연정	JOURNAL OF APPLIED PHYCOLOGY	2023-02-01
115	Comparative transcriptome analysis reveals the molecular mechanism of heat-tolerance in <i>Neopyropia yezoensis</i> induced by <i>Sargassum horneri</i> extract	김장균	Frontiers in Marine Science	2023-03-15
116	Effects of different artificial photosynthetically active radiation (PAR) sources and intensity on the growth and nutrient uptake in <i>Ulva prolifera</i> and <i>Neopyropia yezoensis</i>	김장균	Algal Research-Biomass Biofuels and Bioproducts	2023-05-01
117	Effects of triazine herbicide terbutryn on physiological responses and gene expression in <i>Alexandrium catenella</i>	김장균	JOURNAL OF APPLIED PHYCOLOGY	2023-05-29
118	Ethyl methanesulfonate mutant library construction in <i>Neopyropia yezoensis</i> to provide germplasm resources for next-generation genome-selection breeding	김장균	Frontiers in Marine Science	2023-06-07

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
119	Effects of salinity and irradiance on early developmental stages of <i>Grateloupia turuturu</i> (Halymeniaceae, Rhodophyta) tetrasporophytes	김장균	ALGAE	2023-06-15
120	Population specific responses to temperature and nutrients in the bloom forming <i>Ulva prolifera</i>	김장균	JOURNAL OF APPLIED PHYCOLOGY	2023-11-27
121	Harnessing the power of eDNA technology for macroalgal ecological studies: recent advances, challenges, and future perspectives	김장균	Algal Research-Biomass Biofuels and Bioproducts	2023-12-04
122	Maternal exposure to nanoplastic induces transgenerational toxicity in the offspring of rotifer <i>Brachionus koreanus</i>	정창범	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2023-07-01
123	Toxicological effects of tire rubber-derived 6PPD-quinone, a species-specific toxicant, and dithiobisbenzanilide (DTBBA) in the marine rotifer <i>Brachionus koreanus</i>	정창범	Marine Pollution Bulletin	2023-07-01
124	Environmental DNA surveillance of biocontamination in a drinking water treatment plant	정창범	JOURNAL OF HAZARDOUS MATERIALS	2023-08-15
125	Insights into Tissue-Specific Bioaccumulation of Nanoplastics in Marine Medaka as Revealed by a Stable Carbon Isotopic Approach	정창범	Environmental Science & Technology Letters	2023-09-22
126	Effects of microplastics and phenanthrene on gut microbiome and metabolome alterations in the marine medaka <i>Oryzias melastigma</i>	정창범	JOURNAL OF HAZARDOUS MATERIALS	2023-09-23
127	Nucleolin Regulates Pulmonary Artery Smooth Muscle Cell Proliferation under Hypoxia by Modulating miRNA Expression	강하라	Cells	2023-03-01
128	Small interfering RNA (siRNA)-based therapeutic applications against viruses: principles, potential, and challenges	강하라, 예정용	JOURNAL OF BIOMEDICAL SCIENCE	2023-10-16
129	Platelet-derived growth factor-stimulated pulmonary artery smooth muscle cells regulate pulmonary artery endothelial cell dysfunction through extracellular vesicle miR-409-5p	강하라	BIOLOGICAL CHEMISTRY	2023-10-31
130	Role of cervids in the epidemiology of bovine ephemeral fever virus infection in the Republic of Korea: A cross-sectional retrospective study	예정용	Veterinary Medicine and Science	2023-01-01
131	Prevalence and associated risk factors for <i>Lawsonia intracellularis</i> infection in farmed rabbits: A serological and molecular cross-sectional study in South Korea	예정용	Frontiers in Veterinary Science	2023-02-09
132	Increasing seroprevalence of Japanese encephalitis virus in even-toed hoofed mammals (<i>Artiodactyla</i> species) associated with an upsurge of human cases in South Korea.	예정용	INTERNATIONAL JOURNAL OF INFECTIOUS DISEASES	2023-05-01
133	Epidemiology of Chuzan Virus Infection in Free-Ranging and Farmed Cervids in South Korea: A Seroprevalence Survey	예정용	JOURNAL OF WILDLIFE DISEASES	2023-04-01
134	<i>Hymenobacter canadensis</i> sp. nov. isolated from freshwater of the pond in Cambridge Bay, Canada	예정용	INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY	2023-06-16
135	The Tomato Juhwang Mutant Accumulates a High Level of beta-Carotene and has a Long Shelf-Life	김재광	JOURNAL OF PLANT BIOLOGY	2023-02-01
136	Metabolite Profiling to Evaluate Metabolic Changes in Genetically Modified <i>Protopanaxadiol</i> -Enriched Rice	김재광	Plants-Basel	2023-02-01

