2023년도

NANO convergence 연차실적보고서

2024. 12.

나노기술연구협의회
Korea Nanotechnology Research Society

2023년도
연차실적보고서

Contents

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출판실적

Ⅰ 출판실적

1. 연도별 투고 및 출판실적

- 2022년도와 출판 편 수 동일(55편), 2022년도 대비 투고 논문 수 약 9% 증가
- 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	2023
Total Submitted	2	66	56	58	69	103	253	308	256	202	220
Total Decisioned		49	52	63	59	82	215	302	254	200	215
Accept		27	14	35	37	38	44	33	38	55	54
Reject		22	38	28	22	44	171	269	216	145	161
Acceptance Rate		55%	27%	56%	63%	47%	21%	11%	15%	28%	24%
Rejection Rate		**45%**	**73%**	**44%**	**37%**	**53%**	**79%**	**89%**	**85%**	**72%**	**72%**
Average Days to First Decision	29	35	40	29	41	22	19	20.2	17.5	24	31
Average Days to Final Disposition Accept		43	60	90	50	48	66	104	75	71	84
Average Days to Final Disposition Reject		55	42	55	29	19	14	22	19	16	15

2. 분과별 출판실적

- 2023년도 Thematic Series 발간을 통해 분야 분포도 개선
  · 분과별 전체논문&Thematic Series 출판 편 수 비교표

※( ) : Thematic Series 출판 편 수

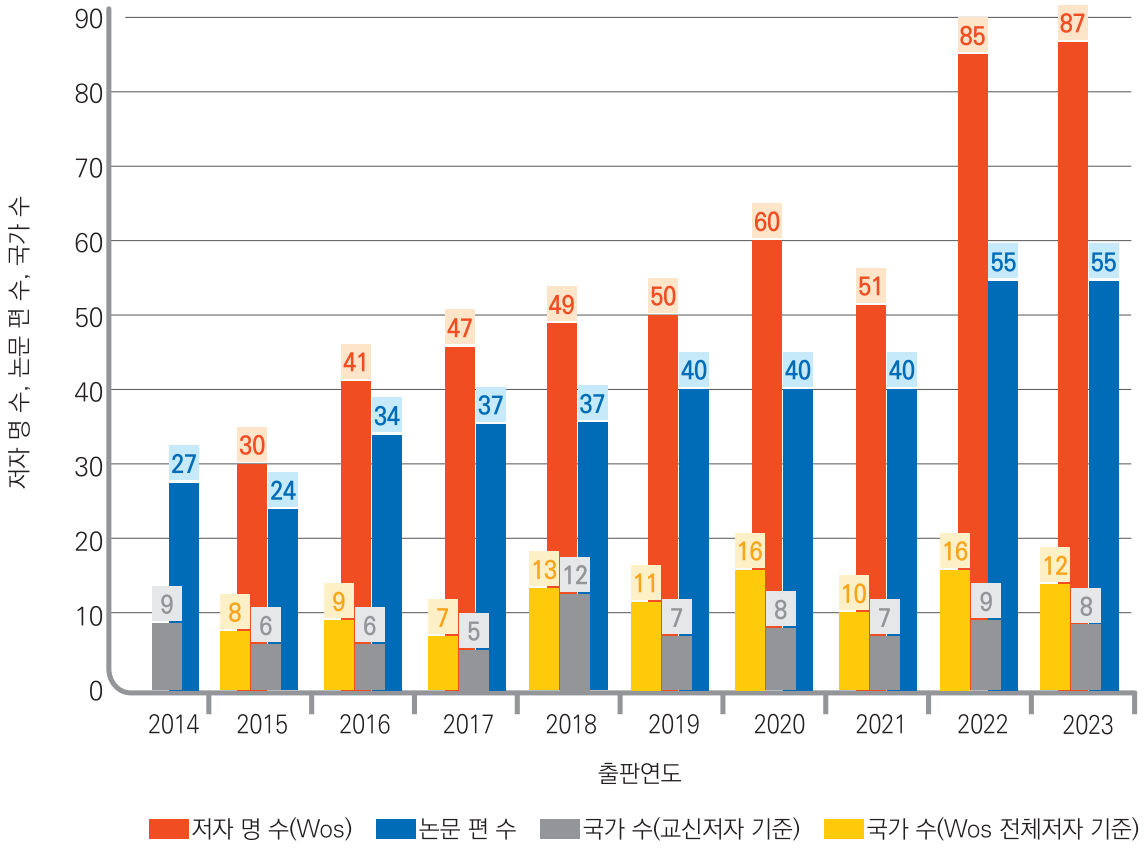
분 과	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Nanoelectronics(NE)	5	3	7	–	3	11(7)	6	–	5(2)	4(3)
Nanophotonics(NP)	4	4	–	4(3)	3(2)	–	6(5)	1	4(2)	2(6)
Nanomaterials(NM)	4	4	7	14(3)	6	21(10)	11(3)	12(6)	14(4)	9(3)
Nanoenergy & Nanoenvironment(EE)	3	1	4	7(5)	2	–	4(1)	8(4)	5(1)	3(2)
Nanofabrication& Nanocharacterization(FC)	3	4	3(1)	4(3)	5(3)	2	2	3(1)	4	2(1)
Nanobio&Nanomedicine(BM)	5	5	11	5	17(5)	1	11	16(7)	20(5)	9(3)
Emerging Nanotechnology(EN)	3	3	2	3(3)	1	5(2)	–	–	3	2(6)
합 계	27	24	34(1)	37(17)	37(10)	40(19)	40(9)	40(18)	55(14)	55(24)

