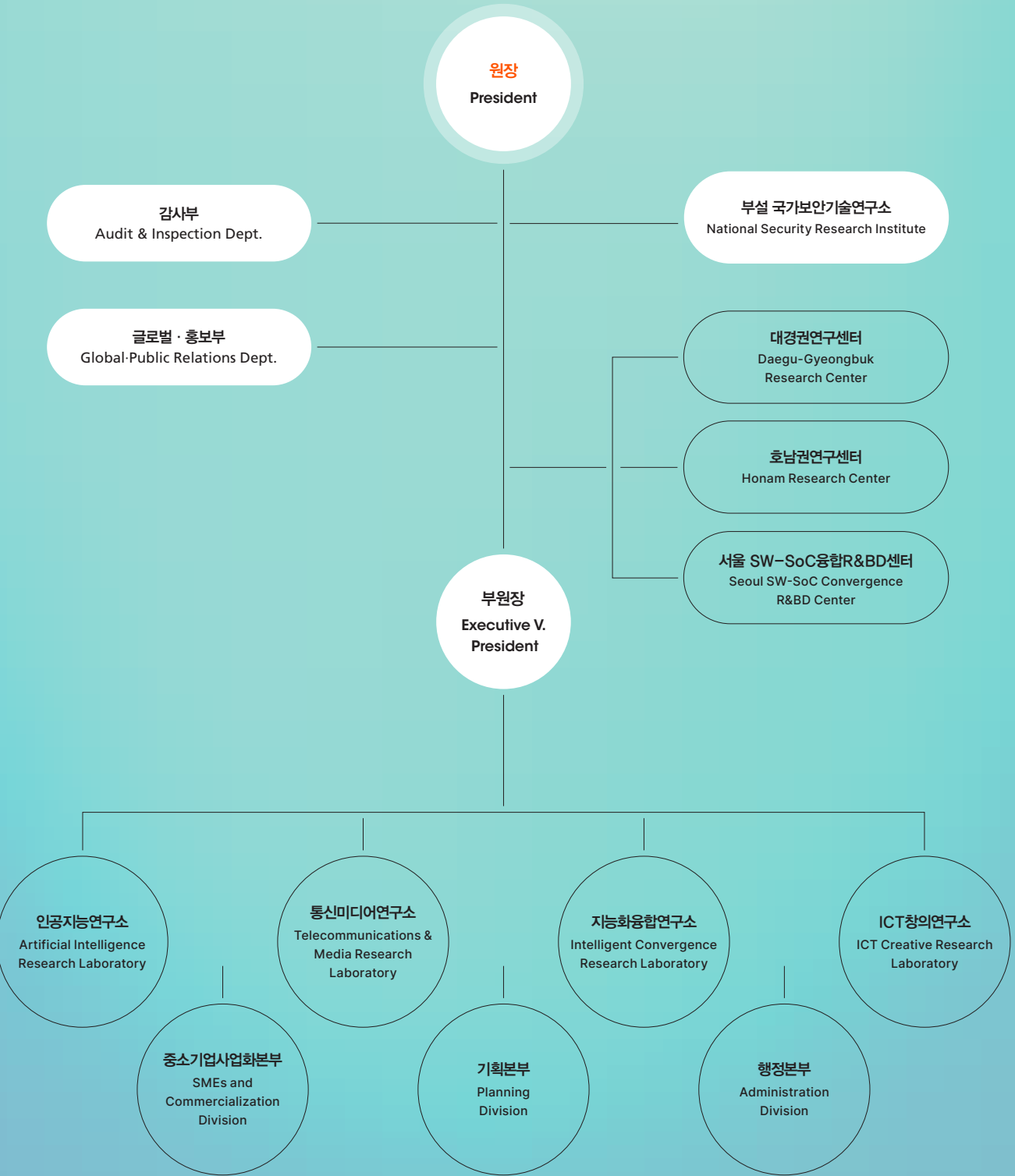


조직도
Organization
Chart



글로벌 R&D
협력 네트워크
Global R&D
Cooperation Network



SWISS Vern Univ. / IDQ	CANADA IP Cube Partners / University of Saskatchewan / CRC Canada / UHN / University of Waterloo / University of Toronto	Nihau Spectrum Corp / Apple / IPVA LUE Management Int / APX / PMC-sierra / Cryptography Research Institute / Vanguard Video / AMD / Sedici Innovations Ltd / Intel / Open Networking Foundation (ONF) / Via Licensing / ICAP / Argonne National Laboratory / Endolynx Inc. / Netlist Inc. / SEMTECH / University of Oklahoma / Veeva Inc. / ONRG / IMEG
FRANCE INRIA/CNRS/ETS/Sigfox	IRAN Ministry of Science and Technology / Adama Science and Technology University	UZBEKISTAN Tashkent University of Information Technologies / JSC Uzbektelecom / MITC
GERMANY Fraunhofer IAF / Universitat Zu Lubeck / Rohde&Schwarz / X-FAB / MERCK / BOSCH / Fraunhofer-HHI / BMW / Julich / ESCRYPT / BMBF	ETHIOPIA Ministry of Science and Technology / Adama Science and Technology University	RWANDA Rwanda Information Society Authority / Ministry of Infrastructure
BELGIUM IMEC, ULB	BRAZIL Information Technology University / Pakistan Post	CHILE Rwanda Information Society Authority / Ministry of Infrastructure
ISRAEL ARO Volcani Center / Design Art Networks / FINLAND	CHINA Tongji University / TSMC / Beijing Jiaotong University	TURKEY PTT
KAZAKHSTAN ITIC(International Green Technologies & Investments Center)	POLAND Warsaw University of Technology / PUT / University of Gdansk	NICARAGUA ENATREL
ITALY SIM2 BV International / ENEA	FINLAND University of Oulu	TAJIKISTAN Technological University of Tajikistan
PALESTINE An-Najah National University	BULGARIA IOMT-BAS	JORDAN Ministry of Information & Communication Technology
KENYA Postal Corporate of Kenya / Baringo County Government	ZIMBABWE OHANA	THAILAND Royal Thai Air Force / Guru Square Co. Ltd. / KMTEL