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
137	Chemical profiling of insect-resistant rice shows that geographical variations produce greater differences in chemical composition than genetic modifications	김재광, 강기윤	Plant Biotechnology Reports	2023-02-01
138	Metabolic Profiling of Primary and Secondary Metabolites in Kohlrabi (<i>Brassica oleracea</i> var. <i>gongylodes</i>) Sprouts Exposed to Different Light-Emitting Diodes	김재광	Plants-Basel	2023-03-01
139	Suppression of cuticular wax biosynthesis mediated by rice LOV KELCH REPEAT PROTEIN 2 supports a negative role in drought stress tolerance	김재광	PLANT CELL AND ENVIRONMENT	2023-05-01
140	Comparative Analysis of Glucosinolate and Phenolic Compounds in Green and Red Kimchi Cabbage (<i>Brassica rapa</i> L. ssp. <i>pekinensis</i>) Hairy Roots after Exposure to Light and Dark Conditions	김재광	Horticulturae	2023-04-01
141	Impact of Light and Dark Treatment on Phenylpropanoid Pathway Genes, Primary and Secondary Metabolites in <i>Agastache rugosa</i> Transgenic Hairy Root Cultures by Overexpressing Arabidopsis Transcription Factor AtMYB12	김재광	Life-Basel	2023-04-01
142	Effect of media and gelling agents on shoot organogenesis of <i>Liriope platyphylla</i>	김재광	Journal of Phytology	2023-01-02
143	Changes in antioxidant bioactive compounds of <i>Cassia tora</i> Linn. seed during germination	김재광	Cogent Food & Agriculture	2023-12-30
144	Lipids and volatile organic compounds in sesame seeds and their relationships with environmental temperature-induced stress	김재광	FOOD RESEARCH INTERNATIONAL	2023-06-08
145	Influence of Different Types of Carbon Sources on Glucosinolate and Phenolic Compounds in Radish Sprouts	김재광	Horticulturae	2023-06-01
146	Metabolic Engineering to Enhance Provitamin D3 Accumulation in Edible Tomatoes	김재광	GEN Biotechnology	2023-06-20
147	A Frameshift Mutation in the Mg-Chelatase I Subunit Gene <i>OsCHLI1</i> Is Associated with a Lethal Chlorophyll-Deficient, Yellow Seedling Phenotype in Rice	김재광	Plants-Basel	2023-08-01
148	LED Lights Influenced Phytochemical Contents and Biological Activities in Kale (<i>Brassica oleracea</i> L. var. <i>acephala</i>) Microgreens	김재광	Antioxidants	2023-09-01
149	Wheat seedling extract and its constituents attenuate RANKL-induced differentiation and fusion of osteoclasts and bone resorption	김재광	Applied Biological Chemistry	2023-09-26
150	Evaluation of obesity prevention effect of black ginseng on serum, liver, and hypothalamus of mice on a high-fat diet using a metabolomics approach	김재광, 임경환	Applied Biological Chemistry	2023-10-28
151	Comparative Analysis of Anticancer and Antibacterial Activities among Seven <i>Trametes</i> Species	김재광	MYCOBIOLOGY	2023-08-29
152	Metabolite Changes in Soybean (<i>Glycine max</i>) Leaves during the Entire Growth Period	김재광	ACS Omega	2023-10-24
153	Metabolite profiles and biological activities of different phenotypes of Chinese cabbage (<i>Brassica rapa</i> ssp. <i>pekinensis</i>)	김재광	FOOD RESEARCH INTERNATIONAL	2023-11-09
154	Production of Phenolic Compounds and Antioxidant Activity in Hairy Root Cultures of <i>Salvia plebeia</i>	김재광	Plants-Basel	2023-11-13
155	Influence of cytokinins and yeast extract on growth and flavone production in hairy root cultures of <i>Scutellaria baicalensis</i>	김재광	Journal of Phytology	2023-11-25

