INCHEON NATIONAL UNIVERSITY

Research Institute of Basic Sciences
Incheon National University

Newsletter

인천대학교 기초과학연구소 뉴스레터
한국연구재단 지정 대학중점연구소

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인천대학교 기초과학연구소
RESEARCH INSTITUTE OF BASIC SCIENCES, INCHEON NATIONAL UNIVERSITY

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2025-1 운영위원회		
직위	학과(부)	성명
소장	화학과	김태현
운영위원	수학과	문병수
	화학과	임태은
	물리학과	박영미
	해양학과	김장균
	생명과학부	예정용
상임연구원	기초과학연구소	강유리
박사후연구원	기초과학연구소	장 훈

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연구책임자	소속	과제명	지원기관
권태현	화학과	장수명 연료전지용 고효율 가역적 재생기능형 라디칼 스캐빈져 제조 및 막전극접합체 적용 기술 개발 : 1년차	한국연구재단
		고분자전해질 전기화학 소자 고내구화를 위한 자가 표면 재생형 레독스 나노 산화방지제 개발 3년차	한국연구재단
김연정	해양학과	비토양조건하에 분해가능한 생분해성 바이오 플라스틱 제조 및 제품화기술 개발 : 3년차	한국산업기술기획평가원
		세포주를 활용한 MBA 대체 독성평가 기법 개발 : 5년차	식품의약품안전평가원
김장균	해양학과	Open water performance evaluation of GORE substrates in a Neopyropia yezoensis farm : 1년차	W.L.Gore&Associates, Inc.
		바다숲 블루카본 정량 평가 및 주변 퇴적물 탄소 저장량 평가 : 1년차	(재)포항산업과학연구원
		해조류 기원 생물촉진물질 처리에 따른 양식 해조류의 고온 내성 증대와 유전적 메커니즘 연구 : 3년차	한국연구재단
		기수습지 가치증진을 위한 조성 및 복원 기술 개발 : 2년차	한국환경산업기술원
김준호	물리학과	고효율 유연 CIGS 태양전지 소자 분석 : 3년차	한국연구재단
김진호	화학과	질소를 포함하는 삼환계 고리화합물의 합성 : 1년차	한국화학연구원
김태현	화학과	Development of high performance polymer binders for Si anode : 1년차	Sionic Energy
		그린수소 생산을 위한 음이온교환막을 활용한 5kW급 수전 해장치용 막전극 접합체 개발 : 4년차	한국산업기술기획평가원
		분자구조의 제어를 통한 고성능 이산화탄소 분리막 소재 개발 : 3년차	한국연구재단

1-1. 연구소 지원 현황 (2024.01.01 ~ 2024.12.31) -계속-

연구책임자	소속	과제명	지원기관
박미라	기초과학연구소	동토 바이러스의 다양성 및 온난화에 따른 반응 연구 : 4년차	한국연구재단
박지숙	기초과학연구소	해조류 군집과 주변 퇴적물의 탄소흡수원 적용 가능성 평가 : 3년차	한국연구재단
방지원	화학과	다중엑시톤 거동 제어 가능한 콜로이드 반도체 나소소재 디자인 및 레이저용 이득매질 및 고효율 광촉매 소재 개발 : 3년차	한국연구재단
		초대형 마이크로 LED 디스플레이 제작을 위한 초고화질 장수명 색변환 소재공정 및 핵심 모듈 개발 : 3년차	한국산업기술기획평가원
유성민	수학과	버그만 계량을 가지는 복소 다양체의 기하학 : 2년차	한국연구재단
임태은	화학과	고결착/비전자전도 특성 기반 고용량 이차전지 양극 소재 계면 형성 기능성 전해액 첨가제 개발 : 3년차	한국연구재단

1-2. 논문게재 현황 (2024.01.01 ~ 2024.12.31)

연번	제목	저자명	게재지명	게재일자
1	Degree of simultaneous approximation of multivariate functions by neural networks with one hidden layer	함남우	Journal of Analysis and Applications	2024-09-01
2	The number of zeros of linear combinations of L-functions near the critical line	이윤복	JOURNAL D ANALYSE MATHEMATIQUE	2024-04-01
3	Discrepancy bounds for the distribution of L-functions near the critical line	이윤복	MATHEMATICAL PROCEEDINGS OF THE CAMBRIDGE PHILOSOPHICAL SOCIETY	2024-10-21
4	On the behavior of the solution to the Degasperis-Procesi equation with the Coriolis effect	문병수	Discrete and Continuous Dynamical Systems-Series S	2024-08-01
5	Peaked solitary waves and shock waves of the Degasperis-Procesi-Kadomtsev-Petviashvili equation	문병수	Advances in Nonlinear Analysis	2024-09-24
6	Path description for q-characters of fundamental modules in type C	장일승	COMMUNICATIONS IN ALGEBRA	2024-03-01
7	Crystal bases of parabolic Verma modules over the quantum orthosymplectic superalgebras	장일승	JOURNAL OF ALGEBRA	2024-10-01
8	Quantization of virtual Grothendieck rings and their structure including quantum cluster algebras	장일승	COMMUNICATIONS IN MATHEMATICAL PHYSICS	2024-07-15
9	Limit of Bergman kernels on a tower of coverings of compact Kähler manifolds	유성민	MATHEMATISCHE ANNALEN	2024-02-01
10	Products of generalized n-projections	김인현	LINEAR & MULTILINEAR ALGEBRA	2024-03-13
11	Infinitely many small energy solutions to nonlinear Kirchhoff-Schrodinger equations with the p-Laplacian	김인현	Bulletin of the Malaysian Mathematical Sciences Society	2024-05-01
12	TENSOR PRODUCTS OF ALUTHGE TRANSFORMS AND A-ADJOINTS OF m-ISOMETRIC OPERATORS	김인현	ROCKY MOUNTAIN JOURNAL OF MATHEMATICS	2024-07-31
13	m-symmetric Operators with Elementary Operator Entries	김인현	Results in Mathematics	2024-11-01
14	Existence Results and L^∞-Bound of Solutions to Kirchhoff–Schrodinger–Hardy Type Equations Involving Double Phase Operators	김인현	Results in Mathematics	2024-11-01
15	Nilpotent perturbations of m-isometric and m-symmetric tensor products of commuting d-tuples of operators	김인현	Demonstratio Mathematica	2024-11-19
16	On the adapted partial differential equation for general diploid model of selection at a single locus	최원	Korean Journal of Mathematics	2024-06-30
17	Long-range ordered graphitic structure in silk fibers delaminated using dopamine and thermal treatment for super-flexible electronic textiles: Possible applications for magnetic and thermoelectric textiles	최수봉, 김병훈, 김정우	Advanced Composites and Hybrid Materials	2024-04-01
18	Micro-scale gas tungsten arc welding on invar sheet	최수봉, 이기훈	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2024-06-10
19	Photoluminescence of MoS2 on Plasmonic Gold Nanoparticles Depending on the Aggregate Size	최수봉, 한강희	ACS Omega	2024-04-29
20	Probing Inherent Optical Anisotropy in Substrates via Direct Nanoimaging of Mie Scattering	최수봉	ACS Nano	2024-04-30