INDIA CDAC / Sagacious Research Pvt Ltd / Saankhya Labs Private Limited	GHANA Council for Scientific and Industrial Research	REPUBLIC OF SOUTH AFRICA SENTECH SOC LTD / AFRIKO HOLDINGS (PTY) LTD
VIETNAM Viettel / UET-VNU / Ton Duc Thang University / HUST	NETHERLANDS WLR	GABON National Agency of Digital Infrastructures and Frequencies
MALAYSIA MYTEL / UCSY(University of Computer Studies, Yangan) / West Yangan Technological University / Ministry of Education	NORWAY Sintef Ocean ASIMARINTEK	BOTSWANA DIS Botswana
MYANMAR MYTEL / UCSY(University of Computer Studies, Yangan) / West Yangan Technological University / Ministry of Education	AUSTRALIA University of South Australia / University of Queensland / University of Wollongong	UK Oxford Univ. / Graphcore
TAIWAN Researchwire Knowledge Solution Pvt. Ltd. / Ministry of Communication and Information Technology / NCC(National Cyber & Crypto Agency of Indonesia)	USA University of Texas Austin / University of Washington / University of California Riverside / Texas A&M / MGH / Harvard University / Georgia Tech / CSUF / SDSU / University of California Davis / University of California San Diego(UCSD) / Indiana University / Virginia Tech / Arizona State University / Columbia University / University of Colorado, Boulder / Massachusetts Institute of Technology(MIT) / University of California, Los Angeles (UCLA) / Qualcomm / University of North Carolina at Charlotte / Houlihan Lokey / Avanci, LLC / IBM Corp. / Farjam & Farjami LLP / AIM-IP / SIGMA DESIGNS / Sinclair Broadcast Group Inc. / Finisar Corp. / NVIDIA / Dolby Laboratories, Inc. / Via Licensing Corporation / University of Connecticut / IEEE / Rutgers University / KBRI / Purdue University / San Jose State University / Space Systems/Loral INC. / South Dakota State Univ. / Google / BOEHRINGER INGELHEIM /	
SPAIN UPV(Universitat Politècnica de València) / University of the Basque Country(UPV/EHU)		
MONGOLIA MUST / MTZ		
JAPAN RIKEN / Morita Tech / Zeon / Konica Minolta / NHK / DNPT & DNP / Heartwell / Novatech & Sharp		