3. 국가별 출판실적

- WoS에서 검색되는 2023년도 전체저자 국가 수는 12개국으로, 2022년도 대비 논문 편 수 및 전체 저자 수가 비슷한 수준임에도 불구하고 국가 수는 낮은 수치를 기록함
- 절대적인 국가 수는 감소하였으나, 한국을 제외한 미국 및 중국 논문의 편수가 증가하였고, 인도, 사우디아라비아 등에서 출판된 논문 수가 감소한 것을 고려할 때 연구력이 높은 상위 기관의 출판이 증가한 것으로 나타남
- 국내 연구자의 논문 출판 편 수는 22년과 31편으로 동일하나, 저널의 인지도 확보를 위한 국제 공동 논문 유치 활성화 등이 필요한 것으로 사료됨

저자 명 수 VS 논문 편 수 VS 국가 수 비교표

※ WoS 데이터는 2015년도 출판실적부터 반영함



– 교신저자 기준 국가별 출판실적

국가/연도	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
KOREA, REPUBLIC OF	13	14	21	22	15	24	25	18	31	31
UNITED STATES	5	3	7	7	10	4	6	11	11	13
CHINA			1		1	3	4	6	3	5
SINGAPORE	1			1	1	2	1		3	
UNITED KINGDOM		2			1		1	1	2	1
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					1
IRAN	1									
ISRAEL					1			1		
SWITZERLAND	2	1								
SWEDEN					1					
FRANCE			1							1
CANADA	1									
MEXICO					1					
POLAND						1				
CZECH REPUBLIC							1			
MALAYSIA							1			
GREECE								1		
SAUDI ARABIA							1			
ITALY										1
GERMANY										2
논문 편 수(편)	**27**	**24**	**34**	**37**	**37**	**40**	**40**	**40**	**55**	**55**
국가 수(개)	**9**	**6**	**6**	**5**	**12**	**7**	**8**	**7**	**9**	**8**

– 전체 저자 기준 국가별 출판실적(※WoS 검색기준)

※ WoS에서 검색되는 2015년도 출판실적부터 반영함
※ WoS 국가 분류 중 'England', 'Northern Ireland', 'Scotland'를 'United Kingdom'으로 통일함

