



2022년도

NANO
convergence



연차실적보고서
2023. 8.



나노기술연구협의회
Korea Nanotechnology Research Society

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I

출판실적

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5. 2022년도 Thematic Series 출판실적

I 출판실적

1. 연도별 투고 및 출판실적

- 2022년도 계약 갱신으로 출판 편 수 전년 대비 약 38% 증가(40편→55편)
- SCIE 등재('18년 12월) 이후 2020년까지 rejection rate이 급증하였으나, 출판 편 수 확대('22년) 이후 뚜렷한 감소세 진입

| Submissions | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|------|------|------|------|------|
| Total Submitted | 2 | 66 | 56 | 58 | 69 | 103 | 253 | 308 | 256 | 202 |
| Total Decided | | 49 | 52 | 63 | 59 | 82 | 215 | 302 | 254 | 200 |
| Accept | | 27 | 14 | 35 | 37 | 38 | 44 | 33 | 38 | 55 |
| Reject | | 22 | 38 | 28 | 22 | 44 | 171 | 269 | 216 | 145 |
| Acceptance Rate | | 55% | 27% | 56% | 63% | 47% | 21% | 11% | 15% | 28% |
| Rejection Rate | | 45% | 73% | 44% | 37% | 53% | 79% | 89% | 85% | 72% |
| Average Days to First Decision | 29 | 35 | 40 | 29 | 41 | 22 | 19 | 20.2 | 17.5 | 24 |
| Average Days to Final Disposition Accept | | 43 | 60 | 90 | 50 | 48 | 66 | 104 | 75 | 71 |
| Average Days to Final Disposition Reject | | 55 | 42 | 55 | 29 | 19 | 14 | 22 | 19 | 16 |

2. 분과별 출판실적

- 2022년도 Thematic Series 발간을 통해 분야 분포도 개선
- 분과별 전체논문&Thematic Series 출판 편 수 비교표

※() : Thematic Series 출판 편 수

| 분과 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|-------|--------|--------|--------|-------|--------|--------|
| Nanoelectronics(NE) | 5 | 3 | 7 | - | 3 | 11(7) | 6 | - | 5(2) |
| Nanophotonics(NP) | 4 | 4 | - | 4(3) | 3(2) | - | 6(5) | 1 | 4(2) |
| Nanomaterials(NM) | 4 | 4 | 7 | 14(3) | 6 | 21(10) | 11(3) | 12(6) | 14(4) |
| Nanoenergy & Nanoenvironment(EE) | 3 | 1 | 4 | 7(5) | 2 | - | 4(1) | 8(4) | 5(1) |
| Nanofabrication & Nanocharacterization(FC) | 3 | 4 | 3(1) | 4(3) | 5(3) | 2 | 2 | 3(1) | 4 |
| Nanobio&Nanomedicine(BM) | 5 | 5 | 11 | 5 | 17(5) | 1 | 11 | 16(7) | 20(5) |
| Emerging Nanotechnology(EN) | 3 | 3 | 2 | 3(3) | 1 | 5(2) | - | - | 3 |
| 합계 | 27 | 24 | 34(1) | 37(17) | 37(10) | 40(19) | 40(9) | 40(18) | 55(14) |

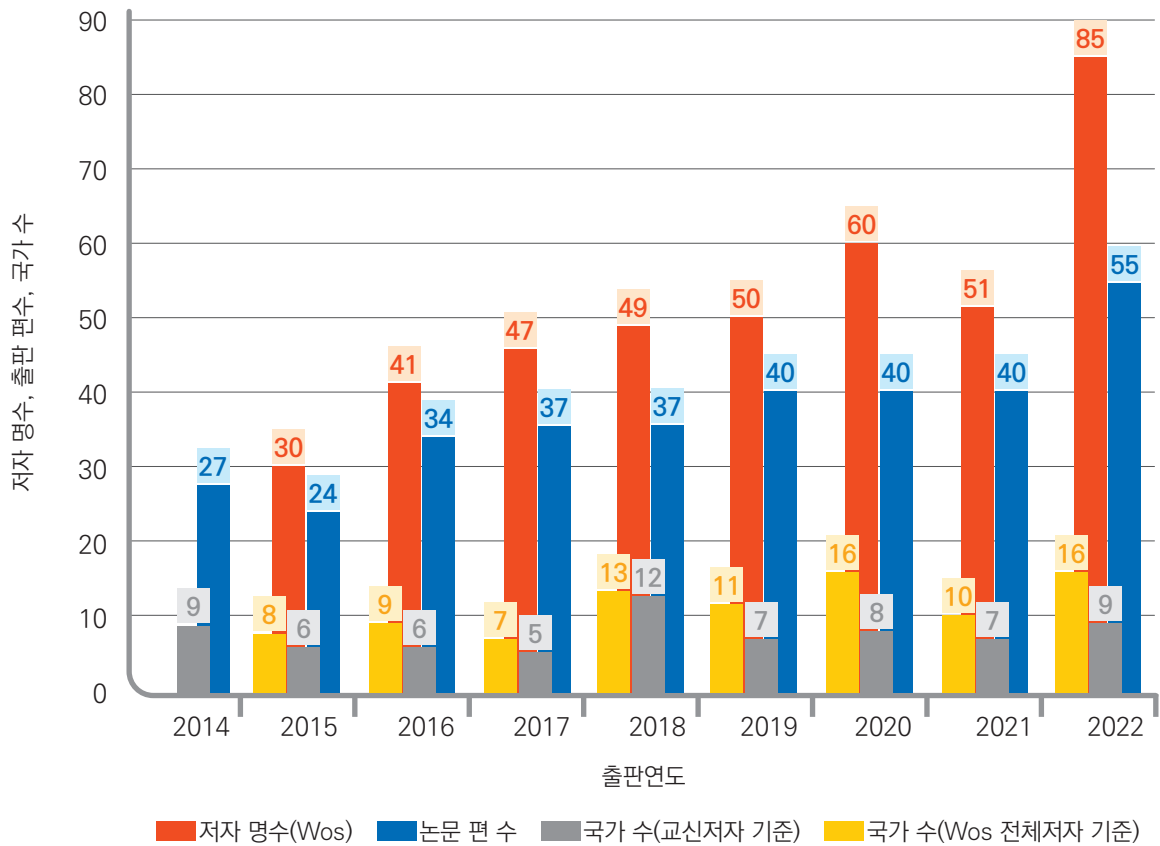


3. 국가별 출판실적

- WoS에서 검색되는 2022년도 전체저자 국가 수는 16개국으로, 2020년도 대비 논문 편 수 및 전체 저자 수가 늘어났음에도 불구하고 국가 수는 동일한 수치를 기록함
- 전체 출판편수는 증가하는 반면 저자의 국가 수는 축소되고 있어 저널의 인지도 개선 및 다양성 확보를 위한 방안 필요
- 국내연구자의 국제공동연구 논문 유치 활성화 제언

논문 편 수 VS 저자 명수 VS 국가 수 비교표

※ WoS 데이터는 2015년도 출판실적부터 반영함





- 교신저자 기준 국가별 출판실적

| 국가/연도 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| KOREA, REPUBLIC OF | 13 | 14 | 21 | 22 | 15 | 24 | 25 | 18 | 31 |
| UNITED STATES | 5 | 3 | 7 | 7 | 10 | 4 | 6 | 11 | 11 |
| CHINA | | | 1 | | 1 | 3 | 4 | 6 | 3 |
| SINGAPORE | 1 | | | 1 | 1 | 2 | 1 | | 3 |
| UNITED KINGDOM | | 2 | | | 1 | | 1 | 1 | 2 |
| JAPAN | | | 1 | 5 | 1 | | | | 2 |
| BELGIUM | | | | | 1 | | | | 1 |
| INDIA | 2 | 2 | 3 | 2 | 3 | 5 | | | 1 |
| AUSTRALIA | 1 | | | | | 1 | | 2 | 1 |
| AZERBAIJAN | 1 | | | | | | | | |
| BELARUS | | 2 | | | | | | | |
| HONG KONG | | | | | 1 | | | | |
| IRAN | 1 | | | | | | | | |
| ISRAEL | | | | | 1 | | | 1 | |
| SWITZERLAND | 2 | 1 | | | | | | | |
| SWEDEN | | | | | 1 | | | | |
| FRANCE | | | 1 | | | | | | |
| CANADA | 1 | | | | | | | | |
| MEXICO | | | | | 1 | | | | |
| POLAND | | | | | | 1 | | | |
| CZECH REPUBLIC | | | | | | | 1 | | |
| MALAYSIA | | | | | | | 1 | | |
| GREECE | | | | | | | | 1 | |
| SAUDI ARABIA | | | | | | | 1 | | |
| 논문 편 수(편) | 27 | 24 | 34 | 37 | 37 | 40 | 40 | 40 | 55 |
| 국가 수(개) | 9 | 6 | 6 | 5 | 12 | 7 | 8 | 7 | 9 |

I. 출판실적

II. 2022년도 출판논문 인용 문서

III. 기타활동



- 전체 저자 기준 국가별 출판실적(※WoS 검색기준)