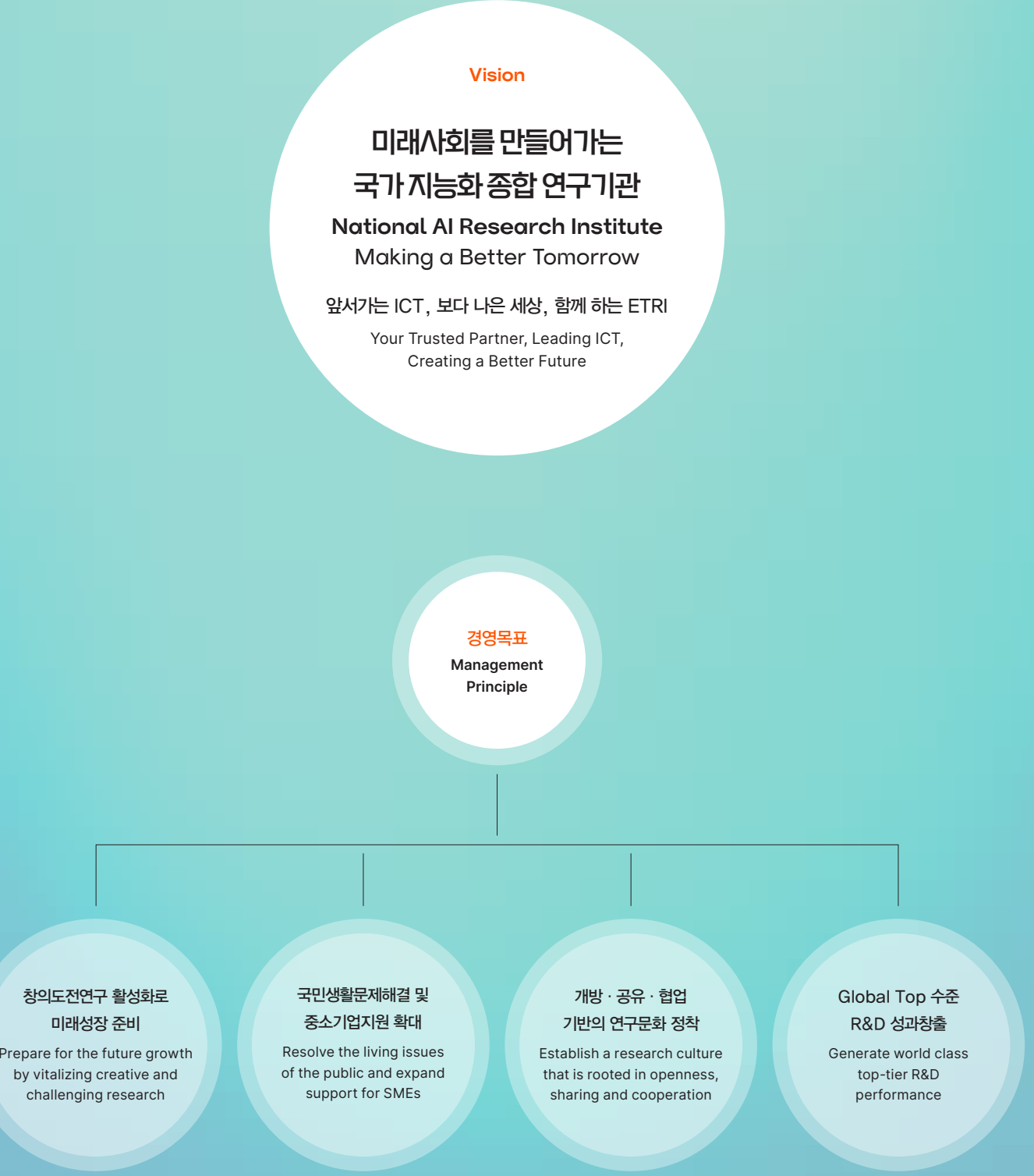
34129 대전광역시 유성구 가정로 218 / TEL 042, 860, 6114 / FAX 042, 860, 5848 / www.etri.re.kr
218 Gajeong-ro, Yuseong-gu, Daejeon, 34129, KOREA