1-2. 논문게재 현황 (2024.01.01 ~ 2024.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
21	High-speed lateral scanning white-light phase shift interferometry	최수봉	OPTICS EXPRESS	2024-06-11
22	High-response room-temperature NO2 gas sensor fabricated with thermally reduced graphene oxide-coated commercial cotton fabric	김병훈	Heliyon	2024-01-10
23	self‑supported VO2 on polydopamine‑derived pyroprotein‑based fibers for ultrastable and flexible aqueous zinc‑ionbatteries	김병훈	Carbon Energy	2024-07-01
24	Flexible Mechanical Sensors Fabricated with Graphene Oxide-Coated Commercial Silk	김병훈, 이기훈	Nanomaterials	2024-06-08
25	The impact of supersaturated electrode on heterogeneous lithium nucleation and growth dynamics	김병훈	ANGEWANDTE CHEMIE-INTERNATIONAL EDITION	2024-11-25
26	Raman-tensor analysis of phonon modes in (Pb, Bi)2Sr2CaCu2O8+δ	박승룡	Progress in Superconductivity and Cryogenics (PSAC)	2024-03-29
27	Continuous Template Growth of Large-Scale Tellurene Films on 1T′-MoTe2	박승룡, 박영미, 한강희, 김정우, 문병희	ACS Nano	2024-07-11
28	Viscoelastic-Support-Layer-Based Macroscopic Conformal Transfer of van der Waals Materials Compatible with Plasmonic Application	박승룡, 박영미	ACS Applied Materials & Interfaces	2024-11-04
29	Understanding the oxidation chemistry of Ti3C2Tx (MXene) sheets and their catalytic performances	엇후 도르츠	Journal of Energy Chemistry	2024-01-01
30	Enhancing heat generation ability and magnetic properties of MgFe2O4 with Ni substitutes for biomedical applications	엇후 도르츠	Materials Today Chemistry	2024-01-01
31	Fe-Ni based alloys as rare-earth free gap permanent magnets	엇후 도르츠	ACTA MATERIALIA	2024-04-15
32	Intrinsic magnetism of an individual rare-earth atom on transition metal dichalcogenide semiconductors	엇후 도르츠	AIP Advances	2024-03-01
33	Optical Tweezing Terahertz Probing for a Single Metal Nanoparticle	박영미	NANO LETTERS	2024-05-06
34	In-depth study for confinement of electromagnetic wave in a coupled terahertz nano-slot antenna	박영미, 이기훈	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2024-08-01
35	Bridging terahertz metal slot antenna with parameterized electrical conductivity: insights from fnite element method and microscopic theory	박영미, 문병희	JOURNAL OF THE KOREAN PHYSICAL SOCIETY	2024-09-01
36	Anti-ambipolar transport and logic operation in two-dimensional field-effect transistors using in-series integration of GeAs and SnS2	한강희, 문병희	APPLIED PHYSICS LETTERS	2024-03-19
37	First-principles study of the thickness-dependent shift current in γ-GeSe thin layers	김정우	CURRENT APPLIED PHYSICS	2024-07-01
38	Non-halogenated and non-volatile solid additive for improving the efficiency and stability of organic solar cells	이진호	Journal of Materials Chemistry A	2024-04-16
39	Understanding of Defect Passivation Effect on Wide Band Gap p-i-n Perovskite Solar Cell	이진호, 김준호	ACS Applied Materials & Interfaces	2024-06-25
40	Naphthalene Diimide-Modified SnO2 Enabling Low-Temperature Processing for Efficient ITO-Free Flexible Perovskite Solar Cells	이진호	Small	2024-10-01

1-2. 논문게재 현황 (2024.01.01 ~ 2024.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
41	Toward submicron inkjet-printed ZnO microdots with suppressed coffee-ring effect via controlled drying conditions for potential solar cell applications	이진호	Journal of Materials Research and Technology-JMR&T	2024-07-16
42	Effect of side chain modification on edge-on oriented dithienobenzodithiophene-based non-fullerene acceptors for organic solar cells	이진호	JOURNAL OF APPLIED POLYMER SCIENCE	2024-12-05
43	Impact of Chemical Source Selection on Aqueous Spray-Deposited CZTSSe Solar Cells	김준호	ACS Applied Energy Materials	2024-02-19
44	Achieving highly efficient kesterite solar cells using simultaneous surface Ge substitution and rear interface engineering strategies	김준호	Chemical Engineering Journal	2024-01-01
45	Vertical plane depth-resolved surface potential and carrier separation characteristics in flexible CZTSSe solar cells with over 12% efficiency	김준호	Carbon Energy	2024-03-28
46	Understanding of the Relationship between the Properties of Cu(In,Ga)Se2 Solar Cells and the Structure of Ag Network Electrodes	김준호	Energy & Environmental Materials	2024-06-18
47	Reducing carrier recombination loss by suppressing Sn loss and defect formation via Ag doping in Cu2ZnSn(S,Se)4 solar cells	김준호	Energy & Environmental Science	2024-11-12
48	Cu-catalyzed aerobic oxidative dehydrogenation of tertiary indolines to indoles using azo/hydrazide redox	김진호	NEW JOURNAL OF CHEMISTRY	2024-02-19
49	Synergistic Antioxidant and Anti-Inflammatory Effects of Phenolic Acid-Conjugated Glutamine–Histidine–Glycine–Valine (QHGV) Peptides Derived from Oysters (Crassostrea talienwhanensis)	임태은, 강동구	Antioxidants	2024-04-10
50	Mn-Catalyzed Aerobic Oxidative α-Cyanation of Tertiary Amines Using Azo/Hydrazide Redox	김진호	JOURNAL OF ORGANIC CHEMISTRY	2024-09-19
51	Sequential Energy and Electron Transfer in Metal–Organic Frameworks	김진호	ACS Applied Materials & Interfaces	2024-12-03
52	1,1-Diethoxyethane as an interfacial-stabilizing solvent for lithium–sulfur batteries	임태은, 김태현	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2024-01-29
53	Regulating interfacial stability of SiOx anode with fluoride-abundant solid-electrolyte interphase by fluorine-functionalized additive	임태은	RARE METALS	2024-02-01
54	Spartina anglica-derived Carbon-coated PE Separator for Physically Restraining Polysulfide Migration in Lithium-Sulfur Batteries	임태은, 김태현, 김장균	KOREAN JOURNAL OF CHEMICAL ENGINEERING	2024-03-01
55	Poly(acrylic acid) Grafted with a Boronic Ester and Dopamine as a Self-healable and Highly Adhesive Aqueous Binder for Si Anodes	임태은, 김태현	ACS Applied Energy Materials	2024-03-05
56	Simultaneous Realization of Multilayer Interphases on a Ni-Rich NCM Cathode and a SiO x Anode by the Combination of Vinylene Carbonate with Lithium Difluoro(oxalato)borate	임태은	ACS Applied Materials & Interfaces	2024-03-15
57	Preserving the Structural Stability of LiNi0.92Co0.04Mn0.04O2 Cathode by Ti4+-ion doping for Lithium-ion Batteries	임태은	Journal of Electroanalytical Chemistry	2024-05-01
58	Boron- and Calcium-interspersed Cathode-Electrolyte Interphases on Ni-rich Layered Oxide Cathodes for Advanced Performance Lithium-ion Batteries	임태은	APPLIED SURFACE SCIENCE	2024-08-01
59	Sacrificial separator facilitating in-situ creation of durable CEI layer and tailoring lithium dendrite for practical lithium metal batteries	임태은	Journal of Materials Chemistry A	2024-05-21
60	Poly(Imide) Separator Functionalized by Melamine Phosphonic Acid for Regulating Structural and Thermal Stabilities of Lithium-ion Batteries	임태은	Journal of Electrochemical Science and Technology	2024-08-01