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
156	RECENT STUDIES ON MYRICETIN AND ITS BIOLOGICAL AND PHARMACOLOGICAL ACTIVITIES	김재광	EXCLI Journal	2023-11-28
157	Effect of heavy metals on phenylpropanoid biosynthesis in <i>Euonymus alatus</i>	김재광	Journal of Aridland Agriculture	2023-12-08
158	Altered Metabolic Phenotypes and Hypothalamic Neuronal Activity Triggered by SGLT-2 Inhibition	김재근	Diabetes & Metabolism Journal	2023-01-17
159	Whole Transcriptome Analysis of Hypothalamus in Mice during Short-Term Starvation	김재근, 한미령	INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	2023-02-01
160	Chronic voluntary wheel running exercise ameliorates metabolic dysfunction via PGC-1 α expression independently of FNDC5/irisin pathway in high fat diet-induced obese mice	김재근	Journal of Physiological Sciences	2023-04-11
161	Bridging Energy Need and Feeding Behavior: The Impact of eIF2 α Phosphorylation in AgRP Neurons	김재근	DIABETES	2023-07-21
162	Sirtuin1-Mediated Deacetylation of Hypothalamic TTF-1 Contributes to the Energy Deficiency Response	김재근	INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	2023-08-07
163	Exploring the potential hypothalamic role in mediating cisplatin-induced negative energy balance	김재근	CHEMICO-BIOLOGICAL INTERACTIONS	2023-11-01
164	One new species and one new record of <i>Nephelomilta Hampson</i> (Lepidoptera, Erebidae, Arctiinae) from Southeast Asia	권형욱, 배양섭	Zootaxa	2023-03-23
165	Contribution to the knowledge for Oriental taxa of the <i>Diduga</i> (Lepidoptera: Erebidae: Arctiinae)	권형욱	Forests	2023-04-30
166	The relationships between microbiome diversity and epidemiology in domestic species of malaria-mediated mosquitoes of Korea	권형욱	Scientific Reports	2023-06-05
167	Chemical screening identifies the anticancer properties of <i>Polyporus tuberaster</i>	권형욱, 박준태	Journal of Cancer	2023-07-09
168	Targeting Mitochondrial Oxidative Stress as a Strategy to Treat Aging and Age-Related Diseases	권형욱, 박준태	Antioxidants	2023-04-15
169	A novel hybrid promoter capable of continuously producing proteins in high yield	권형욱, 박준태	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	2023-02-08
170	Functional restoration of lysosomes and mitochondria through modulation of AKT activity ameliorates senescence	권형욱, 박준태	EXPERIMENTAL GERONTOLOGY	2023-01-16
171	Chemical screening identifies the anticancer properties of <i>Polyporus parvovarius</i>	권형욱, 박준태	Journal of Cancer	2023-01-01
172	Functionalized Parylene Films for Enhancement of Antibody Production by Hybridoma Cells	이미수	ACS Applied Bio Materials	2023-08-31
173	<i>Polyporus ulleungus</i> mycelia cultured in MEB medium produce metabolites with anticancer property	박준태	Journal of Cancer	2023-11-10
174	Association of Leopard Cat Occurrence with Environmental Factors in Chungnam Province, South Korea	이종구	Animals	2023-01-01
175	Food Allocation under Asynchronous Hatching Conditions of Great Tits (<i>Parus major</i>)	이종구	Animals	2023-04-23
176	Shallow Whole-Genome Sequencing of Cell-Free DNA (cfDNA) Detects Epithelial Ovarian Cancer and Predicts Patient Prognosis	한미령	Cancers	2023-01-01
177	Association between vascular ultrasound features and DNA sequencing in breast cancer: A preliminary study	한미령	Discover Oncology	2023-04-30
178	MRI-based breast cancer radiogenomics using RNA profiling: Association with subtypes in a single-center prospective study	한미령	BREAST CANCER RESEARCH	2023-06-30