ETRI

2022 ETRI
Technology Report

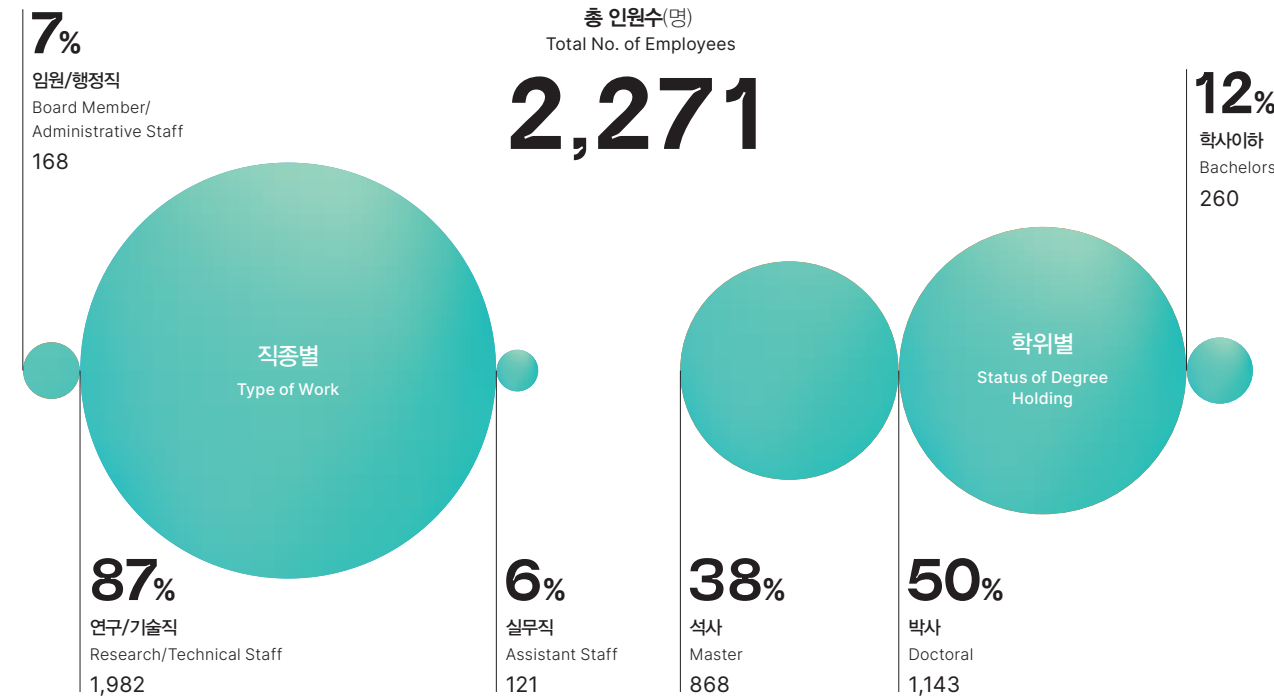
비전 및 경영목표
Vision & Management
Principle



인원현황

Personnel

(2022. 10. 31. 기준)
(As of Oct. 31. 2022)



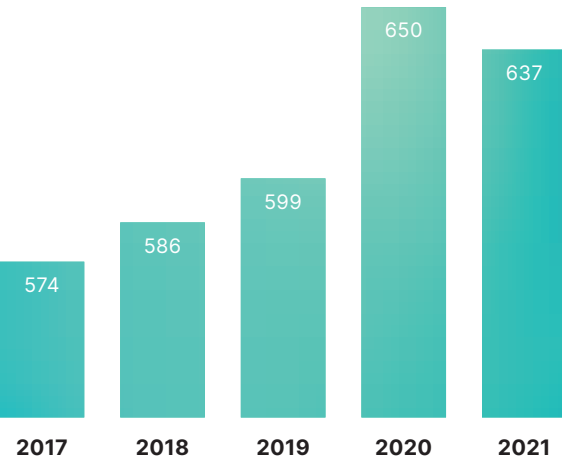
과제수행실적

Proeject Status

(2021. 12. 31. 기준)
(As of Dec. 31. 2021)