1-2. 논문게재 현황 (2024.01.01 ~ 2024.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
61	Fluoride scavengeable Sb2O3-functionalized poly(imide) separators for prolonged cycling of lithium-ion batteries	임태은	CHEMICAL COMMUNICATIONS	2024-08-18
62	Sustainable Cathode-Electrolyte Interphases of Nickel-rich Layered Oxides in-situ Functionalized by Lithium Fluoride Abundant Layers for Lithium-ion Batteries	임태은	Journal of Energy Storage	2024-10-01
63	Stabilizing Interfacial Behaviors of Ni-rich Cathodes by Upcycling of Oyster Shells Waste	임태은, 김장균	Advanced Sustainable Systems	2024-08-28
64	Design principles for moisture-tolerant sulfide-based solid electrolytes and associated effect on the electrochemical performance of all-solid-state battery	임태은	Journal of Electrochemical Science and Technology	2024-11-01
65	A dendrite-free lithium-metal battery by the incorporating poly(dimethylsiloxane) layer onto the porous three-dimensional copper current collector	임태은	KOREAN JOURNAL OF CHEMICAL ENGINEERING	2024-10-01
66	Multiplexed detection of single-point mutations in unprocessed human serum with SERS-integrated PCR	강동구	SENSORS AND ACTUATORS B-CHEMICAL	2024-02-15
67	Integration of wide-field imaging system with droplet microfluidics for monitoring living bacteria	강동구	SENSORS AND ACTUATORS B-CHEMICAL	2024-08-01
68	Droplet microfluidics for single-molecule and single-cell analysis in research, diagnosis, and therapy	강동구	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2024-06-01
69	Tailored synthesis of pH-responsive biodegradable microcapsules incorporating gelatin, alginate, and hyaluronic acid for effective-controlled release	강동구	International Journal of Biological Macromolecules	2024-06-01
70	Microbial and Enzymes That Can Regulate Plastic Degradation	강동구	POLYMER-KOREA	2024-07-01
71	Advancing organic electronics: Achieving reliable synthesis of conjugated polymers with various carrier polarities using a continuous flow reactor	그레고리 아이작 피터슨	Chemical Engineering Journal	2024-01-15
72	Depolymerization of Polymethacrylates with Ball-Mill Grinding	그레고리 아이작 피터슨	MACROMOLECULES	2024-03-25
73	Progress Toward Sustainable Polymer Technologies with Ball-Mill Grinding	그레고리 아이작 피터슨	PROGRESS IN POLYMER SCIENCE	2024-12-01
74	Influence of Crystallinity on the Mechanochemical Degradation of Poly(lactide) with Ball-Mill Grinding	그레고리 아이작 피터슨	MACROMOLECULES	2024-10-29
75	Emerging porous solids for electrocatalytic and photocatalytic seawater splitting	권태현	COORDINATION CHEMISTRY REVIEWS	2024-09-01
76	Ultrahigh Electrode Performance of Low-Loaded Iridium Jagged Nanotubes for Water Electrolysis Applications	권태현	Advanced Energy Materials	2024-09-13
77	Exploration of metal-free 2D electrocatalysts toward the oxygen electroreduction	권태현	Exploration	2024-08-20
78	Enhancement of Optical Gain in Colloidal CdSe/CdS/ZnS Quantum Dots through Nanosecond Optical Pumping	방지원	Journal of Physical Chemistry Letters	2024-02-07
79	Cluster-mediated synthesis of monodispersed In(Zn)P quantum dots and their ZnSe/ZnS shell growth for bright and narrow band emission	방지원	Journal of Alloys and Compounds	2024-06-25
80	Colour-Passive radiative cooling in optoelectronics with Silver/Quantum dot decorated silica multifunctional hybrid structures	방지원	Chemical Engineering Journal	2024-05-15