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
179	MGMT methylation is associated with human papillomavirus infection in cervical intraepithelial neoplasia: a longitudinal study	한미령	Journal of Clinical Medicine	2023-10-01
180	OsMYB7 determines leaf angle at the late developmental stage of lamina joints in rice	강기윤	Frontiers in Plant Science	2023-04-14
181	Triterpenoid saponins from Camellia sinensis roots with cytotoxic and immunomodulatory effects	강기윤, 김병석	PHYTOCHEMISTRY	2023-08-01
182	CD8 T-cell subsets: heterogeneity, functions, and therapeutic potential	김병석	EXPERIMENTAL AND MOLECULAR MEDICINE	2023-11-01
183	A Personalized Cancer Vaccine that Induces Synergistic Innate and Adaptive Immune Responses	김병석	ADVANCED MATERIALS	2023-09-01
184	One-step immunoassay based on filtration for detection of food poisoning-related bacteria	봉지홍	TALANTA	2023-04-01
185	Direct bioethanol production from lignocellulosic biomass using white rot fungus Cerrena unicolor	임경환	한국버섯학회지	2023-06-30
186	Atg5 knockout induces alternative autophagy via the downregulation of Akt expression	이미가엘	Toxicological Research	2023-10-01
187	Transformed cells maintain survival by downregulating autophagy at a high cell confluency	이미가엘	JOURNAL OF CELLULAR PHYSIOLOGY	2023-10-19
188	옥살산을 이용한 꿀벌 안전성과 꿀벌응애류 방제 효율 평가	김길원	Journal of Apiculture	2023-04-30
189	꿀벌응애류 방제용 개미산에 대한 조건별 기화량 평가	김길원	Journal of Apiculture	2023-04-30
190	Inhibition of GLI Transcriptional Activity and Prostate Cancer Cell Growth and Proliferation by DAX1	김길원	CURRENT ISSUES IN MOLECULAR BIOLOGY	2023-07-01
191	Targeting RAF Isoforms and Tumor Microenvironments in RAS or BRAF Mutant Colorectal Cancers with SJ-C1044 for Anti-Tumor Activity	김길원	CURRENT ISSUES IN MOLECULAR BIOLOGY	2023-07-13
192	Review of the genus Diduga (Lepidoptera, Erebididae, Arcitiinae) of Laos, with description of one new species	김길원, 배양섭	Zootaxa	2023-12-20
193	Occurrence prediction of Western Conifer Seed Bug (Leptoglossus occidentalis:Coreidae) and evaluation of the effects of climate change on its distribution in South Korea using machine learning methods	배양섭	Forests	2023-01-01
194	Preliminary checklist, synonymies and some discussions of the Laotian Nolidae (Lepidoptera), with a new species of newly recorded subfamily Beaninae	배양섭	Journal of Asia-Pacific Biodiversity	2023-03-01
195	Rocky Area Inhabiting Daddy Long-Legs Spiders, Pholcus Walckenaer, 1805 (Araneae: Pholcidae) in Mountainous Mixed Forests from South Korea. Forests 2023, 14, 538	배양섭	Forests	2023-03-01
196	Lattice Structure and Spatial Network Models Incorporating into Simulating Human-Mediated Dispersal of the Western Conifer Seed Bug Populations in South Korea	배양섭	Forests	2023-03-01
197	New species of colorful tineids from Cambodia, Thailand, and Vietnam in the new genus Vangatinea (Lepidoptera: Tineidae: Erechthiinae)	배양섭	Zootaxa	2023-04-14
198	Descriptions of Clubiona bakurovi and Otacilia ansula sp. nov. (Araneae: Clubionidae and Phrurolithidae) from South Korea	배양섭	한국동물분류학회지	2023-04-30