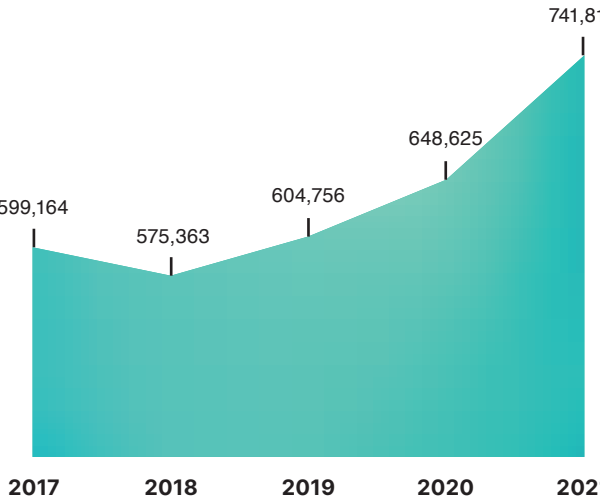
총 과제수(건/5년 누적)
No. of Projects(Cases/Total of Past 5yrs)

3,046



5년 평균 연구비(백만 원)
Budgets(Million KRW/Avg. of Past 5yrs)

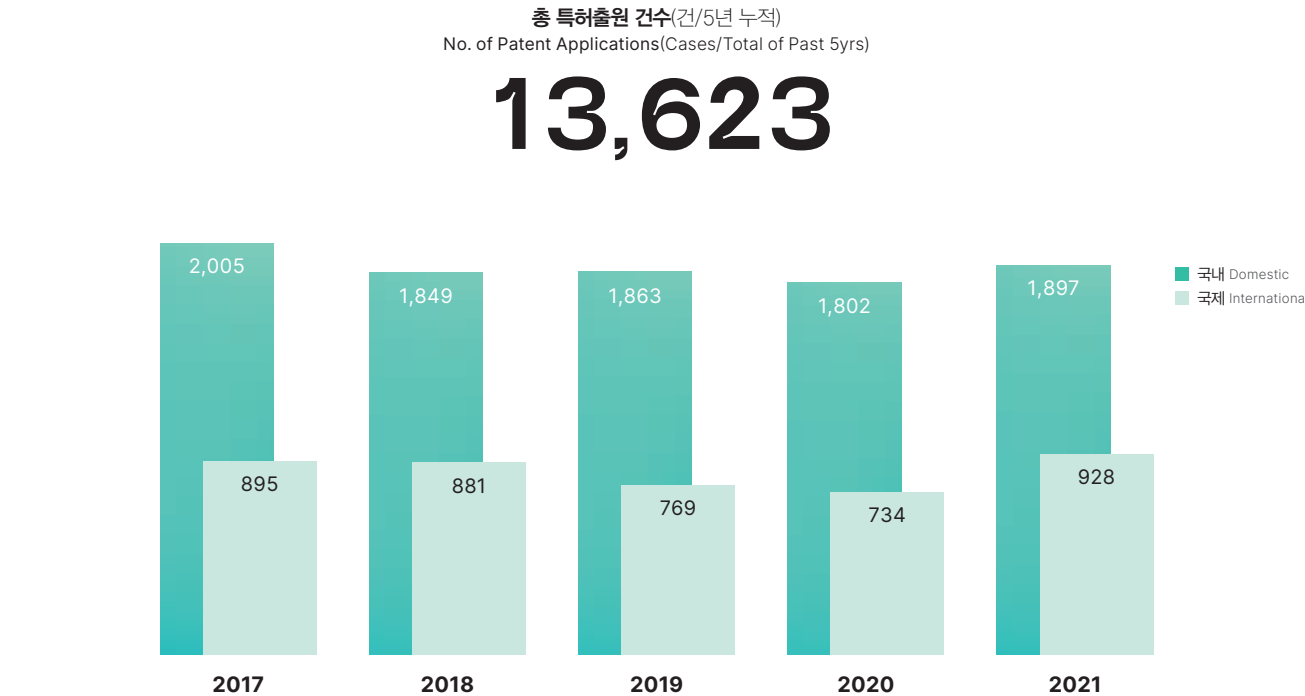
633,943.6



특허출원

Patent Application

(2021. 12. 31. 기준)
(As of Dec. 31. 2021)