※ WoS에서 검색되는 2015년도 출판실적부터 반영함

※ WoS 국가 분류 중 'England', 'North Ireland', 'Scotland'를 'United Kingdom'으로 통일함

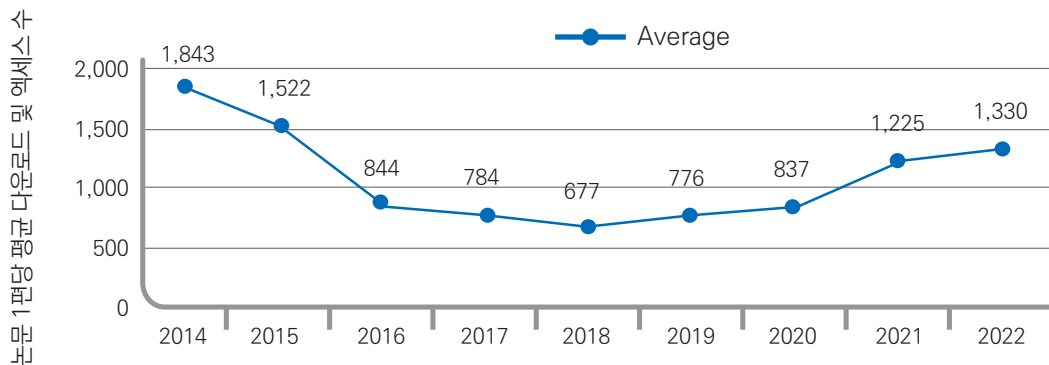
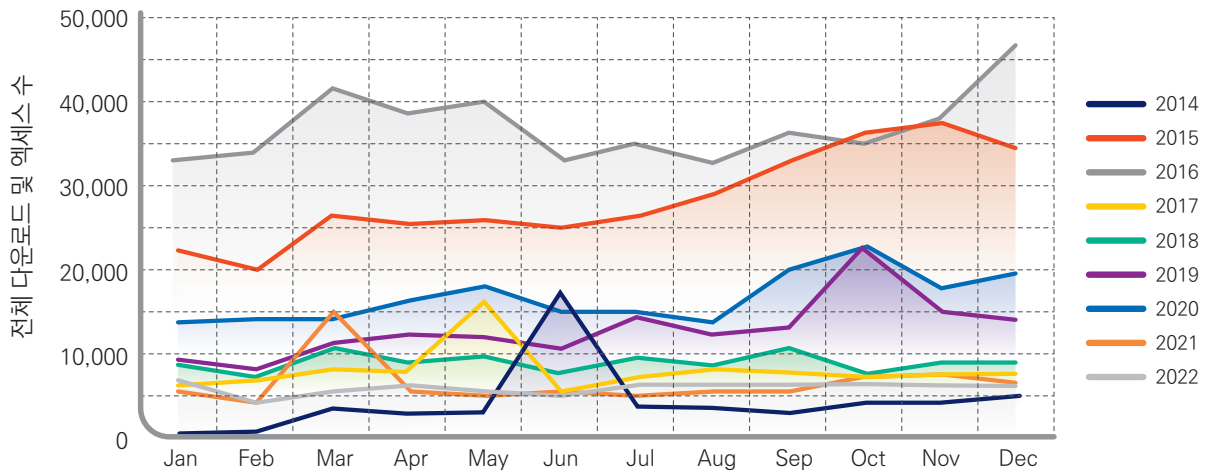
| 국가/연도 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SOUTH KOREA | 15 | 23 | 25 | 21 | 24 | 26 | 23 | 35 |
| UNITED STATES | 5 | 8 | 8 | 10 | 9 | 11 | 14 | 14 |
| CHINA | | 1 | 2 | 2 | 3 | 8 | 6 | 12 |
| SINGAPORE | 2 | | 1 | 1 | 2 | 1 | | 4 |
| JAPAN | | 1 | 6 | 2 | | 1 | | 3 |
| UNITED KINDOM | 2 | | | 2 | | 1 | 1 | 3 |
| AUSTRALIA | | | | | 2 | 1 | 2 | 2 |
| CANADA | | | | | | | | 2 |
| INDIA | 2 | 4 | 3 | 4 | 5 | | | 2 |
| THAILAND | | | | | | 1 | | 2 |
| BANGLADESH | | 1 | | | | | | 1 |
| BELGIUM | | 1 | | 2 | | | | 1 |
| GERMANY | | | 2 | | 1 | | | 1 |
| PAKISTAN | | | | | | | 1 | 1 |
| SAUDI ARABIA | | | | | | 1 | 1 | 1 |
| TAIWAN | | | | | | | | 1 |
| AUSTRIA | | | | | | 1 | | |
| BELARUS | 2 | | | | | | | |
| CZECH REPUBLIC | | | | | 1 | 2 | | |
| EGYPT | | | | 1 | | 1 | | |
| FRANCE | | 1 | | | | | | |
| GREECE | | | | | | | 1 | |
| HUNGARY | 1 | | | | | | | |
| ISRAEL | | | | 1 | | | 1 | |
| ITALY | | | | | | | 1 | |
| MALAYSIA | | | | | | 2 | | |
| MEXICO | | | | 1 | | | | |
| NIGERIA | | | | | | 1 | | |
| NORWAY | | 1 | | 1 | | | | |
| POLAND | | | | | 1 | | | |
| RUSSIA | | | | | | 1 | | |
| SWEDEN | | | | 1 | 1 | | | |
| SWITZERLAND | 1 | | | | | | | |
| VIETNAM | | | | | 1 | 1 | | |
| 저자 수(명) | 30 | 41 | 47 | 49 | 50 | 60 | 51 | 85 |
| 국가 수(개) | 8 | 9 | 7 | 13 | 11 | 16 | 10 | 16 |



4. 연도별 다운로드 및 액세스 현황

- 논문 편 수 누적으로 2022년도 다운로드 및 액세스 수 전년대비 29% 증가
- 하지만 2022년도 1편당 평균 다운로드 및 액세스 수는 창간연도에 비해 떨어짐
- 출판 논문 편 수 확대와 전략적 홍보방안 모색을 통해 액세스 수 관리 필요

| Y/M | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Ave | Totals |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|---------|
| 2014 | | 311 | 3,339 | 2,767 | 2,930 | 17,191 | 3,568 | 3,431 | 2,889 | 4,212 | 4,309 | 4,822 | 1,843 | 49,769 |
| 2015 | 5,381 | 4,298 | 14,929 | 5,659 | 4,829 | 5,144 | 5,202 | 5,726 | 5,563 | 7,133 | 7,445 | 6,330 | 1,522 | 77,639 |
| 2016 | 6,948 | 4,233 | 5,581 | 6,161 | 5,839 | 5,094 | 6,386 | 6,190 | 6,344 | 6,498 | 6,294 | 6,132 | 844 | 71,700 |
| 2017 | 6,018 | 6,587 | 7,941 | 7,667 | 16,002 | 5,586 | 7,245 | 8,307 | 7,754 | 7,213 | 7,644 | 7,669 | 784 | 95,633 |
| 2018 | 8,885 | 7,217 | 10,814 | 8,916 | 9,741 | 7,667 | 9,658 | 8,615 | 10,774 | 7,713 | 9,052 | 8,644 | 677 | 107,696 |
| 2019 | 9,270 | 8,141 | 11,231 | 12,219 | 12,057 | 10,666 | 14,271 | 12,146 | 13,102 | 22,575 | 14,705 | 14,106 | 776 | 154,489 |
| 2020 | 13,831 | 14,001 | 14,349 | 16,308 | 18,081 | 15,170 | 14,786 | 13,431 | 19,794 | 22,971 | 17,779 | 19,628 | 837 | 200,129 |
| 2021 | 22,208 | 19,762 | 26,408 | 25,617 | 25,908 | 25,197 | 26,523 | 28,907 | 32,807 | 36,399 | 37,523 | 34,552 | 1,225 | 341,811 |
| 2022 | 33,098 | 33,966 | 41,652 | 38,640 | 40,017 | 33,160 | 34,870 | 32,677 | 36,239 | 35,077 | 37,997 | 46,664 | 1,330 | 444,057 |



I. 출판실적

II. 2022년도 출판논문 인용 분석

III. 기타활동



5. 2022년도 Thematic Series 출판실적

▶ Thematic Series 출판 개요

- 개요: 최근 주목받고 있는 특정 주제에 관한 논문을 시리즈 형태로 출판
- 규모: 연 16~18편 내외(4~5 series*4 papers)
- 구성 원칙
 - Editor 구성: NC 편집운영위원 1인, Guest Editor 1인(외부초청)
 - 초청논문: 4편 내외(국내논문 1~2편, 국외논문 2편)