1-2. 논문게재 현황 (2024.01.01 ~ 2024.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
81	Organometallic ruthenium complexes derived fromanthracene and pyrene chromophores	방지원	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2024-05-02
82	Narrowing the Photoluminescence Bandwidth of InP-Based Colloidal Quantum Dots through Photon-Triggered Isolation	방지원	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2024-06-01
83	Fabrication of ZnO-quantum dot hybrid nanocomposites with enhanced light scattering and emission characteristics for micro LED display applications	방지원	DYES AND PIGMENTS	2024-12-01
84	Heterostructure seed-mediated synthesis of zinc phosphide quantum dots for bright band-edge emission	방지원	Nanoscale	2024-10-03
85	Enhancement of photocatalytic NO oxidation by Ag-sulfide on TiO_2 mixed with Na-ZSM-5	방지원	Journal of Industrial and Engineering Chemistry	2024-12-25
86	Enhancing the durability of anion exchange membrane water electrolysis cells via interfacial membrane–ionomer crosslinking	김태현	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2024-07-19
87	Crosslinked high-performance anion exchange membranes based on poly(dibenzyl N-methyl piperidine) and pentafluorobenzoyl-substituted SEBS	김태현	Journal of Materials Chemistry A	2024-07-24
88	Enhancing CO_2 Transport Across the PEG/PPG-Based Crosslinked Rubbery Polymer Membranes with a Sterically Bulky Carbazole-Based ROMP Comonomer	김태현	MACROMOLECULAR RAPID COMMUNICATIONS	2024-09-01
89	Fabrication of a high-performance MOF-COP-based porous hollow fiber membrane for carbon dioxide separation	김태현	Chemical Engineering Journal	2024-10-01
90	Anion Exchange Membranes by Cross-Linking Poly(styrene-b-ethylene-co-butylene-b-styrene) with Poly(aryl piperidinium) Containing Rigid-Flexible Units	김태현	ACS Applied Polymer Materials	2024-09-13
91	A Polysaccharide Binder with Carbon Quantum Dots for Improved Flexibility of Si Anodes in Lithium−Ion Batteries	김태현	ACS Applied Energy Materials	2024-10-25
92	Oxidized λ-Carrageenan as an Aqueous Silicon-Anode Polymer Binder with Reduced Viscosity for Lithium-Ion Batteries	김태현	ACS Sustainable Chemistry & Engineering	2024-10-15
93	Metal-Coordinated, Dual-Crosslinked PIM Polymer Membranes for Upgraded CO_2 Separation: Aging and Plasticization Resistance	김태현	Small	2024-10-30
94	Si anodes via dual strategies of coating Si with a rigid polymer and employing a polymer binder with improved mechanical properties	김태현	JOURNAL OF POWER SOURCES	2024-11-12
95	Thermal Debromination-Induced Cross-Linking of PIM-Polyimide Membranes: Improved CO_2 Gas Permeability, Selectivity, and Separation Performance	김태현	SEPARATION AND PURIFICATION TECHNOLOGY	2024-11-29
96	Comparing kinetic methods for ball-mill grinding: Molecular weight versus refractive index-based methods	김태현	BULLETIN OF THE KOREAN CHEMICAL SOCIETY	2024-12-19
97	Crystal structure of bis(methylammonium) hexadecaselenidopalladate(II), $(CH_3NH_3)_2PdSe_{16}$	김강우	ZEITSCHRIFT FUR KRISTALLOGRAPHIE-NEW CRYSTAL STRUCTURES	2024-06-25
98	Crystal structure of bis(N,N,Ntrimethylbutanaminium) tetrathiotungstate(VI), $(BuMe_3N)_2[WS_4]$	김강우	ZEITSCHRIFT FUR KRISTALLOGRAPHIE-NEW CRYSTAL STRUCTURES	2024-08-27
99	Crystal structure of bis(benzyltrimethylammonium) tetrathiotungstate(VI), $\{(C_6H_5CH_2)(CH_3)_3N\}_2[WS_4]$	김강우	ZEITSCHRIFT FUR KRISTALLOGRAPHIE-NEW CRYSTAL STRUCTURES	2024-10-28
100	Triglochin maritima Extracts Exert Anti-Melanogenic Properties via the CREB/MAPK Pathway in B16F10 Cells	김연정, 김장균	Marine Drugs	2024-11-27

1-2. 논문게재 현황 (2024.01.01 ~ 2024.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
101	De Novo Genome Assembly of the Sea Star Patiria pectinifera (Muller & Troschel, 1842) Using Oxford Nanopore Technology and Illumina Platforms	이재성	Diversity-Basel	2024-01-31
102	Acute and chronic effects of triclosan on the behavior, physiology, and multigenerational characteristics of the water flea Moina macrocopa	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2024-02-01
103	Detrimental effects of hull cleaning wastewater on oxidative status, life cycle parameters, and population growth of the monogonont rotifer Brachionus manjavacas	이재성	Marine Pollution Bulletin	2024-03-01
104	Hull-cleaning wastewater poses serious acute and chronic toxicity to a marine mysid—A multigenerational study	이재성	JOURNAL OF HAZARDOUS MATERIALS	2024-05-01
105	Exposure to hull cleaning wastewater induces mortality through oxidative stress and cholinergic disturbance in the marine polychaete Perinereis aibuhitensis	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2024-07-01
106	Chronic toxic effects of fragmented polyvinyl chloride on the water flea Moina macrocopa	이재성	Molecular & Cellular Toxicology	2024-07-02
107	Acute and chronic effects of the antifouling booster biocide Irgarol 1051 on the water flea Moina macrocopa revealed by multi-biomarker determination	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2024-11-01
108	Negligible additive effect of environmental concentrations of fragmented polyethylene terephthalate microplastics on the growth and reproductive performance of Java medaka exposed to 17β-estradiol and bisphenol A	이재성	AQUATIC TOXICOLOGY	2024-08-21
109	Annotation and characterization of the Zacco platypus genome	이재성	Diversity-Basel	2024-09-01
110	The effects of co-exposure to antifoulants and microplastics on the survival, oxidative status, and cholinergic system of a marine mysid	이재성	Toxics	2024-09-06
111	Unlocking the relationship between tourism and bivalve health: A comprehensive study of Donax trunculus as environmental and public health indicators in Morocco	이재성	MARINE ENVIRONMENTAL RESEARCH	2024-11-01
112	Acute and multigenerational effects of short-chain chlorinated paraffins on the harpacticoid copepod Tigriopus japonicus	이재성	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY	2024-10-23
113	Detrimental effects of hull-cleaning wastewater on embryo development via oxidative stress induction in the Java medaka Oryzias javanicus	이재성	Toxicology and Environmental Health Sciences	2024-12-01
114	Exposure to acute cold temperatures induces Ucps-dependent thermogenesis in zebrafish	이재성	Toxicology and Environmental Health Sciences	2024-09-01
115	Assessing photosynthetic uptake of total inorganic carbon in an Ecklonia cava dominated seaweed artificial reef: Population- and community-level metabolisms	김일남	JOURNAL OF APPLIED PHYCOLOGY	2024-04-01
116	Harnessing the power of eDNA technology for macroalgal ecological studies: recent advances, challenges, and future perspectives	김장균	Algal Research-Biomass Biofuels and Bioproducts	2024-01-01
117	Acid treatment for the prevention of green macroalgae attachment to Neopyropia aquaculture	김장균	AQUACULTURE	2024-06-30
118	Effects of biostimulants, AMPEP and Kelpak on the growth and asexual reproduction of Pyropia yezoensis (Bangiales, Rhodophyta) at different temperatures	김장균	ALGAE	2024-03-25