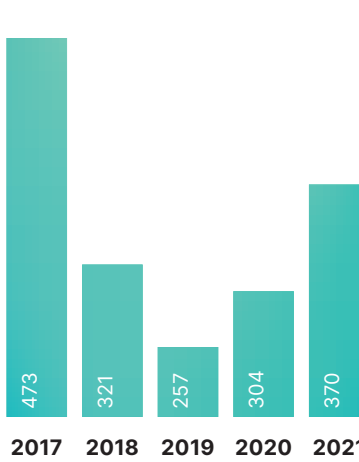
기술이전

Technology Transfer

(2021. 12. 31. 기준)
(As of Dec. 31. 2021)

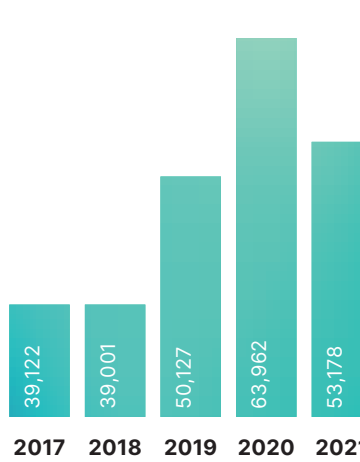
기술수(건/5년 누적)
No. of Technology
(Cases/Total of Past 5yrs)

1,725



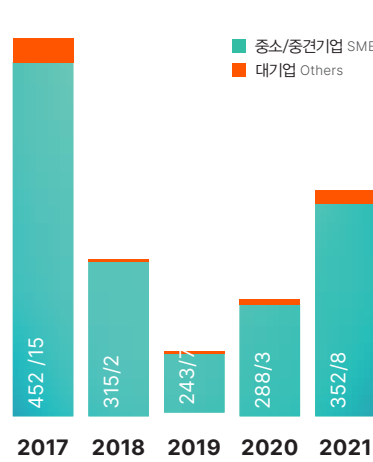
기술료(백만 원/5년 누적)
Royalty Income
(Million KRW/Total of Past 5yrs)

245,390



기술 이전 기업 수(건/5년 누적)
No. of Technology Transfer Companies
(Cases/Total of Past 5yrs)

1,685



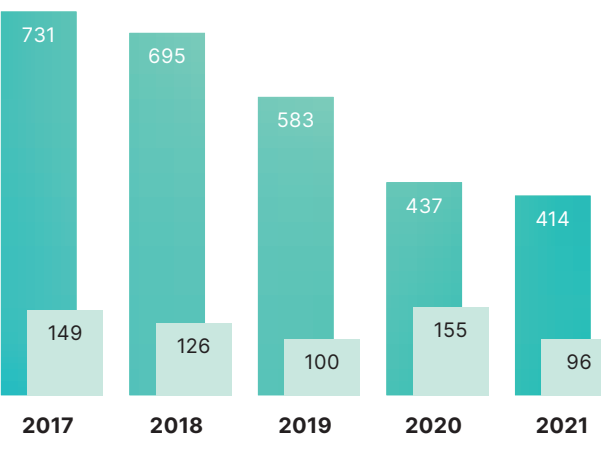
표준화

Standardization

(2021. 12. 31. 기준)
(As of Dec. 31. 2021)