1-2. 논문게재 현황 (2023.01.01 ~ 2023.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
199	Two new species of the genus <i>Stericta</i> Lederer (Lepidoptera, Pyralidae, Epipaschiinae) from Laos and Cambodia	배양섭	Zootaxa	2023-05-15
200	Three new records of wolf spiders (Araneae: Lycosidae) from Korea	배양섭	Journal of Species Research	2023-08-31
201	The newly recorded genus <i>Manoba</i> Walker, 1864 with four species in Laos(Lepidoptera: Nolidae: Nolinae)	배양섭	Journal of Asia-Pacific Biodiversity	2023-09-01
202	Five new species of the <i>Pholcus phungiformes</i> species group (Araneae, Pholcidae) from South Korea	배양섭	ZooKeys	2023-09-04
203	Six new records of Running Crab Spiders of the genus <i>Tibellus</i> with four new species (Araneae: Philodromidae) from Korea	배양섭	한국동물분류학회지	2023-11-03
204	A review of the genus <i>Termioptycha</i> Meyrick (Lepidoptera: Pyralidae: Epipaschiinae) from Korea	배양섭	Journal of Asia-Pacific Biodiversity	2023-11-23
205	New and little known species of soil mites of the families Oppiidae and Suctobelbidae (Acari: Oribatida) from Korea	배양섭	INTERNATIONAL JOURNAL OF ACAROLOGY	2023-12-19

1-3. 상시 콜로키움 개최 현황 (2023.03.01 ~ 2024.02.28)

	개최일	연사	소속	발표주제
제1차	2022.03.21	이동일	연세대학교	Electrocatalysis on Atomically Precise Metal Nanoclusters
제2차	2022.03.23	강태희	한국과학기술연구원	Probing ultrafast dynamics of layered materials in terahertz and mid-infrared range
		강혜민	한구해양과학기술원	분자생물학적 접근을 통한 해양생물 영향 평가
제3차	2023.04.06.	김주형	군산대학교	Structure and function of Ice-binding proteins
		장영준	서울시립대학교	Single-crystalline 2D chalcogenide films and Machine-learning growth analysis
제4차	2023.04.11.	신승훈	한양대학교	Umpolung Chemistry via N-O Bond Redox: mechanism, asymmetric synthesis, and cross-coupling applications
제5차	2023.04.13.	박세영	성균관대학교	Transfer learning for high-dimensional multiple response regression
		정윤선	한국환경연구원	환경분석화학을 통한 해양 및 환경오염평가
제6차	2023.04.18.	황예진	인하대학교	Conjugated Polymer Synthesis in Flow
제7차	2023.04.20.	이준혁	극지연구소	Structure and function of Ice-binding proteins
제8차	2023.04.25.	진하늘	동국대학교	Catalyst design for efficient electrochemical nitrogen reduction via metal sulfide nanocrystal surface engineering
제9차	2023.04.27.	박의용	서울시립대학교	Monoidal categorification for cluster algebras
		나형술	극지연구소	기후변화, 극지해양생태계의 위기와 우리의 과학적 대응
제10차	2023.05.02.	황재택	경보제약	The ChemStory of KyongBo Pharma
제11차	2023.05.04.	노광동	이화여자대학교	Physics of light-emitting Devices from Non-epitaxial Materials
제12차	2023.05.09.	오승주	고려대학교	Nanocrystal based electronic devices and sensors
제13차	2023.05.18.	안태용	인하대학교	Complex dynamics and equidistribution of inverse images
제14차	2023.05.25.	손세진	인하대학교	Cancer nano-vaccine strategies for precision cancer medicine
		윤진미	인하대학교	Study on the Crop Productivity by Understanding of the Developmental Processes