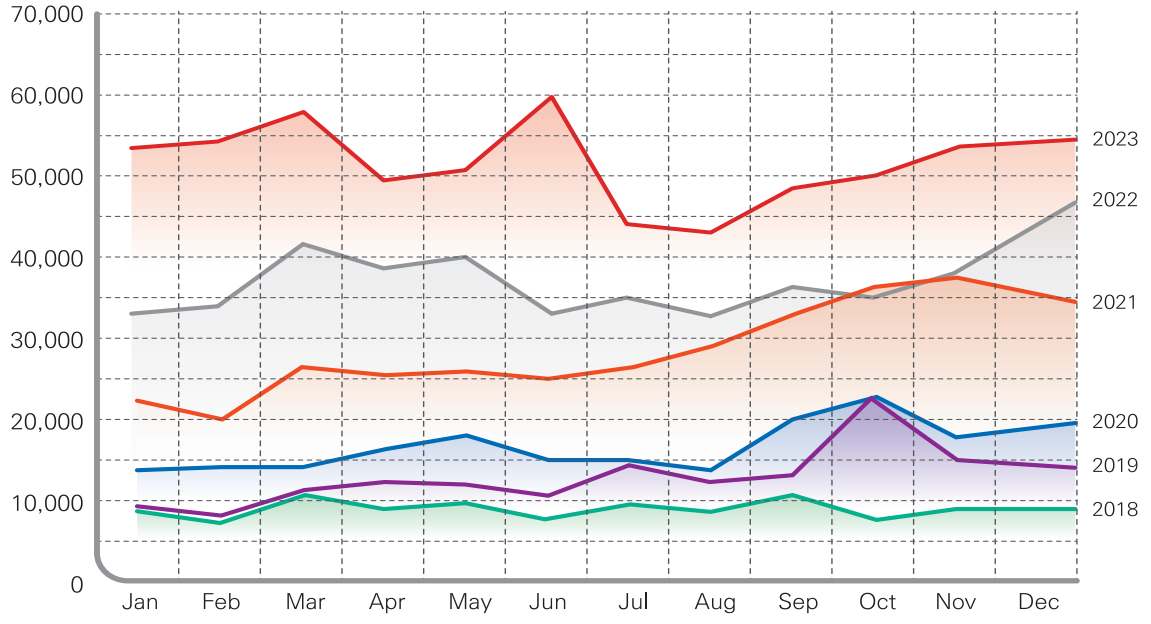
국가/연도	2015	2016	2017	2018	2019	2020	2021	2022	2023
SOUTH KOREA	15	23	25	21	24	26	23	35	40
UNITED STATES	5	8	8	10	9	11	14	14	18
CHINA		1	2	2	3	8	6	12	10
SINGAPORE	2		1	1	2	1		4	
JAPAN		1	6	2		1		3	2
UNITED KINDOM	2			2		1	1	3	2
AUSTRALIA					2	1	2	2	
CANADA								2	1
INDIA	2	4	3	4	5			2	
THAILAND						1		2	
BANGLADESH		1						1	
BELGIUM		1		2				1	
GERMANY			2		1			1	3
PAKISTAN							1	1	
SAUDI ARABIA						1	1	1	
TAIWAN								1	
AUSTRIA						1			
BELARUS	2								
CZECH REPUBLIC					1	2			
EGYPT				1		1			
FRANCE		1							1
GREECE							1		
HUNGARY	1								
ISRAEL				1			1		
ITALY							1		1
MALAYSIA						2			
MEXICO				1					
NIGERIA						1			
NORWAY		1		1					
POLAND					1				
RUSSIA						1			
SWEDEN				1	1				1
SWITZERLAND	1								
VIETNAM					1	1			
CHILE									1
SPAIN									1
저자 수(명)	**30**	**41**	**47**	**49**	**50**	**60**	**51**	**85**	**81**
국가 수(개)	**8**	**9**	**7**	**13**	**11**	**16**	**10**	**16**	**12**

4. 연도별 다운로드 및 엑세스 현황

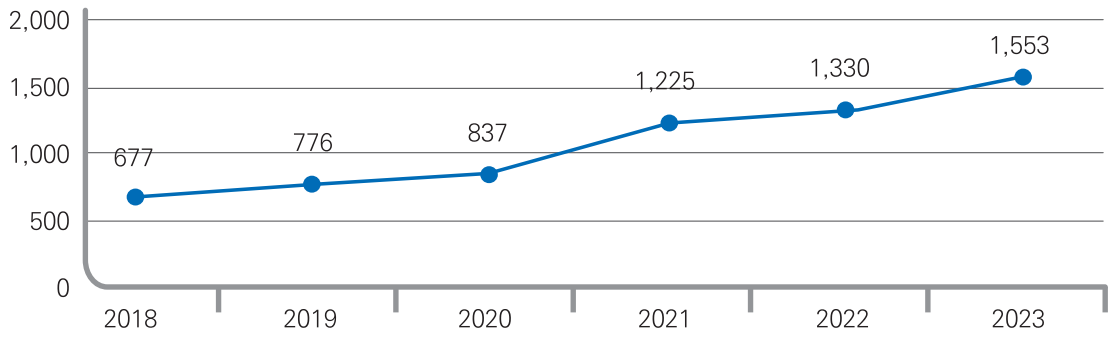
- 논문 편 수 누적으로 2023년도 다운로드 및 엑세스 수 전년대비 36% 증가
- 2023년도 1편당 평균 다운로드 및 엑세스 수는 전년대비 17% 증가
- 출판 논문 편 수 확대와 전략적 홍보방안 모색을 통해 엑세스 수 관리 필요

Y/M	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave	Totals
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
2023	52,909	53,613	57,469	49,508	50,656	55,636	59,277	43,054	41,988	43,616	47,040	49,485	1,553	604,251