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연번	제목	저자명	게재지명	게재일자
119	Effects of Microbubbles and Temperature on the Germination of the Saltmarsh Plant, Suaeda Malacosperma	김장균	WETLANDS	2024-08-01
120	Population specific responses to temperature and nutrients in the bloom forming Ulva prolifera	김장균	JOURNAL OF APPLIED PHYCOLOGY	2024-02-01
121	Regenerative aquatic foods can be a win–win for human and planetary health	김장균	Nature Food	2024-09-18
122	Effects of temperature and light on earlysporophyte development of Saccharina japonicaand S. latissima (Phaeophyta)	김장균	JOURNAL OF THE WORLD AQUACULTURE SOCIETY	2024-10-03
123	Salinity alternation with dark treatment enhances the gel quality and quantity of carrageenan in a red alga, Chondrus crispus	김장균	AQUACULTURE	2024-11-05
124	Physiological responses of Grateloupia turuturu and Chondrus ocellatus to nano-plastics	김장균	MARINE ENVIRONMENTAL RESEARCH	2024-11-01
125	Effects of environmental and physical factors on the shell infiltration density of free-living conchocelis of three Pyropia species (Bangiales, Rhodophyta)	김장균	ALGAE	2024-12-10
126	Effects of microplastics and phenanthrene on gut microbiome and metabolome alterations in the marine medaka Oryzias melastigma	정창범	JOURNAL OF HAZARDOUS MATERIALS	2024-01-05
127	Environmental occurrence, biological effects, and health implications of zinc pyrithione: A review	정창범	Marine Pollution Bulletin	2024-06-01
128	Detection of the jellyfish Chrysaora pacifica by RPA-CRISPR-Cas12a environmental DNA (eDNA) assay and its evaluation through field validation and comparative eDNA analyses	정창범	Science of The Total Environment	2024-10-17
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	2024-03-25
130	Risk factors associated with Coxiella burnetii in wild boars: A study in South Korea	예정용, 이종구	PREVENTIVE VETERINARY MEDICINE	2024-04-12
131	Coding-complete genome sequence and phylogenetic analysis of Coxsackievirus B3 isolated from South Korea	예정용	Microbiology Resource Announcements	2024-05-23
132	Integrated "-omics" analysis highlights the role of brassinosteroid signaling and antioxidant machinery underlying improved rice seed longevity during artificial aging treatment	김재광	PLANT PHYSIOLOGY AND BIOCHEMISTRY	2024-01-02
133	Metabolomics Reveals Lysinibacillus capsici TT41-Induced Metabolic Shifts Enhancing Drought Stress Tolerance in Kimchi Cabbage (Brassica rapa L. subsp. pekinensis)	김재광	Metabolites	2024-02-01
134	Influence of medium and gelling agents concentration on in vitro rooting of Polygonum tinctorium	김재광	Journal of Phytology	2024-01-07
135	Effects of Different Solvents on the Extraction of Phenolic and Flavonoid Compounds, and Antioxidant Activities, in Scutellaria baicalensis Hairy Roots	김재광	Horticulturae	2024-02-09
136	Molecular characterization of diosgenin biosynthesis in different organs of Trigonella foenum-graecum L.	김재광	Journal of Aridland Agriculture	2024-02-27

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연번	제목	저자명	게재지명	게재일자
137	A Comprehensive Metabolite Profile of Green and White Asparagus (Asparagus officinalis L.) and Their Antioxidant Properties in Differing Cultivation Conditions	김재광	Natural Product Communications	2024-04-09
138	Metabolic Profiling in Plasma and Brain Induced by 17β-Estradiol Supplementation in Ovariectomized Mice	김재광, 김재근	ACS Omega	2024-04-09
139	Effects of light-emitting diodes on the morphology and accumulation of glucosinolates, carotenoids and phenolic acids in red kale sprouts	김재광	Journal of Aridland Agriculture	2024-04-27
140	Optimizing suitable solvent for phenylpropanoid extraction and antioxidant activities in Agastache rugosa hairy roots	김재광	Journal of Phytology	2024-01-07
141	Recent insights into luteolin and its biological and pharmacological activities	김재광	EXCLI Journal	2024-05-16
142	Effect of LED Lights on Secondary Metabolites and Antioxidant Activities in Red Pakchoi Baby Leaves	김재광	ACS Omega	2024-05-22
143	Comparative Analysis of Primary and Secondary Metabolites in Different In Vitro Tissues of Narcissus tazetta var. chinensis	김재광	ACS Omega	2024-05-23
144	Identification of metabolite changes and evaluation of biological activities in edible flowers of Magnolia kobus at different developmental stages	김재광	Chemical and Biological Technologies in Agriculture	2024-07-31
145	Comparative metabolomic analysis of mouse plasma in response to different dietary conditions	김재광	FOOD SCIENCE AND BIOTECHNOLOGY	2024-07-31
146	Molecular protocol to develop β-carotene-biofortified rice events via molecular optimization	김재광	PLANT PHYSIOLOGY AND BIOCHEMISTRY	2024-10-01
147	Enhancement of Phenylpropanoid Accumulation and Antioxidant Activities of Agastache rugosa Transgenic Hairy Root Cultures by Overexpressing the Maize Lc Transcription Factor	김재광	Applied Sciences-Basel	2024-10-21
148	Integrated metabolome and transcriptome analyses provide comprehensive insight into dark- and light-responsive mechanisms in Althaea officinalis hairy root cultures	김재광	Chemical and Biological Technologies in Agriculture	2024-11-19
149	Effect of different NaCl concentrations on secondary metaboli-tes and antioxidant activity in three radish (Raphanus sativus L.) varieties	김재광	Plant Science Today	2024-11-25
150	Effect of high-temperature stress on phenylpropanoid biosynthesis and antioxidant activities of Acer palmatum	김재광	Journal of Aridland Agriculture	2024-11-27
151	Metabolic profling characterizes the genetic diversity of genetically modifed and conventional rice	김재광	Plant Biotechnology Reports	2024-12-17
152	Polyporus ulleungus mycelia cultured in MEB medium produce metabolites with anticancer property	최재혁, 권형욱, 박준태	Journal of Cancer	2024-01-01
153	Altered Metabolic Phenotypes and Hypothalamic Neuronal Activity Triggered by Sodium-Glucose Cotransporter 2 Inhibition (Diabetes Metab J 2023;47:784-95)	김재근	Diabetes & Metabolism Journal	2024-01-29
154	Minimally Invasive Syringe-Injectable Hydrogel with Angiogenic Factors for Ischemic Stroke Treatment	김재근	Advanced Healthcare Materials	2024-11-09
155	Morphological modulation enabled by non-halogenated solvent-processed simple solid additives for high-efficiency organic solar cells	권형욱	EcoMat	2024-03-01
156	Comparative Study of the Effect of Pollen Substitute Diets on Honey Bees during Early Spring	권형욱	Insects	2024-02-01
157	Gut Microbiota of Apis mellifera at Selected Ontogenetic Stages and Their Immunogenic Potential during Summer	권형욱	Pathogens	2024-02-01