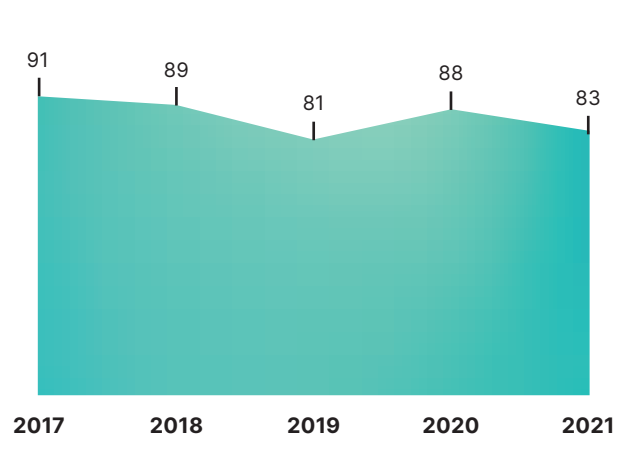
표준기고서 건수(건/5년 누적)
No. of Standards Contributions Adopted
(Cases/Total of Past 5yrs)

3,446



국제표준화기구 의장단(명/5년 평균)
No. of Standard Leaders
(Avg. of Past 5yrs)

86.4



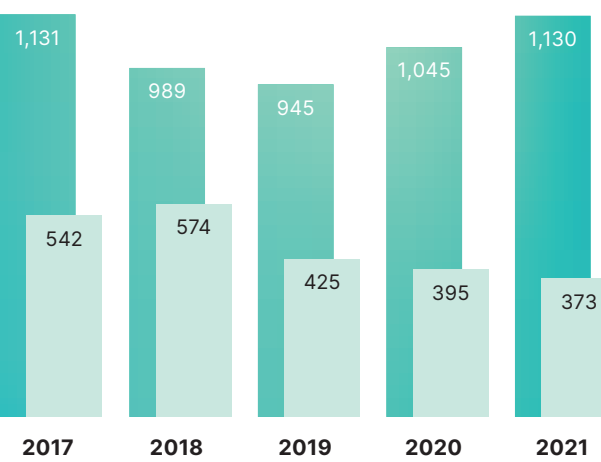
논문자료

Papers

(2021. 12. 31. 기준)
(As of Dec. 31. 2021)

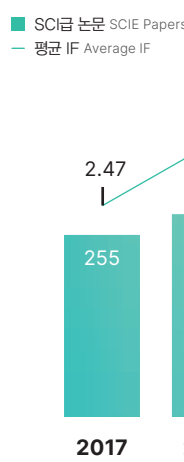
총 논문자료 수(건/5년 누적)
No. of Papers(Total of Past 5yrs)

7,549



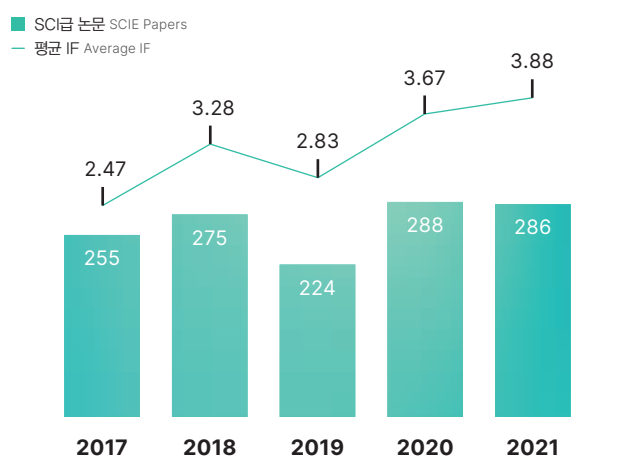
총 SCI급 논문자료 수(건/5년 누적)
No. of SCIE Papers(Total of Past 5yrs)

1,328



평균 IF(5년 누적)
Average IF(Avg. of Past 5yrs)

3.23



R&D 주요성과

Major Acheivements in R&D

2020s

- 2022 · 마이크로 LED 동시 전사 · 접합 기술 Micro LED Transfer, Bonding Technology
- 2021 · 도로와 사물, 사람을 이해하는 지능로보틱스 AI 핵심기술
Developed core technologies for AI that understands roads, objects, and people
- 2020 · 시각지능 원천기술 플랫폼 '딥뷰(Deepview)' Deepview - Visual intelligence source technology platform