▶ 2022년도 출판실적

- 총 6 series, 14편 출판

| | |
|---------------------|--|
| Series Title | Cancer-targeted imaging and therapy |
| Description | Cancer is a pivotal medical application of nanotechnology. Nano-scale materials provide unlimited advantages of pinpointed diagnosis by molecular detection of tumor microenvironment and targeted molecular therapy in response to pathological stimuli. Since the key concept of utilizing nanotechnology in cancer diagnosis and therapy was conceived a few decades ago, immense research and development efforts have been invested with relatively little successes. This theme issue will overview the current status and key accomplishment in the field as well as offering perspectives and guides for the next generation nanotechnology in cancer imaging and therapy. |
| Edited by | Young Jik Kwon (University of California, Irvine, USA) |
| Publications | Chuanbin Mao (University of Oklahoma, USA) · 주제: Protein nanoparticles directed cancer imaging and therapy [DOI] https://doi.org/10.1186/s40580-021-00293-4 |

| | |
|---------------------|--|
| Series Title | Biomolecular Assembly in Nanoscale |
| Description | Biomolecular assembly plays a key role in nearly all life processes, providing hierarchical supramolecular structure, molecular recognition, and communication within cells. Since these assembly processes rely on precise interactions between the functional groups of biomolecules, researchers tried to mimic and engineer biomolecule assembly with a variety of goals, from modulating cellular functions to the creation of unique nanostructure. Moreover, computational methods have been developed dramatically in parallel with advances in understanding the structure and properties of naturally occurring assemblies. The concise design of the unit structure allows to create an unprecedented supramolecular structure. This thematic series aims to introduce the latest research trend of utilizing biomolecular assembly and their representative applications including therapeutics, biocatalysts, and functional nanomaterials. |
| Edited by | Yong Ho Kim(Sungkyunkwan University, KOREA) Minkyu Kim(University of Arizona, USA) |
| Publications | Yong Ho Kim(Sungkyunkwan University, KOREA) · 주제: Supramolecular assembly of protein building blocks: From folding to function [DOI] https://doi.org/10.1186/s40580-021-00294-3 Olga V. Makhlynets(Syracuse University, USA) · 주제: Peptide hydrogel with self-healing and redox-responsive properties [DOI] https://doi.org/10.1186/s40580-022-00309-7 |



| | |
|---------------------|---|
| Series Title | Photonic Nanomedicine |
| Description | Photonic nanomedicine provides opportunities to create new diagnostic and therapeutic modalities to advance healthcare technology with unprecedented precision and safety. With the rapid evolution of this convergence technology at the interface between nanomedicine and biophotonics, increasing attention is being paid to its potential as a novel platform to enable and facilitate research in nanoscience and engineering. Efforts have been made to drive nanoengineering techniques to advance the capabilities of photomedicine for a variety of biomedical applications including light-mediated/activated sensing, imaging, drug delivery/release and therapeutic intervention. Motivated by these emerging trends, this special issue aims to introduce recent interdisciplinary research efforts directed towards the convergence of biophotonics with nanotechnology. |
| Edited by | Sehoon Kim(Korea Institute of Science and Technology, KOREA) |
| Publications | Winnok H. De Vos(University of Antwerp: Universiteit Antwerpen Antwerp, BELGIUM) · 주제: The cellular response to plasma membrane disruption for nanomaterial delivery [DOI] https://doi.org/10.1186/s40580-022-00298-7 |
| | Kanyi Pu(Nanyang Technological University, SINGAPORE) · 주제: Bioenzyme-based nanomedicines for enhanced cancer therapy [DOI] https://doi.org/10.1186/s40580-022-00297-8 |
| Series Title | Atomically Tailored Nanocatalysts for Energy Applications |
| Description | Nanomaterial catalysis is receiving growing interest in sustainable and environmental-friendly energy storage and conversion devices. Catalytically active nanomaterials have been widely employed as heterogeneous catalysts in various photocatalytic or electrocatalytic energy storage and conversion reactions, including hydrogen evolution reaction, oxygen evolution reaction, and oxygen reduction reaction. Since the catalytic activity of nanomaterials depends strongly on their physical and chemical structures, it is the kernel of research to design the active sites with atomic precision for the development of high-performance energy devices. Motivated by this emerging trend, this special issue aims to introduce recent outstanding research efforts directed towards the atomic engineering of nanomaterials' structure and catalytic activity. |
| Edited by | Jong-Ho Kim(Hanyang University, KOREA) |
| Publications | Jong-Ho Kim(Hanyang University, KOREA) · 주제: Modulating the Electrocatalytic Activity of N-doped Carbon Frameworks via Coupling with Dual Metals for Zn-Air Batteries [DOI] https://doi.org/10.1186/s40580-022-00308-8 |
| | Hong Yang(University of Illinois, USA) · 주제: Regulating the Electronic Structures of Mixed B-site Pyrochlore to Enhance the Turnover Frequency in Water Oxidation [DOI] https://doi.org/10.1186/s40580-022-00311-z |
| | Zhiqun Lin(Georgia Institute of Technology, USA) · 주제: Rational Coordination Regulation in Carbon-Based Single-Metal-Atom Catalysts for Electrocatalytic Oxygen Reduction Reaction [DOI] https://doi.org/10.1186/s40580-022-00324-8 |

| | |
|---------------------|--|
| Series Title | Novel Nanobiophotonic Approaches for Sensing and Imaging |
| Description | Nanobiophotonics is an emerging field with integrating nanotechnology with biomedical science. This field provides great opportunities to develop new diagnostic and therapeutic methods towards advanced healthcare technology as well as to study fundamentals of light-nano/biomaterial interactions. In these research areas, there have been great achievements in high-sensitive biosensing at the single molecular and cellular level and high-spatial imaging of intracellular structures using nanophotonic structures. These techniques offer a powerful way for sensing and imaging various biological entities with a nanoscale resolution beyond the diffraction limit. Furthermore, nanobiophotonics has been continuously advanced and expanded to other fields through the convergence with other functional materials and platforms. This special Issue aims to introduce recent interdisciplinary approaches towards innovative nanobiophotonics-based sensing and imaging technologies. |
| Edited by | Inhee Choi(University of Seoul, KOREA) |
| Publications | Inhee Choi(University of Seoul, KOREA) · 주제: Ultrasensitive and Real-time Optical Detection of Cellular Oxidative Stress Using Graphene-covered Tunable Plasmonic Interfaces [DOI] https://doi.org/10.1186/s40580-022-00315-9 |
| | SungWoo Nam(University of California, Irvine, USA) · 주제: Plasmonic sensors based on graphene and graphene hybrid materials [DOI] https://doi.org/10.1186/s40580-022-00319-5 |
| | Ruixuan Gao(University of Illinois Chicago, USA) · 주제: Nanoscale imaging of biological ultrastructure via molecular anchoring and physical expansion [DOI] https://doi.org/10.1186/s40580-022-00318-6 |
| Series Title | Fluorite Structure Ferroelectric Materials and Devices |
| Description | New discoveries of advanced CMOS-compatible hafnia-based ferroelectric devices pave the way for FerroElectronics, which uses ferroelectric building blocks embedded in future CMOS technology nodes. It will make data-centric edge intelligence (EI) a reality by enabling much-needed improvements in computing capabilities. In this series, we focus on recent breakthroughs in hafnia ferroelectric materials and devices to achieve high ferroelectricity, functionality, and performance ferroelectric devices. We discuss epitaxial growth of hafnia ferroelectric materials, high functionality ferroelectric devices, and the morphotropic phase boundary with a high dielectric constant. Such contributions will help hafniabased FerroElectronics make the crucial transition from scientific understanding and fundamentals to practical EI technologies. |
| Edited by | Sanghun Jeon(Korea Advanced Institute of Science and Technology, KOREA) |
| Publications | Sanghun Jeon(Korea Advanced Institute of Science and Technology, KOREA) · 주제: A Review on Morphotropic Phase Boundary in Fluorite-Structure Hafnia towards DRAM Technology [DOI] https://doi.org/10.1186/s40580-022-00333-7 |
| | Masaharu Kobayashi(University of Tokyo, JAPAN) · 주제: Mesoscopic-scale grain formation in HfO ₂ -based ferroelectric thin films and its impact on electrical characteristics [DOI] https://doi.org/10.1186/s40580-022-00342-6 |
| | Hiroshi Funakubo(Tokyo Institute of Technology, JAPAN) · 주제: On the switching dynamics of epitaxial ferroelectric CeO ₂ - HfO ₂ thin film capacitors [DOI] https://doi.org/10.1186/s40580-022-00344-4 |