1-2. 논문게재 현황 (2024.01.01 ~ 2024.12.31) -계속-

연번	제목	저자명	게재지명	게재일자
158	A single mutation in the mosquito (Aedes aegypti) olfactory receptor 8 causes loss of function to 1-octen-3-ol	권형욱	INSECT BIOCHEMISTRY AND MOLECULAR BIOLOGY	2024-04-01
159	Monitoring Immune Modulation in Season Population: Identifying Effects and Markers Related to Apis mellifera ligustica Honey Bee Health	권형욱	Biomolecules	2024-01-01
160	A new species of Siccia (Lepidoptera, Erebidae, Arctiinae) from Vietnam	권형욱, 배양섭	Zootaxa	2024-02-22
161	Hydrogen-Bonding Interactions Between Terpolymers Enable Excellent Device Efficiency and Operational Stability of Non-Halogenated Solvent-Processed Polymer Solar Cells	권형욱	ADVANCED FUNCTIONAL MATERIALS	2024-09-01
162	The Effects of Artificial Diets on the Expression of Molecular Marker Genes Related to Honey Bee Health	권형욱	INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	2024-04-12
163	Establishment of a new promoter trapping vector using 2A peptide	권형욱, 박준태	BIOTECHNOLOGY AND BIOPROCESS ENGINEERING	2024-04-24
164	Intestinal microbial diversity in domestic honey bees and evaluation of their probiotic properties	권형욱	JOURNAL OF APICULTURAL RESEARCH	2024-04-26
165	Enhancing Honey Bee Health: Evaluating Pollen Substitute Diets in Field and Cage Experiments	권형욱	Insects	2024-05-16
166	An annotated checklist of the Arctiinae of Korea (Lepidoptera: Noctuoidea, Erebidae) with two newly recorded genera	권형욱, 배양섭	Journal of Asia-Pacific Biodiversity	2024-03-01
167	Review of the genus Diduga (Lepidoptera, Erebidae, Arctiinae) of Vietnam, with a new species and two newly recorded species	권형욱, 배양섭	Zootaxa	2024-09-03
168	Identification of Cellular Isoschaftoside-Mediated Anti-Senescence Mechanism in RAC2 and LINC00294	권형욱, 박준태	MOLECULES	2024-09-04
169	Snouted tiger moth (Noctuoidea, Erebidae, Aganainae) in Korea with two newly records of Asota: A connection with Lepidopterism	권형욱	Journal of Asia-Pacific Biodiversity	2024-06-14
170	The Improving Effects of Probiotic-Added Pollen Substitute Diets on the Gut Microbiota and Individual Health of Honey Bee (Apis mellifera L.)	권형욱	Microorganisms	2024-08-01
171	Dissemination of phosphorescent microbial agents by honey bees (Apis mellifera L.) in apple orchards	권형욱	JOURNAL OF ASIA-PACIFIC ENTOMOLOGY	2024-12-01
172	The Chinese mitten crab (Eriocheir sinensis) and its microbiome: A review	권형욱	AQUACULTURE	2024-08-22
173	Elucidating the interactions of advanced glycation end products with RAGE, employing molecular docking and MD simulation approaches: Implications of potent therapeutic for diabetes and its related complications	권형욱	JOURNAL OF MOLECULAR LIQUIDS	2024-11-13
174	Description of Diduga siamensis sp. nov. and newly recorded D. scalprata (Lepidoptera, Erebidae, Arctiinae) from Thailand, with a checklist of the genus Diduga	권형욱, 김길원, 배양섭	Zootaxa	2024-11-26
175	ROSA26 BAC-based system enables continuous high-yield protein production	권형욱, 박준태	BIOTECHNOLOGY AND BIOPROCESS ENGINEERING	2024-05-31
176	Synergistic ROS Reduction Through the Co-Inhibition of BRAF and p38 MAPKAmeliorates Senescence	권형욱, 박준태	Antioxidants	2024-10-15
177	One-step immunoassay of SARS-CoV-2 using screened Fv-antibodies and switching peptides	이미수	BIOSENSORS & BIOELECTRONICS	2024-02-01
178	Monoamine oxidase-A (MAO-A) inhibitors screened from autodisplayed Fv-antibody library	이미수	ACS Pharmacology and Translational Science	2024-01-12

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연번	제목	저자명	게재지명	게재일자
179	Two-dimensional segmentation fusion tool: an extensible, free-to-use, user-friendly tool for combining different bidimensional segmentations	이미수	Frontiers in Bioengineering and Biotechnology	2024-01-31
180	Covalent coupling of functionalized outer membrane vesicles (OMVs) to gold nanoparticles	이미수, 봉지홍	JOURNAL OF COLLOID AND INTERFACE SCIENCE	2024-06-01
181	Impact of glucose metabolism on PD-L1 expression in sorafenib-resistant hepatocellular carcinoma cells	이미수	Scientific Reports	2024-01-15
182	Combination of [18F]FDG and [18F]PSMA-1007 PET/CT predicts tumour aggressiveness at staging and biochemical failure postoperatively in patients with prostate cancer	이미수	EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING	2024-05-01
183	Monocarboxylate transporter-1 (MCT-1) inhibitors screened from autodisplayed FV-antibody library	이미수	International Journal of Biological Macromolecules	2024-04-01
184	Acetyl-CoA synthetase 2 contributes to a better prognosis for liver cancer by switching acetate-glucose metabolism	이미수	EXPERIMENTAL AND MOLECULAR MEDICINE	2024-03-25
185	Enhancing the anticancer effect of androgen deprivation therapy by monocarboxylate transporter 1 inhibitor in prostate cancer cells	이미수	PROSTATE	2024-06-01
186	Visualizing cancer-originating acetate uptake through monocarboxylate transporter 1 in reactive astrocytes in the glioblastoma tumor microenvironment	이미수	NEURO-ONCOLOGY	2024-05-01
187	Surface Plasmon Resonance (SPR) Biosensor for the Detection of SARS-CoV-2 Using Autodisplyaed FV-antibodies on Outer Membrane of E. coli	이미수, 봉지홍	BioChip Journal	2024-03-01
188	Epidermal Growth Factor Receptor (EGFR) Inhibitors Screened fromAutodisplayed Fv-Antibody Library	이미수	BIOCONJUGATE CHEMISTRY	2024-08-28
189	Preventing SARS-CoV-2 infection using Fv-antibodies targeting the proprotein convertase (PPC) cleavage site	이미수	RSC Medicinal Chemistry	2024-11-13
190	Reduction of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) variant infection by blocking the epidermal growth factor receptor (EGFR) pathway	이미수	Microbiology Spectrum	2024-11-05
191	Anticancer effects of high-dose extracellular citrate treatment in pancreatic cancer cells under different glucose concentrations	이미수, 봉지홍	Heliyon	2024-09-30
192	Screened Fv-Antibodies against the Angiotensin-Converting Enzyme 2 (ACE2) Receptor Neutralizing the Infection of SARS-CoV-2	이미수	ACS Pharmacology and Translational Science	2024-11-19
193	One-step Ultra-Rapid Immunoassay of Calcitonin Gene-Related Peptide for Migraine Diagnosis	이미수	BIOSENSORS & BIOELECTRONICS	2024-11-23
194	SARS-CoV-2 vaccine based on ferritin complex with screened immunogenic sequences from Fv-antibody library	이미수	Journal of Materials Chemistry B	2024-12-04
195	Mucosal TLR5 activation controls healthspan and longevity	박준태	Nature Communications	2024-01-02
196	Rapid and accurate ecotoxicological assessment of heavy metals using Cyprinus carpio cells	박준태	Life-Basel	2024-09-05
197	Senescence rejuvenation through reduction in mitochondrial Reactive Oxygen Species generation by Polygonum cuspidatum extract: in vitro evidence	박준태	Antioxidants	2024-09-14
198	Assessing the Distribution and Richness of Mammalian Species Using a Stacking Species Distribution Model in a Temperate Forest	이종구	Animals	2024-03-01