전체 다운로드 및 엑세스 수



논문 1편당 평균 다운로드 및 엑세스 수



5. 2023년도 Thematic Series 출판실적

Thematic Series 출판 개요

- 개요: 최근 주목받고 있는 특정 주제에 관한 논문을 시리즈 형태로 출판
- 규모: 연 20~25편 내외(8~9 series*3 papers)
- 구성 원칙
  · Editor 구성: NC 편집운영위원 1인, Guest Editor 1인(외부초청)
  · 초청논문: 3편 내외(국외논문 1~2편, 국내논문 1~2편)

2023년도 출판실적

- 총 9 series, 24편 출판

Series Title	Nanophotonics meet functional imaging
Description	Nanophotonics is a part of nanotechnology for investigat-ing the light-matter interactions on the nanometer scale. This field provides a new approach to achieving the limit of specificity and sensitivity in functional medical imag-ing such as photoacoustic imaging, optical coherence tomography, and two-photon microscopy. This functional imaging based on nanophotonics can expand and devel-op new diagnostic and imaging technologies towards ad-vanced healthcare technology with a nanoscale resolu-tion beyond the diffraction limit. Furthermore, functional imaging using nanophotonics has been continuously pro-gressive and expanded to other fields through the con-vergence with other available materials and platforms. This special Issue aims to introduce recent interdiscipli-nary approaches toward innovative nanophotonics-based functional imaging technologies.
Edited by	· Prof. Junsuk Rho (Pohang University of Science and Technology, KOREA)
Publications	Prof. Hao Zhang (Northwestern University, USA) · 주제: Spectroscopic single-molecule localization microscopy: applications and prospective [DOI] https://doi.org/10.1186/s40580-023-00363-9
	Prof. Junsuk Rho (POSTECH, KOREA) · 주제: Recent advancements of metalenses for functional imaging [DOI] https://doi.org/10.1186/s40580-023-00372-8
	Prof. Chulhong Kim (POSTECH, KOREA) · 주제: Functional Photoacoustic Imaging: from Nano- and Micro- to Macro-scale [DOI] https://doi.org/10.1186/s40580-023-00377-3
	Prof. Cheng Sun (Northwestern University, USA) · 주제: Highly Sensitive Ultrasound Detection Using Nanofabricated Polymer Micro-ring Resonators [DOI] https://doi.org/10.1186/s40580-023-00378-2

Series Title	Synthesis and Applications of Colloidal Nanocrystals for Emerging Applications
Description	Colloidal nanocrystals are widely used and have formed an important platform for various emerging applications including electronic devices, energy saving materials, and biomedical research. The synthesis of highly uniform nanomaterials with controlled size, shape, and composi-tions is important to precisely understand the physical properties enabling to design new material properties which is not developed in nature thus far. In this series, we will introduce the recent advances of the application of colloidal nanocrystals and nanoparticles for various fields of researches.
Edited by	· Prof. Taejong Paik (Chung-Ang University, KOREA) · Dr. Benjamin T. Diroll (Argonne National Lab., USA)
Publications	Prof. Taejong Paik (Chung-Ang University, KOREA) · 주제: Colloidal Inorganic Nano- and Microparticles for Passive Daytime Radiative Cooling [DOI] https://doi.org/10.1186/s40580-023-00365-7
	Dr. Benjamin T. Diroll (Argonne National Lab., USA) · 주제: Optical anisotropy of CsPbBr3 perovskite nanoplatelets [DOI] https://doi.org/10.1186/s40580-023-00367-5

Series Title	Remote and van der Waals epitaxy
Description	Remote and van der Waals (vdW) epitaxy differs from con-ventional epitaxy that relies on forming strong chemical bonds on a bare wafer. Instead, the remote and vdW epitaxy is driven by a remote attracting force from the underlying wafer through a two-dimensional (2D) layer or by vdW force direct-ly from the (2D) layer. This enables the efficient release of interfacial strain and the creation of high-quality epitaxial layers with fewer dislocations. The loosely bound interface also allows easy peeling off the epitaxial layer, facilitating vertical hetero-integration in the fabrication of high-density, multi-functional devices. This thematic issue covers the working principle, strategies for overcoming challenges in remote and vdW epitaxy, and the achievements and future outlook for its practical device applications.
Edited by	· Prof. Young Jun Chang (University of Seoul, KOREA) · Prof. Young Joon Hong (Sejong University, KOREA)
Publications	Prof. Jinkyoung Yoo (Los Alamos National Lab, USA) · 주제: Unveiling the mechanism of remote epitaxy of crystalline semiconductors on 2D materials-coated substrates [DOI] https://doi.org/10.1186/s40580-023-00387-1
	Prof. Hyun S. Kum (Yonsei University, KOREA) · 주제: Understanding the 2D-material and substrate interaction during epitaxial growth towards successful remote epitaxy: a review [DOI] https://doi.org/10.1186/s40580-023-00368-4
	Prof. Sang-Hoon Bae (Washington University at Saint Louis, USA) · 주제: Applications of Remote epitaxy and van der Waals epitaxy [DOI] https://doi.org/10.1186/s40580-023-00369-3
	Prof. Zhiqiang Liu (Chinese Academy of Science, CHINA) · 주제: Lattice modulation strategies for 2D material assisted epitaxial growth [DOI] https://doi.org/10.1186/s40580-023-00388-0