II

2022년도 출판논문 인용 분석

1. 논문별 인용 현황
2. 국가별 인용 현황
3. 논문형식별 인용 현황
4. 인용 학술지 분포
5. 인용 분야 분포
6. 초청논문 인용 분석



II 2022년도 출판논문 인용 분석

1. 논문별 인용 현황

| 권호 | 교신저자 | 제목 | Google | SCIE |
|------|---|---|--------|------|
| 9:01 | Jeong Ho Cho (Yonsei University, Korea) | Electroplated Core-Shell Nanowire Network Electrodes for Highly Efficient Organic Light-Emitting Diode | 13 | 11 |
| 9:02 | Chuanbin Mao (University of Oklahoma, USA) | Protein nanoparticles directed cancer imaging and therapy | 13 | 12 |
| 9:03 | Nam-Joon Cho (Nanyang Technological University, Singapore) | Nanoarchitected of air-stable supported lipid bilayer incorporating sucrose-bicelle complex system | 0 | 0 |
| 9:04 | Yong Ho Kim (Sunkyunkwan University, Korea) | Supramolecular assembly of protein building blocks: From folding to function | 9 | 7 |
| 9:05 | Seunghyun Lee (Hanyang University, Korea) | Effect of reducing agents on the synthesis of anisotropic gold nanoparticles | 5 | 5 |
| 9:06 | Winnok H. De Vos (University of Antwerp, Belgium) | The cellular response to plasma membrane disruption for nanomaterial delivery | 5 | 5 |
| 9:07 | Kanyi Pu (Nanyang Technological University, Singapore) | Bioenzyme-based nanomedicines for enhanced cancer therapy | 9 | 8 |
| 9:08 | Bong Geun Chung (Sogang University, Korea) | Contributions of the microbiome to intestinal inflammation in a gut-on-a-chip | 16 | 16 |
| 9:09 | Chan Woo Lee (Kookmin University, Korea) | Shell Isolated Nanoparticle Enhanced Raman Spectroscopy for Mechanistic Investigation of Electrochemical Reactions | 6 | 5 |
| 9:10 | Yusuke Yamauchi (University of Queensland, Australia) | Boosting Capacitive Performance of Manganese Oxide Nanorods by Decorating with Three-Dimensional Crushed Graphene | 16 | 15 |
| 9:11 | Ping Wang (University of Minnesota, USA) | Recent Development in Functional Nanomaterials for Sustainable and Smart Agricultural Chemical Technologies | 10 | 9 |
| 9:12 | Taejong Paik (Chung-Ang University, Korea) | Single-Step Acid-Catalyzed Synthesis of Luminescent Colloidal Organosilica Nanobeads | 4 | 4 |
| 9:13 | Jingchao Li (Donghua University, China) | Antibody-conjugated gold nanoparticles as nanotransducers for second near-infrared photo-stimulation of neurons in rats | 5 | 3 |

| 권호 | 교신저자 | 제목 | Google | SCIE |
|------|---|---|--------|------|
| 9:14 | Woochul Yang (Dongguk University, Korea) | A Dual-functional flexible sensor based on defects-free Co-doped ZnO nanorods decorated with CoO clusters towards pH and glucose monitoring of fruit juices and human fluids | 10 | 9 |
| 9:15 | Yi Ge (Queen's University, UK) | Recent advances in carbon quantum dots for virus detection, as well as inhibition and treatment of viral infection | 20 | 15 |
| 9:16 | Noo Li Jeon (Seoul National University, Korea) | Perfusable micro-vascularized 3D tissue array for high-throughput vascular phenotypic screening | 15 | 15 |
| 9:17 | Jong-Ho Kim (Hanyang University, Korea) | Modulating the Electrocatalytic Activity of N-doped Carbon Frameworks via Coupling with Dual Metals for Zn-Air Batteries | 4 | 4 |
| 9:18 | Olga V. Makhlynets (Syracuse University, USA) | Peptide hydrogel with self-healing and redox-responsive properties | 7 | 6 |
| 9:19 | Ki-Bum Lee (Rutgers University, USA) | Nanotechnology-enabled immunoengineering approach to advance therapeutic applications | 11 | 9 |
| 9:20 | Myung Jong Kim (Gachon University, Korea) | Spontaneous Formation of Boron Nitride Nanotube Fibers by Boron Impurity Reduction in Laser Ablation of Ammonia Borane | 2 | 2 |
| 9:21 | Hemant Kumar Daima (Amity University, India) | Smart nanomaterials for cancer diagnosis and treatment | 25 | 23 |
| 9:22 | Hong Yang (University of Illinois, USA) | Regulating the Electronic Structures of Mixed B-site Pyrochlore to Enhance the Turnover Frequency in Water Oxidation | 2 | 2 |
| 9:23 | Inhee Choi (University of Seoul, Korea) | Ultrasensitive and Real-time Optical Detection of Cellular Oxidative Stress Using Graphene-covered Tunable Plasmonic Interfaces | 2 | 2 |
| 9:24 | Jeong-Woo Choi (Sogang University, Korea) | Electroactive Nano-Biohybrid Actuator composed of Gold Nanoparticle-embedded Muscle Bundle on Molybdenum Disulfide Nanosheet-modified Electrode for Motion Enhancement of Biohybrid Robot | 3 | 3 |
| 9:25 | Yong-Hoon Kim (KAIST, Korea) | Quantum hybridization negative differential resistance from non-toxic halide perovskite nanowire heterojunctions and its strain control | 4 | 4 |
| 9:26 | Prashant Kumar (University of Newcastle, UK) | 2D Materials: Increscent Quantum Flatland With Immense Potential For Applications | 18 | 15 |
| 9:27 | Youngeun Kwon (Dongguk University, Korea) | Systematic and mechanistic analysis of AuNP-induced nanotoxicity for risk assessment of nanomedicine | 3 | 3 |
| 9:28 | SungWoo Nam (University of California, USA) | Plasmonic sensors based on graphene and graphene hybrid materials | 12 | 12 |

| 권호 | 교신저자 | 제목 | Google | SCIE |
|------|---|---|--------|------|
| 9:29 | Miso Kim (Sungkyunkwan University, Korea) | L-shape triple defects in a phononic crystal for broadband piezoelectric energy harvesting | 4 | 3 |
| 9:30 | Ruixuan Gao (University of Illinois Chicago, USA) | Nanoscale imaging of biological ultrastructure via molecular anchoring and physical expansion | 2 | 1 |
| 9:31 | Oh Seok Kwon (Korea Research Institute of Bioscience and Biotechnology, Korea) | Real-time monitoring of serotonin with highly selective aptamer-functionalized conducting polymer nanohybrids | 3 | 2 |
| 9:32 | Nicholas Kotov (University of Michigan, USA) | Recent Advances in Chiral Nanomaterials with Unique Electric and Magnetic Properties | 4 | 4 |
| 9:33 | Ho Won Jang (Seoul National University, Korea) | Regulating the Surface of Anion-Doped TiO ₂ Nanorods by Hydrogen Annealing for Superior Photoelectrochemical Water Oxidation | 1 | 0 |
| 9:34 | Zhiqun Lin (Georgia Institute of Technology, USA) | Rational Coordination Regulation in Carbon-Based Single-Metal-Atom Catalysts for Electrocatalytic Oxygen Reduction Reaction | 5 | 5 |
| 9:35 | Han-sem Kim (ITREN: Institute of Tissue Regeneration Engineering, Korea) | Wearable CNTs-based humidity sensors with high sensitivity and flexibility for real-time multiple respiratory monitoring | 8 | 7 |
| 9:36 | Xiaobo Yin (University of Colorado, USA) | Solar spectral management for natural photosynthesis: from photonics designs to potential applications | 3 | 3 |
| 9:37 | Emily S. Day (University of Delaware, USA) | Membrane-Wrapped Nanoparticles for Photothermal Cancer Therapy | 6 | 6 |
| 9:38 | Suck Won Hong (Pusan National University, Korea) | Ternary MXene-loaded PLCL/collagen nanofibrous scaffolds that promote spontaneous osteogenic differentiation | 6 | 6 |
| 9:39 | Taejoon Kang (Korea Research Institute of Bioscience and Biotechnology, Korea) | Dual-mode SERS-based lateral flow assay strips for simultaneous diagnosis of SARS-CoV-2 and influenza A virus | 7 | 7 |
| 9:40 | Junsuk Rho (POSTECH, Korea) | Self-Assembled Pagoda-like Nanostructure-Induced Vertically Stacked Split-Ring Resonators for Polarization-Sensitive Dichroic Responses | 2 | 2 |
| 9:41 | Taek Lee (Kwangwoon University, Korea) | Selection of DNA aptamer and its application as an electrical biosensor for Zika virus detection in human serum | 6 | 6 |
| 9:42 | Dong June Ahn (Korea University, Korea) | Sustainable Colorimetric/Luminescent Sensors Enabled by Armored Lipid Nanoparticles | 2 | 2 |
| 9:43 | William Jo (Ewha Womans University, Korea) | Grain boundary passivation via balancing feedback of hole barrier modulation in HfO ₂ -x for nanoscale flexible electronics | 2 | 2 |