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연번	제목	저자명	게재지명	게재일자
199	Metabarcoding of pathogenic parasites based on copro-DNA analysis of wild animals in South Korea	이종구	Heliyon	2024-05-15
200	Integration of Whole-Exome Sequencing and Structural Neuroimaging Analysis in Major Depressive Disorder: A Joint Study	한미령	Translational Psychiatry	2024-03-09
201	Neuroimaging and epigenetic analysis reveal novel epigenetic loci in major depressive disorder	한미령	PSYCHOLOGICAL MEDICINE	2024-03-20
202	NRF2 is a spatiotemporal metabolic hub essential for the polyfunctionality of Th2 cells	한미령	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2024-07-09
203	A pan-cancer analysis unveiling the function of NR4A family genes in tumor immune microenvironment, prognosis, and drug response.	한미령	Genes & Genomics	2024-08-01
204	Integrated Analysis of Spatial Transcriptomics and CT phenotypes for Unveiling the novel molecular characteristics of Recurrent and Non-Recurrent High-Grade Serous Ovarian Cancer	한미령	Biomarker Research	2024-08-02
205	Transcriptomic analysis of cellular senescence induced by ectopic expression of ATF6α in human breast cancer cells	한미령	PLoS One	2024-10-28
206	MethylCallR : a comprehensive analysis framework for Illumina Methylation Beadchip	한미령	Scientific Reports	2024-11-07
207	Epigenetic Regulation on Left Atrial Function and Disease Recurrence After Catheter Ablation in Atrial Fibrillation	한미령	Clinical Epigenetics	2024-11-27
208	The Effect of Forkhead Box O1 Single Nucleotide Polymorphisms on Cortical Thickness and White Matter Integrity in High Suicide Risk Patients	한미령	Psychiatry Investigation	2024-11-28
209	Rice OsGATA16 is a positive regulator for chlorophyll biosynthesis and chloroplast development	강기윤	PLANT JOURNAL	2024-01-30
210	Rice ONAC016 promotes leaf senescence through abscisic acid signaling pathway involving OsNAP	강기윤	Crop Journal	2024-06-01
211	Rice CHD3/Mi-2 chromatin remodeling factor RFS regulates vascular development and root formation by modulating the transcription of auxin-related genes NAL1 and OsPIN1	강기윤	BMB Reports	2024-04-23
212	Rice CRYPTOCHROME-INTERACTING BASIC HELIXLOOP- HELIX 1-LIKE interacts with OsCRY2 and promotes flowering by upregulating Early heading date 1	강기윤	PLANT CELL AND ENVIRONMENT	2024-11-04
213	Boosting with variant-matched adenovirus-based vaccines promotes neutralizing antibody responses against SARS-CoV-2 Omicron sublineages in mice	김병석	International Journal of Antimicrobial Agents	2024-03-01
214	IL-17 and IL-21: Their Immunobiology and Therapeutic Potentials	김병석	Immune Network	2024-02-01
215	The role of alternative autophagy in cell viability and response to paclitaxel treatment in v-Ha-ras-transformed NIH 3T3 cells	이미가엘	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	2024-12-03
216	Anti-Cancer Strategy Based on Changes in the Role of Autophagy Depending on the Survival Environment and Tumorigenesis Stages	이미가엘	MOLECULES	2024-11-01
217	Review of the genus Xyrosaris Meyrick (Lepidoptera, Yponomeutidae, Yponomeutinae) from Korea, with two new species	배양섭	Zootaxa	2024-01-05

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218	New findings of poronotic oribatid mites (Acari: Oribatida) from Korea	배양섭	Zootaxa	2024-01-30
219	Three new species of Cirrothaumatia Razowski & Becker from Peru, with notes on the genus (Lepidoptera: Tortricidae: Tortricinae: Cochylini). Zootaxa 5418 (3): 268–278	배양섭	Zootaxa	2024-02-29
220	Taxonomic study of the genus Spilonota Stephens (Lepidoptera: Tortricidae: Olethreutinae: Eucosmini) with descriptions of two new species in Korea	배양섭	Zootaxa	2024-03-01
221	Review of the genus Rhagoba Moore, 1888 (Lepidoptera, Crambidae, Spilomelinae) from Laos, with a description of new species	배양섭	Zootaxa	2024-04-19
222	An illustrated checklist of the tribe Nomophilini (Lepidoptera:Spilomelinae) with a newly recorded genus in Korea	배양섭	Journal of Asia-Pacific Biodiversity	2024-06-01
223	New and little known species of soil mites of the families Oppiidae and Suctobelbidae (Acari: Oribatida) from Korea	배양섭	INTERNATIONAL JOURNAL OF ACAROLOGY	2024-01-02
224	First report of the family Attevidae (Lepidoptera, Yponomeutoidea) from Cambodia, with description of a new species	배양섭	Zootaxa	2024-08-19
225	Two newly recorded species with a revised checklist for the Korean nolid moth fauna (Lepidoptera, Nolidae)	배양섭	Journal of Asia-Pacific Biodiversity	2024-09-01
226	Three newly recorded Nola species in Laos (Lepidoptera, Nolidae, Nolinae)	배양섭	Journal of Asia-Pacific Biodiversity	2024-12-01
227	Contribution to the knowledge of soil mites of the family Brachychthoniidae (Acari: Oribatida) in Korea, with key to known species	배양섭	SYSTEMATIC AND APPLIED ACAROLOGY	2024-11-29

1-3. 상시 콜로키움 개최 현황 (2024.03.01 ~ 2025.02.28)

	개최일	연사	소속	발표주제
제1차	2024.03.26	김연준	부경대학교	Harnessing Computational Chemistry and Machine Learning to Design Chemicals for Renewable Energy
제2차	2024.04.04	한솔	CJ제일제당	해조류 연구원으로의 여정
제3차	2024.04.02	장석복	카이스트	분자활성 촉매반응
제4차	2024.04.11	김태진	부경대학교	해양 용존 미량 금속의 생지화학 순환
제5차	2024..04.18	윤주은	극지연구소	Ocean nutrients fertilization
제6차	2024.05.14	이성수	KIST	Synergistically Integrated Membranes and Ionomers for High Temperature Polymer Electrolyte Membrane Fuel Cells and Anion Exchange Membrane Water Electrolyzers
제7차	2024.04.25	변성수	서울대학교	Random Matrix Theory Through the Lens of the Universality Principle
제8차	2024.04.30	박종식	경기대학교	Development of unconventional heteronanstructures via cation exchange reaction for highly efficient electrocatalyst
제9차	2024.05.16	김민수	한국수산기술연구원	한국과 글로벌 수산양식업의 현황과 우리가 가야할 방향
		박병철	성균관대학교	피코초로 보는 전자의 세상: 새로운 극한 전자상태
제10차	2024.05.20	신영훈	주식회사 빅스캔 R&D 연구소	Road to GaN
제11차	2024.05.21	한민수	GIST	Di-metalliccomplexes as artificial peroxidase and its application
제12차	2024.05.23	이미경	인천대학교	저탄소 사회 구축을 위한 전기화학적 시스템 및 촉매 개발
		백인환	인하대학교	Atomic layer deposition for semiconducting thin films for transistor applications
		이태권	연세대학교	Harnessing Big Data to Identify Groundwater Vulnerable Areas
		김대준	고려대학교	Theta series and representations by integral quadratic forms
제13차	2024.05.30	이민경	극지연구소	퇴적물을 이용한 남극 과거 환경 복원
		최광용	성균관대학교	양자 스핀계에 관한 얘기
제14차	2024.06.07	양희혁	Stevens Institute of Technology	Room Temperature 2D Dilute Magnetic Semiconductors for Spintronics