2010s

- 2019 · 25Gbps급 촉각인터넷 기술 '틱톡(TIC-TOC)' TIC-TOC - 25Gbps-class tactile Internet technology
- 2018 · UHD 모바일방송 기술 UHD mobile broadcasting technology
- 2017 · 고성능 언어지능 SW '엑스브레인(Exobrain)' Exobrain - High-performance language intelligent SW
- 2016 · 광-회선-패킷 통합 스위칭 시스템 Optic-line packet integration switching system
- 2015 · RoF기반 모바일 프런트홀 기술(High Five ESCoRT) RoF-based mobile front hole technology (High Five ESCoRT)
- 2014 · 세계최초 가입자당 10Gbps 속도보장 오케스트라(OCES+3.2 Tera) 광인터넷 기술
World's first Orchestra (OCES+3.2 Tera) optic Internet technology guaranteeing 10 Gbps per subscriber
- 2013 · DB-Call 기반 지능형 영어학습 시스템(Genie Tutor) DB Call-based intelligent English learning system (Genie Tutor)
- 2012 · 100배 빠른 광 인터넷 기술개발 Developed optical Internet technology that's 100 times faster
휴대형 한 · 영 자동통역 지니톡(Genie Talk) 기술 개발
Developed a mobile Korean-English translating technology called Genie Talk
- 2011 · 투명도 조절 AMOLED 디스플레이 패널 개발 Transparency adjustable AMOLED display
- 패킷-광 통합 전달망 기술개발 Packet-optical integrated transport network technology
- 2010 · 4세대 이동통신 LTE-Advanced 세계 최초 개발 4G LTE-Advanced Technology
- 스마트 선박 기술개발 Smart ship technology(SAN)

2000s

- 2009 · 세상을 밝혀주는 친환경 OLED 조명기술 개발
Developed eco-friendly OLED lighting technology for illuminating the world
- 2008 · SMMD 기반 실감체험 4D 시스템기술 개발 Developed an SMMD-based live experience 4D system technology
- 2007 · 3.6Gbps 4세대 무선전송시스템 세계 최초 개발
The world's first 3.6Gbps 4th generation mobile communication technology(NoLA)
- 2006 · 무선 홈 네트워크(UWB)개발 Developed a wireless home network(UWB)
- 투명 AMOLED 세계 최초 개발 Developed the world's first transparent AMOLED
- 2005 · 국산 임베디드SW 개발 솔루션 첫 수출 ETRI succeeded in exported embedded SW solution
- 지상파 DMB 서비스 개시 Terrestrial DMB service launched
- 2004 · 세계최초 이동무선 광대역 인터넷 와이브로(WiBro) 시제품 개발
Developed the world's first prototype system of wireless broadband Internet called WiBro

1990s

- 1999 · 동기식 IMT 2000(CDMA2000) STP 시스템 개발 Synchronized IMT 2000(CDMA2000) STP system
- 1996 · CDMA ATM교환기 개발 CDMA ATM exchanging machine
- 1995 · CDMA 세계 최초 상용화 성공 Commercialize CDMA for the first time in the world
- 1991 · TDX-10 개통 Launched TDX-10
- 주전산기II (TICOM) 개발 Developed TICOM II
- 1990 · 32비트 마이크로프로세서 개발 Developed 32-bit microprocessors

1980s

- 1989 · 4M DRAM 개발을 시작으로 16M, 64M, 256M DRAM 개발
Developed 4M DRAM, which led to the development of 16M, 64M, and 256M DRAM
- 1988 · 565Mbps 광통신 시스템 개발 Developed 565 Mbps optical communication system
- 1986 · 1가구 1전화시대를 연 전전지교환기(TDX)개발 Developed TDX which opened the "one-household, one-telephone" era
- 1984 · 16비트 UNIX 개발 컴퓨터 국산화 성공 Localized 16-bit UNIX computer
- 1983 · 8bit 교육용 컴퓨터 개발 Developed 8-bit educational computer
- 1982 · 우리나라 최초의 메모리 반도체 32K ROM 개발 Developed Korea's first memory semiconductor 32K ROM