| 권호 | 교신저자 | 제목 | Google | SCIE |
|------------|---|--|------------|------------|
| 9:44 | Sanghun Jeon (KAIST, Korea) | A Review on Morphotropic Phase Boundary in Fluorite-Structure Hafnia towards DRAM Technology | 3 | 3 |
| 9:45 | Rino Choi (Inha University, Korea) | Impact of Pt grain size on ferroelectric properties of zirconium hafnium oxide by chemical solution deposition | 0 | 0 |
| 9:46 | Soong Ju Oh (Korea University, Korea) | Ink-lithographic fabrication of silver-nanocrystal-based multiaxial strain gauge sensors through the coffee-ring effect for voice recognition applications | 1 | 1 |
| 9:47 | Heungsoo Shin (Hanyang University, Korea) | Biomimetic anti-inflammatory and osteogenic nanoparticles self-assembled with mineral ions and tannic acid for tissue engineering | 1 | 1 |
| 9:48 | Nam-Joon Cho (Nanyang Technological University, Singapore) | Nanoarchitectonic-based model membrane platforms for probing membrane-disruptive interactions of odd-chain antimicrobial lipids | 0 | 0 |
| 9:50 | Masaharu Kobayashi (University of Tokyo, Japan) | Mesoscopic-scale grain formation in HfO ₂ -based ferroelectric thin films and its impact on electrical characteristics | 3 | 3 |
| 9:51 | Hong-Dae Kim (Korea Institute of Industrial Technology, Korea) | Recent Trends in Vanadium-based SCR Catalysts for NO _x Reduction in Industrial Applications: Stationary Sources | 4 | 4 |
| 9:52 | Xin Han (Nanjing University of Chinese Medicine, China) | Accurate delivery of pristimerin and paclitaxel by folic acid-linked nano-micelles for enhancing chemosensitivity in cancer therapy | 2 | 2 |
| 9:53 | Sangsul Lee (Pohang Accelerator Laboratory, Korea) | Near-field infrared nanoscopic study of EUV- and e-beam-exposed hydrogen silsesquioxane photoresist | 1 | 1 |
| 9:55 | Guixin Zhang (Tsinghua University, China) | Self-assembled wide bandgap nanocoatings enabled outstanding dielectric characteristics in the sandwich-like structure polymer composites | 2 | 2 |
| 9:56 | Hiroshi Funakubo (Tokyo Institute of Technology, Japan) | On the switching dynamics of epitaxial ferroelectric CeO ₂ - HfO ₂ thin film capacitors | 1 | 1 |
| 9:57 | Dong Keun Han (CHA University, Korea) | Bolstering the secretion and bioactivities of umbilical cord MSC-derived extracellular vesicles with 3D culture and priming in chemically defined media | 1 | 1 |
| 총 계 | | | 329 | 299 |
| 평균 | | | 5.9 | 5.4 |



2. 국가별 인용 현황

- 인용 국가 수는 38개국으로 논문 국가 수(9개국) 대비 비교적 다양한 나라에서 인용되고 있음을 알 수 있음
- 그러나 한국과 중국에서의 인용 비율이 약 61%로 특정 국가에 인용 수가 편중된 편임

| 국가 | 인용횟수 | 국가 | 인용횟수 |
|----------------|------|----------------------|------|
| Korea | 99 | Pakistan | 2 |
| China | 82 | Russia | 2 |
| USA | 26 | The Netherlands | 2 |
| India | 15 | Austria | 1 |
| Italy | 9 | Belgium | 1 |
| Germany | 5 | Brazil | 1 |
| Spain | 5 | Denmark | 1 |
| Iran | 4 | Estonia | 1 |
| Japan | 4 | Hong Kong | 1 |
| Poland | 4 | Israel | 1 |
| UK | 4 | Malaysia | 1 |
| Australia | 3 | Portugal | 1 |
| Canada | 3 | Saudi Arabia | 1 |
| Czech Republic | 3 | Singapore | 1 |
| Taiwan | 3 | Slovenia | 1 |
| Bangladesh | 2 | Sri Lanka | 1 |
| Egypt | 2 | Thailand | 1 |
| Finland | 2 | Turkey | 1 |
| Lithuania | 2 | United Arab Emirates | 1 |
| 총 계 | | | 299 |

3. 논문형식별 인용 현황

- 2022년도 Review 논문의 평균 인용횟수는 8회로 다른 논문형식 대비 최대 2.6배 더 높게 나오고 있음
- Review 논문 인용 실적이 다른 논문형식에 비해 월등히 높은 편임을 알 수 있음
- 향후 저널의 Impact Factor를 안정적으로 상승시키기 위해 양질의 Review 논문 출판을 지속할 필요가 있음

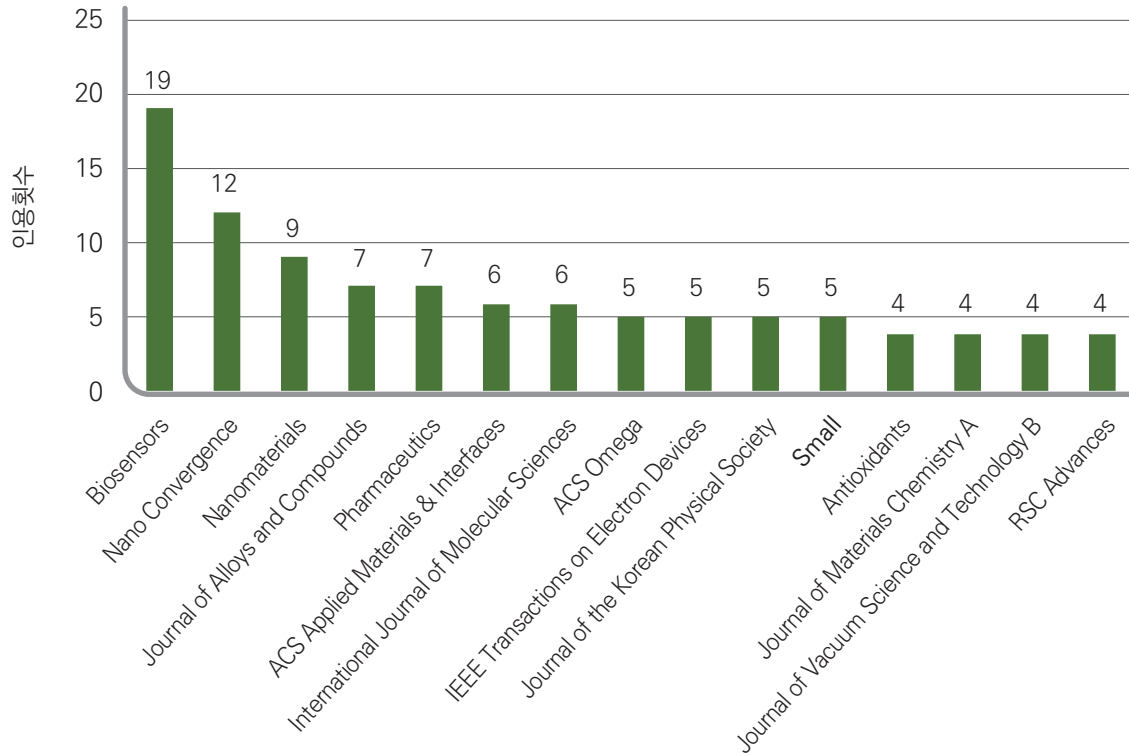
| 출판연도 | 구분 | 합계 | Review | Full Paper | Communications |
|------|---------------|------------|-----------------|-----------------|----------------|
| 2020 | 논문 편 수 | 40 | 14(35%) | 26(65%) | - |
| | 총 인용횟수 | 852 | 447(52%) | 405(48%) | - |
| | 평균 인용횟수 | 21 | 32 | 16 | |
| 2021 | 논문 편 수 | 40 | 19(47%) | 20(50%) | 1(3%) |
| | 총 인용횟수 | 871 | 676(78%) | 181(21%) | 14(1%) |
| | 평균 인용횟수 | 22 | 36 | 9 | 14 |
| 2022 | 논문 편 수 | 55 | 18(33%) | 34(62%) | 3(5%) |
| | 총 인용횟수 | 299 | 144(48%) | 145(49%) | 10(3%) |
| | 평균 인용횟수 | 5 | 8 | 4 | 3 |

4. 인용 학술지 분포

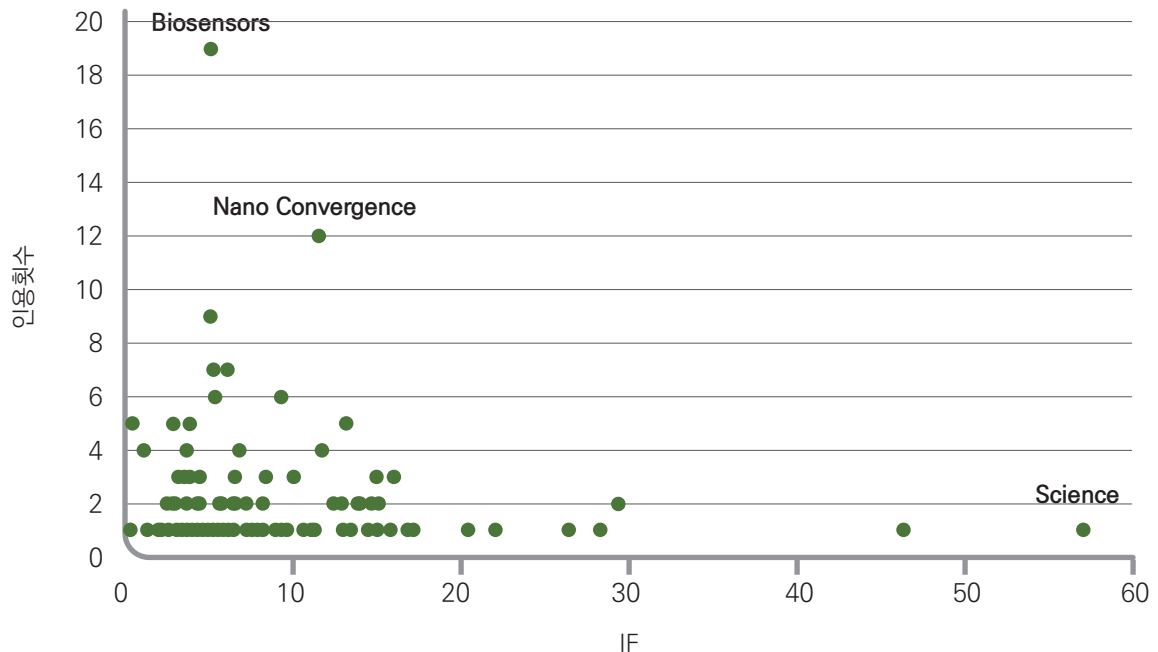
▶ 학술지별 인용횟수

- 우리 저널을 가장 많이 인용한 저널은 'Biosensors'로 19회 인용함
- 우리 저널을 인용한 학술지 중 가장 높은 IF를 기록한 학술지는 'Science'로 2022년도 IF '56.9'를 기록함
- 우리 저널을 인용한 학술지 중 우리 저널 보다 더 높은 IF를 기록한 학술지는 총 24개로 약 6.8% 비율을 보이고 있음