1-3. 상시 콜로키움 개최 현황 (2023.03.01 ~ 2024.02.28) -계속-

	개최일	연사	소속	발표주제
제15차	2023.05.30.	김동호	연세대학교	Study on the Crop Productivity by Understanding of the Developmental Processes
제16차	2023.07.21.	김유신	University of Texas Health at San Antonio (UTHSA)	In vivo Calcium Imaging of Neuronal Ensembles in Networks of Primary Sensory Neurons in intact Dorsal Root Ganglia
제17차	2023.08.01.	김준연	The Ames Laboratory, Iowa State University	Towards terahertz nanoscopy at sub-2 Kelvin temperatures and 5 Tesla magnetic fields
제18차	2023.09.18.	최성운	Hims (주)	Introduction of Photomask
제19차	2023.09.21.	하선용	극지연구소	안정동위원소 기법을 이용한 해양환경 이해 (극지 해양이 왜 중요한가?)
제20차	2023.09.25.	박병욱	한국화학연구원	Development of Polymer Blend Systems for Future Organic Electronic Applications
제21차	2023.10.05.	이신명	고등과학원	Representation theory: An algebraic study of symmetries
		정진현	국립해양과학관	2050 탄소중립과 해양의 역할
제22차	2023.10.10.	임종우	서울대학교	Manipulating spatiodynamics of electrochemical reaction: batteries and electrocatalysis
제23차	2023.10.17.	정지은	한국화학연구원	Recovery of Polymer Networks Using a Photothermal Effect Triggered by NIR Radiation
제24차	2023.11.02.	김대환	대구대학교	Translating solitons for mean curvature flow
제25차	2023.11.03.	오동진	MIT	Electronic correlation and topology in pyrochlore lattices
제26차	2023.11.07.	김현우	Postech	Electrifying Organic Chemistry: Teaching Old Dogs New Tricks
제27차	2023.11.14.	최정모	부산대학교	Rational Design of Amyloid Aggregation Inhibitors
제28차	2023.11.23.	최영준	부산대학교	A brief introduction to Uniformization Theorem and Deformation Theory in Complex Geometry
제29차	2023.11.30.	이동현	부경대학교	한국 연안환경 내 수질-퇴적물 관리를 위한 안정동위원소 활용 연구
제30차	2023.12.05.	권오민	포스코홀딩스	Sulfide-based solid electrolytes and the issues for all-solid-state batteries
제31차	2023.12.07.	변은진	성균관대학교	Molecular response and biotransformation of arsenic compounds in aquatic invertebrates

1-4. 국제 협력 교류 활동 (2023.03.01 ~ 2024.02.28)

연번	체결명	기관	국가	일자
1	상호 교류협력에 관한 업무협력 협약서	(주)보야스에너지	대한민국	2023.04.06
2	상호 교류협력에 관한 업무협력 협약서	부경대학교 에너지융복합소재연구소	대한민국	2023.05.10
3	상호 교류협력에 관한 업무협력 협약서	ALGApplus	포르투갈	2023.06.16
4	상호 교류협력에 관한 업무협력 협약서	(주)3일애	대한민국	2023.10.20
5	상호 교류협력에 관한 업무협력 협약서	(주)오서닉	대한민국	2023.11.24

1-5. 국제학술대회 개최 현황 (2023.03.01 ~ 2024.02.28)

연번	주제	강사명	소속	일자
1	제 15회 기초과학 국제공동심포지움	연사: 총 26명 (국내 13명, 국외 13명)	참가국: 대한민국, 미국, 영국, 호주, 캐나다, 일본	2022.10.30 ~ 10.31

1-6. 기초과학특강 개최 현황 (2023.03.01 ~ 2024.02.28)