1-3. 상시 콜로키움 개최 현황 (2024.03.01 ~ 2025.02.28) -계속-

	개최일	연사	소속	발표주제
제15차	2024.06.13	이재용	중앙대학교	Deep Learning and Partial Differential Equations
제16차	2024.08.23	이덕형	NIMS (Japan)	Control of electromagnetic waves in small gaps
제17차	2024.09.12	권도현	서울시립대학교	Applications of Optimal Transport in Machine Learning
제18차	2024.10.17	김탁원	성신여자대학교	Making Decisions in Financial Markets
제19차	2024.11.14	윤주은	극지연구소	북극해 해양열파 발생과 시공간적 변동 연구
제20차	2024.11.21	강호정	연세대학교	기후변화와 생태계
제21차	2024.12.05	서인석	서울대학교	확률론의 여러 난제들
제22차	2024.11.28	김기태	극지연구소	얼음에서 일어나는 특이한 환경 화학 반응 연구
제23차	2024.12.12	구자근	수산자원연구소	블루카본, 갯벌 관련 인천시의 사업 및 동향

1-4. 국제 협력 교류 활동 (2024.03.01 ~ 2025.02.28)

연번	체결명	기관	국가	일자
1	상호 교류협력에 관한 업무협력 협약서	Car-Y-Mor	영국	2024.07.30
2	상호 교류협력에 관한 업무협력 협약서	라딕스 유한회사	대한민국	2024.10.02
3	상호 교류협력에 관한 업무협력 협약서	경희대학교 디스플레이 부품 소재 지역혁신센터	대한민국	2024.10.31
4	상호 교류협력에 관한 업무협력 협약서	㈜로브	대한민국	2024.12.19
5	상호 교류협력에 관한 업무협력 협약서	㈜시노바	대한민국	2024.12.20
6	상호 교류협력에 관한 업무협력 협약서	㈜하이퍼인사이트랩	대한민국	2024.12.20

1-5. 국제학술대회 개최 현황 (2024.03.01 ~ 2025.02.28)

연번	주제	강사명	소속	일자
1	제 16회 기초과학 국제공동심포지움	**연사: 총 25명 (국내 17명, 국외 8명)**	**참가국: 대한민국, 미국, 이탈리아, 일본, 중국**	2024.10.10 ~ 10.11

1-6. 기초과학특강 개최 현황 (2024.03.01 ~ 2025.02.28)

연번	강사명	주제	진행학교	일자
1	강유리	친환경 발전의 양면성과 발전의 이해	박문중학교	2024.06.17
2	강유리	반도체, 다이오드의 원리와 구조 및 브레드보드 회로 구성하기	인천예송중학교	2024.06.28
3	강유리	우주자원과 우주개발, 우주전쟁	인천예송중학교	2024.07.08
4	함남우	우주자원과 우주개발, 우주전쟁	인천중학교	2024.12.06

1-7. 운영위원회 회의

연번	일 자	회 의 내 용
제 1회	2024.03.19	• 2024학년도 연구소 운영 논의 • 2023년 기초과학연구소 운영 결과보고 • 병역특례지정업체 전문연구요원 채용계획에 관한 논의
제 2회	2024.07.16	• 2024학년도 연구소 운영 논의 • 2024학년도 기초과학연구소 운영 상반기 자유학기제/전공체험 결과보고 • 2024년 기초과학 국제공동 심포지움 개최 논의
제 3회	2024.12.20	• 2024학년도 기초과학연구소 기초학문 박사후연구원 채용계획에 관한 논의
제 4회	2025.01.20	• 2025학년도 기초과학연구소 학술연구교수 채용논의

2
학술행사 및 연구활동

2-1. 기초과학논문집 제 36집 발간

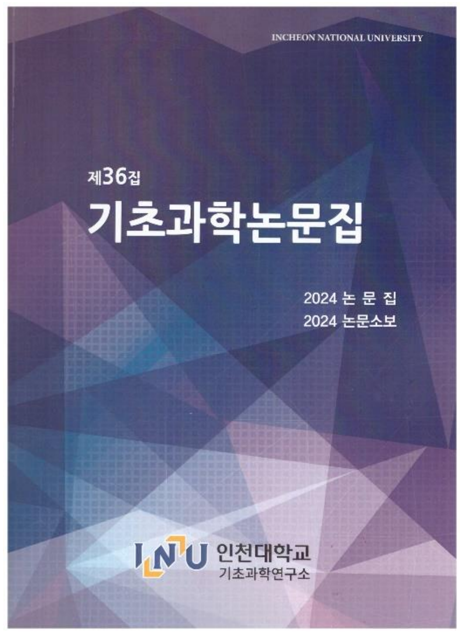
2-1-1. 기초과학논문집 제 36집 발간

2025년 1월 기초과학연구소는『기초과학논문집 제 36집』을 발행하였다. 이 논문집에는 5편의 연구논문과 227편의 논문소보가 수록되었다.

연구논문의 교신저자는 강동구 교수(화학부), 박승룡 교수(물리학과), 이윤복 교수(수학과), 이재성 교수(해양학과), 그리고 최수봉 교수(물리학과)이다.

논문소보에는 2024년 1월부터 12월까지 1년간 국내외 여러 학술지에 개제된 기초과학연구소 소속 교원들의 연구논문 첫 페이지를 수록하였다.

본 연구소는 이 논문집을 전국 기초과학연구소 및 유관기관에 배포하였다.



논문 제목	저자	소속
SERS-based PCR for the monitoring of Klebsiella pneumoniae	강동구	화학과
라만 분광법을 통한 La1.85Sr0.15CuO4 박막의 포논 분석	박승룡	물리학과
Note on a-Values of the Riemann Zeta Function Near the Critical Line	이윤복	수학과
Chronic exposure to low dose of ethanol induces hepatic malfunction in Danio rerio and Oryzias sinensis	이재성	해양학과
8 종의 전이 금속 디칼코게나이드(TMDs) 물질에 대한 라만 스펙트럼 분석	최수봉	물리학과

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Incheon National University

인천대학교 기초과학연구소
RESEARCH INSTITUTE OF BASIC SCIENCES, INCHEON NATIONAL UNIVERSITY

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