상위 15개 인용 학술지 인용횟수



전체 인용학술지 인용횟수 및 IF 분포표



| # | 순위 | 인용 저널 | IF | 인용횟수 |
|----|-------------------|---|------|------|
| 1 | 1 | Biosensors | 5.4 | 19 |
| 2 | 2 | Nano Convergence | 11.7 | 12 |
| 3 | 3 | Nanomaterials | 5.3 | 9 |
| 4 | 4 | Journal of Alloys and Compounds | 6.2 | 7 |
| 5 | | Pharmaceutics | 5.4 | 7 |
| 6 | 6 | ACS Applied Materials & Interfaces | 9.5 | 6 |
| 7 | | International Journal of Molecular Sciences | 5.6 | 6 |
| 8 | 8 | ACS Omega | 4.1 | 5 |
| 9 | | IEEE Transactions on Electron Devices | 3.1 | 5 |
| 10 | | Journal of the Korean Physical Society | 0.6 | 5 |
| 11 | | Small | 13.3 | 5 |
| 12 | 12 | Antioxidants | 7.0 | 4 |
| 13 | | Journal of Materials Chemistry A | 11.9 | 4 |
| 14 | | Journal of Vacuum Science and Technology B | 1.4 | 4 |
| 15 | | RSC Advances | 3.9 | 4 |
| 16 | 16 | Advanced Drug Delivery Reviews | 16.1 | 3 |
| 17 | | Applied Physics Letters | 4.0 | 3 |
| 18 | | Applied Surface Science | 6.7 | 3 |
| 19 | | Chemical Engineering Journal | 15.1 | 3 |
| 20 | | Chemistry of Materials | 8.6 | 3 |
| 21 | | Journal of Nanobiotechnology | 10.2 | 3 |
| 22 | | Journal of Physical Chemistry C | 3.7 | 3 |
| 23 | | Materials | 3.4 | 3 |
| 24 | | Micromachines | 3.4 | 3 |
| 25 | | Molecules | 4.6 | 3 |
| 26 | | Nanoscale | 6.7 | 3 |
| 27 | Optical Materials | 3.9 | 3 | |
| 28 | 28 | ACS Biomaterials Science & Engineering | 5.8 | 2 |
| 29 | | Acta Pharmaceutica Sinica B | 14.5 | 2 |
| 30 | | Advanced Materials | 29.4 | 2 |
| 31 | | Advanced Materials Technologies | 6.8 | 2 |

| # | 순위 | 인용 저널 | IF | 인용횟수 | |
|----|------------------------------------|---|---|------|---|
| 32 | 28 | Biomaterials | 14.0 | 2 | |
| 33 | | Biosensors and Bioelectronics | 12.6 | 2 | |
| 34 | | Cells | 6.0 | 2 | |
| 35 | | Comprehensive Reviews in Food Science and Food Safety | 14.8 | 2 | |
| 36 | | CrystEngComm | 3.1 | 2 | |
| 37 | | Current Applied Physics | 6.8 | 2 | |
| 38 | | Electrochimica Acta | 6.6 | 2 | |
| 39 | | Gels | 4.6 | 2 | |
| 40 | | Journal of Drug Targeting | 4.5 | 2 | |
| 41 | | Journal of Materials Research | 2.7 | 2 | |
| 42 | | Journal of Translational Medicine | 7.4 | 2 | |
| 43 | | Lab on a Chip | 6.1 | 2 | |
| 44 | | Langmuir | 3.9 | 2 | |
| 45 | | Materials Today Communications | 3.8 | 2 | |
| 46 | | Nano Energy | 4.7 | 2 | |
| 47 | | Nanoscale Advances | 4.7 | 2 | |
| 48 | | New Journal of Chemistry | 3.3 | 2 | |
| 49 | | Sensors and Actuators B: Chemical | 8.4 | 2 | |
| 50 | | TrAC Trends in Analytical Chemistry | 13.1 | 2 | |
| 51 | | Trends in Food Science & Technology | 15.3 | 2 | |
| 52 | | 52 | ACS Applied Electronic Materials | 4.7 | 1 |
| 53 | | | ACS Materials Letters | 11.4 | 1 |
| 54 | | | ACS Nano | 17.1 | 1 |
| 55 | | | ACS Sustainable Chemistry & Engineering | 8.4 | 1 |
| 56 | | | Acta Biomaterialia | 9.7 | 1 |
| 57 | | | Advanced Optical Materials | 9.0 | 1 |
| 58 | | | Advanced Photonics | 17.3 | 1 |
| 59 | | | Advanced Science | 15.1 | 1 |
| 60 | Analyst | | 4.2 | 1 | |
| 61 | Analytica Chimica Acta | | 6.2 | 1 | |
| 62 | Analytical Chemistry | | 7.4 | 1 | |
| 63 | Applied Catalysis B: Environmental | | 22.1 | 1 | |

I. 출판실적

II. 2022년도 출판논문 인용 분석

III. 기타활동

| # | 순위 | 인용 저널 | IF | 인용횟수 |
|----|----|--|------|------|
| 64 | 52 | Applied Clay Science | 5.6 | 1 |
| 65 | | Biochimica et Biophysica Acta (BBA) – Reviews on Cancer | 11.2 | 1 |
| 66 | | BioChip Journal | 4.3 | 1 |
| 67 | | Bioconjugate Chemistry | 4.7 | 1 |
| 68 | | BioDrugs | 6.8 | 1 |
| 69 | | Bioengineering and Translational Medicine | 7.4 | 1 |
| 70 | | Biomaterials Science | 6.6 | 1 |
| 71 | | Biomedicines | 4.7 | 1 |
| 72 | | Biomicrofluidics | 3.2 | 1 |
| 73 | | Biomimetics | 4.5 | 1 |
| 74 | | Biotechnology & Bioengineering | 3.8 | 1 |
| 75 | | BUNSEKI KAGAKU | 0.2 | 1 |
| 76 | | Ceramics International | 5.2 | 1 |
| 77 | | Chemical Communications | 4.9 | 1 |
| 78 | | Chemical Physics Impact | 2.2 | 1 |
| 79 | | Chemical Society Reviews | 46.2 | 1 |
| 80 | | Chemistry–An Asian Journal | 4.1 | 1 |
| 81 | | Chinese Chemical Letters | 9.1 | 1 |
| 82 | | Colloids and Surfaces A: Physicochemical and Engineering Aspects | 5.2 | 1 |
| 83 | | Colloids and Surfaces B: Biointerfaces | 5.8 | 1 |
| 84 | | Coordination Chemistry Reviews | 20.6 | 1 |
| 85 | | Current Opinion in Chemical Engineering | 6.6 | 1 |
| 86 | | Current Opinion in Colloid & Interface Science | 8.9 | 1 |
| 87 | | Current Opinion in Electrochemistry | 8.5 | 1 |
| 88 | | Current Opinion in Green and Sustainable Chemistry | 9.3 | 1 |
| 89 | | Diagnostics | 3.6 | 1 |
| 90 | | Diamond and Related Materials | 4.1 | 1 |
| 91 | | Emergent Materials | 3.8 | 1 |
| 92 | | Energies | 3.2 | 1 |
| 93 | | Environmental Science & Technology | 11.4 | 1 |
| 94 | | European Journal of Medicinal Chemistry | 6.7 | 1 |

| # | 순위 | 인용 저널 | IF | 인용횟수 |
|-----|---|---|-----|------|
| 95 | 52 | Expert Opinion on Drug Delivery | 6.6 | 1 |
| 96 | | FlatChem | 6.2 | 1 |
| 97 | | Frontiers in Bioengineering Biotechnology | 5.7 | 1 |
| 98 | | Frontiers in Cardiovascular Medicine | 3.6 | 1 |
| 99 | | Frontiers in Chemistry | 5.5 | 1 |
| 100 | | Frontiers in Immunology | 7.3 | 1 |
| 101 | | Frontiers in Materials | 3.2 | 1 |
| 102 | | Frontiers in Molecular Biosciences | 5.0 | 1 |
| 103 | | Frontiers in Oncology | 4.7 | 1 |
| 104 | | Frontiers in Plant Science | 5.6 | 1 |
| 105 | | Heliyon | 4.0 | 1 |
| 106 | | IEEE Electron Device Letters | 4.9 | 1 |
| 107 | | IEEE Sensors Journal | 4.3 | 1 |
| 108 | | IEEE Transactions on Plasma Science | 1.5 | 1 |
| 109 | | Inorganic Chemistry Communications | 3.8 | 1 |
| 110 | | International Journal of Biological Macromolecules | 8.2 | 1 |
| 111 | | International Journal of Energy Research | 4.6 | 1 |
| 112 | | International Journal of Mechanical Sciences | 7.3 | 1 |
| 113 | | International Journal of Nanomedicine | 8.0 | 1 |
| 114 | | International Journal of Refractory Metals and Hard Materials | 3.6 | 1 |
| 115 | | Journal of Agricultural and Food Chemistry | 6.1 | 1 |
| 116 | | Journal of Applied Crystallography | 6.1 | 1 |
| 117 | | Journal of Applied Microbiology | 4 | 1 |
| 118 | | Journal of Applied Phycology | 3.3 | 1 |
| 119 | | Journal of Biological Chemistry | 4.8 | 1 |
| 120 | Journal of Cleaner Production | 11.1 | 1 | |
| 121 | Journal of Colloid and Interface Science | 9.9 | 1 | |
| 122 | Journal of Controlled Release | 10.8 | 1 | |
| 123 | Journal of Energy Chemistry | 13.1 | 1 | |
| 124 | Journal of Energy Storage | 9.4 | 1 | |
| 125 | Journal of Environmental Chemical Engineering | 7.7 | 1 | |