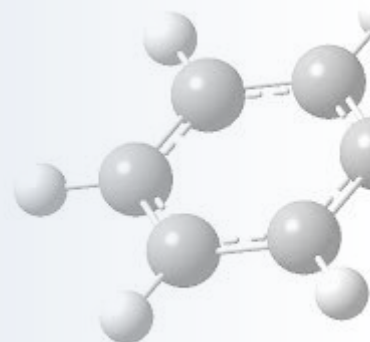
연번	강사명	주제	진행학교	일자
1	김태현	인천대학교 기초과학연구소/화학과/해양학과 홍보 및 전공 체험 (실험실전공체험)	인천시 박문여자고등학교	2023. 07. 06
2	강유리	전기회로와 브레드보드 (기초과학실험)	인천시 인천해송중학교	2023.07.10
3	강유리	직렬.병렬 회로연결과 브레드보드 (기초과학실험)	인천시 인천능허대중학교	2023.07.13
4	김태현	인천대학교 기초과학연구소/화학과/해양학과 홍보 및 전공 체험 (실험실전공체험)	인천시 박문여자고등학교	2023. 07. 14
5	강유리	우주개발과 우주자원 (진로특강)	인천시 인천능허대중학교	2023.11.23

1-7. 운영위원회 회의

연번	일 자	회 의 내 용
제 1회	2023.03.14	• 2023학년도 연구소 운영 논의 • 2022년 기초과학연구소 운영 결과보고 • 병역특례지정업체 전문연구요원 채용계획에 관한 논의
제 2회	2022.06.22	• 2023학년도 연구소 운영 논의 • 2023년 기초과학 국제공동 심포지움 개최 논의 • 병역특례지정업체 전문연구요원 채용 계획에 관한 논의
제 3회	2022.10.10	• 2023학년도 연구소 사업운영 논의 • 2023년 국제공동심포지움 개최 논의 • 병역특례지정업체 전문연구요원 채용계획에 관한 논의
제 4회	2022.12.22	• 2024학년도 기초과학연구소 학술연구교수 채용논의 • 2023년 기초과학논문집 발간 계획에 관한 논의

2

학술행사 및 연구활동



2-1. 기초과학논문집 제 35집 발간

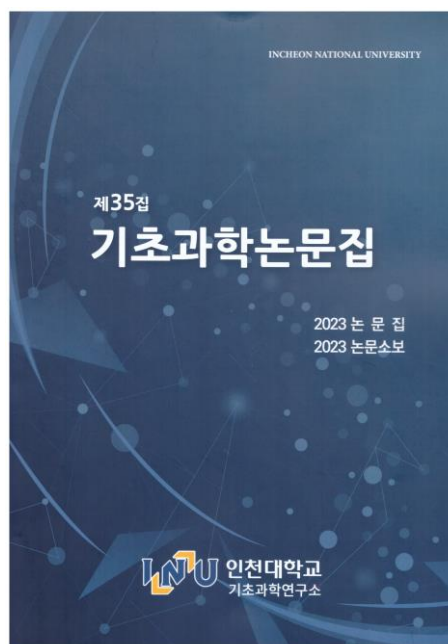
2-1-1. 기초과학논문집 제 35집 발간

2024년 2월 기초과학연구소는 『기초과학논문집 제 35집』을 발행하였다. 이 논문집에는 5편의 연구논문과 205편의 논문소보가 수록되었다.

연구논문의 교신저자는 김진호 교수(화학부), 이재성 교수(해양학과), 김태현 교수(화학과), 박영미 교수(물리학과), 그리고 문병수 교수(수학과)이다.

논문소보에는 2023년 1월부터 12월까지 1년간 국내외 여러 학술지에 게재된 기초과학연구소 소속 교원들의 연구논문 첫 페이지를 수록하였다.

본 연구소는 이 논문집을 전국 기초과학연구소 및 유관기관에 배포하였다.



논문 제목	저자	소속
Cu/ABNO-catalyzed aerobic oxidative synthesis of quinazolinones from primary benzyl alcohols and o-aminobenz amides	김진호	화학과
Effects of consistent exposure to microplastic on transcriptome profile of Pacific oyster	이재성	해양학과
Thiourea를 이용한 불소이온 감지센서의 개발	김태현	화학과
결합된 슬롯 안테나의 결합각에 따른 테라헤르츠파의 전기장 집속도 및 투과 특성 변화에 대한 연구	박영미	물리학과
Blow up solution for the rotationa-b-family system	문병수	수학과

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