I. 출판실적

II. 2022년도 출판논문 인용 분석

III. 기타활동

| # | 순위 | 인용 저널 | IF | 인용횟수 |
|-----|----|--|------|------|
| 126 | 52 | Journal of Functional Biomaterials | 4.8 | 1 |
| 127 | | Journal of Hazardous Materials | 13.6 | 1 |
| 128 | | Journal of Materials Chemistry C | 6.4 | 1 |
| 129 | | Journal of Materials Science: Materials in Electronics | 2.8 | 1 |
| 130 | | Journal of Peptide Science | 2.1 | 1 |
| 131 | | Journal of Physical Chemistry B | 3.3 | 1 |
| 132 | | Journal of Raman Spectroscopy | 2.5 | 1 |
| 133 | | Journal of the American Ceramic Society | 3.9 | 1 |
| 134 | | Journal of Tissue Engineering | 8.2 | 1 |
| 135 | | Macromolecules | 5.5 | 1 |
| 136 | | Marine Drugs | 5.4 | 1 |
| 137 | | Materials Research Bulletin | 5.4 | 1 |
| 138 | | Materials Today Bio | 8.2 | 1 |
| 139 | | Materials Today Physics | 11.5 | 1 |
| 140 | | Medicine | 1.6 | 1 |
| 141 | | Microchemical Journal | 4.8 | 1 |
| 142 | | Microchimica Acta | 5.7 | 1 |
| 143 | | Microorganisms | 4.5 | 1 |
| 144 | | Molecular Systems Design & Engineering | 3.6 | 1 |
| 145 | | Nano Research | 9.9 | 1 |
| 146 | | Nano-Micro Letters | 26.6 | 1 |
| 147 | | Nanophotonics | 7.5 | 1 |
| 148 | | Nanotechnology | 3.5 | 1 |
| 149 | | Nanotoxicology | 5.0 | 1 |
| 150 | | npj flexible electronics | 14.6 | 1 |
| 151 | | Optics Express | 3.8 | 1 |
| 152 | | Pest Management Science | 4.1 | 1 |
| 153 | | Physica Scripta | 2.9 | 1 |
| 154 | | Platelets | 3.3 | 1 |
| 155 | | PLOS ONE | 3.7 | 1 |
| 156 | | Science | 56.9 | 1 |

| # | 순위 | 인용 저널 | IF | 인용횟수 |
|-------|----|--|----------|----------|
| 157 | 52 | Sensors | 3.9 | 1 |
| 158 | | SusMat | 28.4 | 1 |
| 159 | | Technology in Cancer Research & Treatment | 2.8 | 1 |
| 160 | | Tissue Engineering and Regenerative Medicine | 3.6 | 1 |
| 161 | | Toxicology and Applied Pharmacology | 3.8 | 1 |
| 162 | | Trends in Microbiology | 15.9 | 1 |
| 163 | | Vaccines | 7.8 | 1 |
| 164 | | View | 8.6 | 1 |
| 평균/합계 | | | (평균) 6.5 | (합계) 299 |

▶ 인용 학술지 출판사 분포



I. 출판실적

II. 2022년도 출판논문 인용 분석

III. 기타활동

5. 인용 분야 분포

- 인용 분야는 우리 저널이 랭킹된 3개 카테고리 분야('Physics, Applied', 'Materials Science, Multidisciplinary', 'Nanoscience & Nanotechnology')가 매년 가장 높은 비중을 차지하고 있음
- 2022년에 랭킹 분야가 아닌 'Chemistry Mutidisciplinary'가 상위 2위 인용 분야로 기록된 점은 출판논문의 다양성 또는 인지도의 향상으로 인한 변화라고 볼 수 있음

※상위 15개 분야

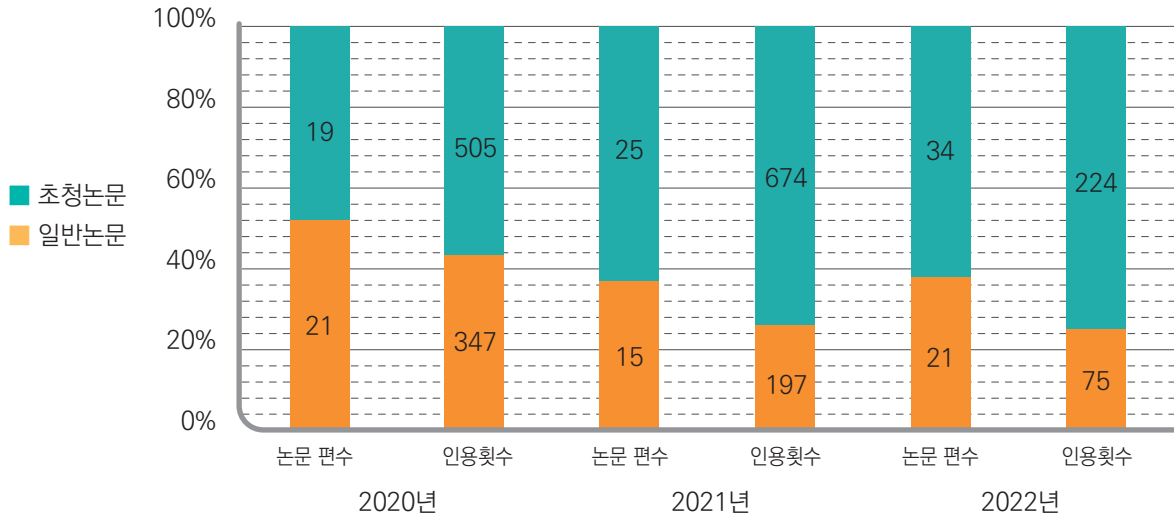




6. 초청논문 인용 분석

▶ 초청논문 출판 편수 대비 인용 현황

- 2022년도 초청논문이 일반 논문보다 평균 1.75배 더 많이 인용되고 있음



| 출판연도 | 구분 | 합 계 | 일반 논문 | 초청논문 |
|------|---------------|------------|-----------------|-----------------|
| 2020 | 논문 편 수 | 40 | 21(53%) | 19(47%) |
| | 총 인용횟수 | 852 | 347(41%) | 505(59%) |
| | 평균 인용횟수 | 21 | 17 | 27 |
| 2021 | 논문 편 수 | 40 | 15(38%) | 25(62%) |
| | 총 인용횟수 | 871 | 197(23%) | 674(77%) |
| | 평균 인용횟수 | 22 | 13 | 27 |
| 2022 | 논문 편 수 | 55 | 21(38%) | 34(62%) |
| | 총 인용횟수 | 299 | 75(25%) | 224(75%) |
| | 평균 인용횟수 | 5 | 4 | 7 |

I. 출판실적

II. 2022년도 출판논문 인용 분석

III. 기타활동

III

기타활동

1. 학술대회 홍보
2. Nano Convergence Award 시상
3. Nano Convergence Special Session 개최

III 기타활동

1. 학술대회 홍보

▶ ISPSA 2022 홍보부스 운영

| 추진개요 |

- 대회명 : The 20th International Symposium on the Physics of Semiconductors and Applications (ISPSA 2022)
- 일정/장소 : 2022년 7월 17일(일)~20일(수) / 라마다 프라자 제주 호텔
- 부스 규모 : 1 booth(3m*2m*2.5m)

| 주요결과 |

- 참가자 약 450명 부스 방문
- 참가자 대상 기념품(USB) 400개, 2021년도 우수논문 모음집 100부, 홍보브로셔 150부, 협의회 홍보브로셔, NANO e-Academy 홍보브로셔 등 배포

▶ 2022 MRS Fall Meeting & Exhibition 홍보부스 운영

| 추진개요 |

- 대회명 : 2022 MRS Fall Meeting & Exhibition
- 일정/장소 : 2022년 11월 29일(화)~12월 1일(목) / 미국 보스턴 Hynes Convention Center
- 부스 규모 : 10 feet*10 feet booth(약 3m*3m)

| 주요결과 |

- 참가자 약 300명 부스 방문
- 참가자 대상 홍보브로슈어 300부, 2021년도 우수논문모음집 120부, 로고스티커 100장, 편집위원장 및 사무국 명함 200장, 나노코리아 2023 Call for Abstracts 100장 등 배포
- 해외 연구자 대상 저널 인지도 및 관심 분야 파악을 위한 설문조사 실시(총 258명 참여)



[ISPSA 2022 홍보부스 운영 사진]



[2022 MRS 홍보부스 운영 사진]



2. Nano Convergence Award 시상

▶ Nano Convergence Award

| 시상목적 |

- NC저널 발전에 기여한 연구자 발굴 및 시상을 통해 저널 저변 및 영향력 확대

| 수상명 및 규모 |

- 나노기술연구협의회장 명의로 2개 부문, 총 4점 시상
 - * Nano Convergence Outstanding Paper Award(논문상) 2점
 - * Nano Convergence Contribution Award(공로상) 2점

| 수상자격 |

- Nano Convergence Outstanding Paper Award
 - * 최근 2년간 출판된 NC 논문 중 가장 우수한 논문의 제1저자 또는 교신저자
- Nano Convergence Contribution Award
 - * 최근 2년간 NC저널 발전에 기여한 연구자
 - * NC저널에 교신저자 또는 제1저자로 논문을 1번 이상 출판한 자

| 수상혜택 |

- Nano Convergence Outstanding Paper Award
 - * 상패, 수상기념강연 진행 및 강연료(100만원 또는 \$1,000)
- Nano Convergence Contribution Award
 - * 상패

| 수상자 선정 방법 |

- 시상위원회에서 수상 후보 검토 후 최종 수상자 결정

| 수상자 선정결과 |

| 부문 | 수상자 | |
|----------------------------------|---|--|
| Outstanding Paper Award (논문상) |  | 김경훈 교수 (성균관대학교) |
| |  | Prof. Chuan-Jian Zhong (SUNY Binghamton) |
| Contribution Award (공로상) |  | 최정우 교수 (서강대학교) |
| |  | 전상훈 교수 (한국과학기술원) |

▶ Nano Convergence Lectureship Award

| 시상목적 |

- 국내외 나노과학기술분야에서 활약하는 연구자 발굴 및 연구성과 소개

| 수상명 및 규모 |

- Nano Convergence 편집위원장 명의로 2개 부문, 총 2점 시상
 - * Nano Convergence Distinguished Lectureship Award 1점
 - * Nano Convergence Young Investigator Lectureship Award 1점

| 수상자격 |

- Nano Convergence Distinguished Lectureship Award
 - * 나노기술분야에서 뛰어난 연구실적을 이룬 자
 - * 2022년도 기준으로 만 45세 이상
 - * NC저널에 교신저자 또는 제1저자로 논문을 1번 이상 출판한 자
- Nano Convergence Young Investigator Lectureship Award
 - * 나노기술분야에서 뛰어난 연구실적을 이룬 자
 - * 2022년도 기준으로 만 45세 미만
 - * NC저널에 교신저자 또는 제1저자로 논문을 1번 이상 출판한 자

| 수상혜택 |

- 상패, 수상기념강연 진행 및 강연료(100만원 또는 \$1,000)

| 수상자 선정 방법 |

- 수상후보 추천 공고 및 추천서 취합
- 편집운영위원회에서 수상후보 검토 후 최종 수상자 결정

| 수상자 선정결과 |

| 부문 | 수상자 |
|--------------------------------|---|
| Distinguished Lectureship |  최리노 교수 (인하대학교) |
| Young Investigator Lectureship |  Prof. Zubin Jacob (Purdue University) |



3. Nano Convergence Special Session 개최

▶ 개최 목적

- 국내 최대 규모의 나노기술분야 국제 심포지엄 'NANO KOREA 2022 Symposium'의 스페셜 세션 개최를 통한 저널 실적 홍보 진행
- Nano Convergence 저널 시상식 및 수상기념강연 진행을 통한 우수 연구자 발굴 및 연구성과 집중 조명

▶ 추진 개요

- 개최 시기: 매년 7월 첫째주 목요일
- 개최 장소: 일산 킨텍스 회의장
- 프로그램: 개최식, Nano Convergence Award 시상식, 수상기념강연 등

▶ 2022년도 개최결과

- 주요 사항
 - 행사명: Nano Convergence Special Session 2022
 - 일시: 2022년 7월 7일(목) 14:30~17:45
 - 장소: 일산 킨텍스 제1전시장 208호(온·오프 하이브리드)
 - 주최/후원: 나노기술연구협의회/Springer Nature
- 성과 요약
 - **(발표규모) 2개국 4명의 초청 연사 강연 진행**
 - **(참가규모) 3개국 68명 참가(오프라인 46명, 온라인 22명)**
 - **(주요결과) NC 출판실적 홍보, 4개 부문 6명 시상 및 수상기념 강연 진행**
 - * Nano Convergence 저널 성장 및 나노기술 발전에 크게 기여한 우수 연구자 6인을 선정하여 시상하고 수상기념강연을 진행
 - * Nano Convergence 출판 및 인용 현황을 소개하고 참가자에게 저널의 투고와 인용을 독려
 - * 나노분야 우수 학술지 'Nano Letters'의 associate editor인 서울대 남좌민 교수를 초청하여 학술지 성공 전략과 최신 출판 트렌드 공유
 - * 온·오프라인 하이브리드 형태로 개최되었으며, 세션 녹화영상은 NC저널 공식 홈페이지와 나노기술연구협의회 공식 유튜브를 통해 공개(일정 기간 게시)

- 프로그램

| Time | Session | |
|------------------------|---|---|
| 14:00~14:30 | Registration | |
| 14:30~14:32 | Opening (Chair : Prof. Bong Geun Chung) | Congratulatory Remarks Jinho Ahn (President, Korea Nanotechnology Research Society) |
| 14:32~14:34 | | Opening Remarks William Jo (Editor-in-Chief, Nano Convergence) |
| 14:34~14:39 | | Congratulatory Remarks Annie Kang (Senior Editor, Springer Nature) |
| 14:39~14:45 | | Current and Future of Nano Convergence Bong Geun Chung (Executive Editor, Nano Convergence) |
| 14:45~15:05 | | Trends and Strategies of Leading Scientific Journals [Live Streaming] Jwa-Min Nam (Associate Editor, Nano Letters) |
| 15:05~15:20 (15min) | Award Ceremony | |
| 15:20~15:50 (30min) | Session I (Chair : Prof. Hye-Won Seo) | Invited Lecture of Outstanding Paper Award Winner [Pre-recorded Video] Kyunghoon Kim (Professor, Sungkyunkwan University) <i>"Composite Membranes for Water Treatment"</i> |
| 15:50~16:20 (30min) | | Invited Lecture of Outstanding Paper Award Winner [Live Streaming] Chuan-Jian Zhong (Professor, State University of New York at Binghamton) <i>'Nanoengineering in heterogeneous catalysis for energy sustainability'</i> |
| 16:20~16:40 | Coffee Break | |
| 16:40~17:10 (30min) | Session II (Chair : Prof. Young Jun Chang) | Invited Lecture of Distinguished Lectureship Award Winner Rino Choi (Professor, Inha University) <i>"3-Dimensional Integration: The Last Technology of the Moore's Era"</i> |
| 17:10~17:40 (30min) | | Invited Lecture of Young Investigator Lectureship Award Winner [Live Streaming] Zubin Jacob (Professor, Purdue University) <i>"Pico-EE: The journey to picoscale electrodynamics engineering"</i> |
| 17:40~17:45 | Closing Remark | |



I. 출판사업

II. 2022년도 출판논문 인용 분석

III. 기타활동



5기 Nano Convergence 편집운영위원회 (2022-2023년도)

편집위원장 조윌럼 (이화여자대학교 교수)
Luke P. Lee (Professor, Harvard Medical School, Harvard University)

책임편집간사 서혜원 (제주대학교 교수)
정봉근 (서강대학교 교수)
Ki-Bum Lee (Professor, Rutgers University)

실무편집간사 공수현 (고려대학교 교수)
김태형 (중앙대학교 교수)
류혜진 (한국과학기술연구원 선임연구원)
이승현 (한양대학교 교수)

관리편집간사 장영준 (서울시립대학교 교수)

분과위원장 전상훈 (한국과학기술원 교수)
노준석 (포항공과대학교 교수)
백태종 (중앙대학교 교수)
심우영 (연세대학교 교수)
고민재 (한양대학교 교수)
송준명 (서울대학교 교수)
이신범 (대구경북과학기술원 교수)

2022년도 Nano Convergence 연차실적보고서

- 인쇄일** 2023년 8월
- 발행일** 2023년 8월
- 발행인** 안진호 (나노기술연구협의회 제9대 회장)
- 편집인** 조월림 (Nano Convergence 5기 편집위원장)

발행처



나노기술연구협의회
Korea Nanotechnology Research Society

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<https://www.kontrs.or.kr>

디자인 및 인쇄

- 이 보고서는 과학기술정보통신부에서 시행한 나노과학기술 전문인력 양성 및 협력 네트워크 연구사업의 일환으로 수행한 연구보고서입니다.
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Korea Nanotechnology Research Society

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