Series Title	PV technology leading a sustainable carbon-neutral society: Perovskite Solar Cells
Description	Organic-inorganic halide perovskite solar cells are rapidly growing renewable energy resources in the field of photo-voltaics (PVs). This technology holds great potential for creating highly efficient and economical solar energy de-vices, such as ultra-light, foldable solar cells, space-based solar panels, and colorful building-integrated PVs (BIPVs) for a sustainable carbon-neutral society. The study of these materials also provides insight into the fundamental interactions between photons and semicon-ducting materials. The perovskites have shown remarka-ble advances in solar cell performance, exhibiting high efficiency and excellent tolerance to defects, even when produced through low-temperature solution processes. Additionally, this is the only material that can control the bandgap over a wide range without sacrificing quality. The outstanding photon-to-electric conversion properties of perovskites have led to their ongoing improvement and expansion into other device forms, making it a feasible solution for satisfying a wide range of energy needs. This special issue highlights recent interdisciplinary ap-proaches to innovation in perovskite-based solar cells, covering areas such as performance, next-generation perovskite materials, tandem form factors, and more.
Edited by	· Prof. Min Jae Ko (Hanyang University, KOREA) · Prof. Dong Hoe Kim (Korea University, KOREA)
Publications	Prof. Kai Zhu (National Renewable Energy Laboratory, USA) · 주제: Progress and outlook of Sn-Pb mixed perovskite solar cells [DOI] https://doi.org/10.1186/s40580-023-00371-9
	Prof. Yuelong Li (Nankai University, CHINA) · 주제: Perovskite Single-Crystal Thin Films: Preparation, Surface Engineering, and Application [DOI] https://doi.org/10.1186/s40580-023-00373-7
	Prof. Ik Jae Park (Sookmyung Women's University, KOREA) · 주제: Interfacial Modification in Perovskite-Based Tandem Solar Cells [DOI] https://doi.org/10.1186/s40580-023-00374-6
	Prof. Jang Won Seo (KAIST, KOREA) · 주제: Recent progress of eco-friendly manufacturing process of efficient perovskite solar cells [DOI] https://doi.org/10.1186/s40580-023-00375-5

Series Title	Emerging quantum phenomena in van der Waals materials
Description	Van der Waals (vdW) materials, such as graphene, boron nitride, and transition metal dichalcogenics (TMDs), con-sist of atomic planes bonded by weak vdW interactions. These materials host a wide range of electrical, optical, topological, structural, chemical, magnetic, and thermoe-lectric properties. The various quantum characteristics contained in vdW systems offer an ideal platform for fun-damental scientific research as well as material property engineering and device applications.
Edited by	· Dr. Hyejin Ryu (Korea Institute of Science and Technology, KOREA) · Prof. Choongyu Hwang (Pusan National University, KOREA)
Publications	Dr. Cedomir Petrovic (Brookhaven National Lab., USA) · 주제: Nanoscale inhomogeneity and the evolution of correlation strength in FeSe_S [DOI] https://doi.org/10.1186/s40580-023-00405-2
	Dr. Sung-Kwan Mo (Lawrence Berkeley National Lab, USA) · 주제: Enhanced thermoelectric performance of SnSe by controlled vacancy population [DOI] https://doi.org/10.1186/s40580-023-00381-7

Series Title	3D bioprinting-based biomaterials for tissue engineering
Description	Tissue engineering and regenerative medicine have shown significant progress through the use of 3D bioprinting technology. Various hydrogel-based bioinks have been developed to facilitate 3D engineered tissue construction and their trans-lational applications. In this Nano Convergence thematic series, we provide a comprehensive overview of the latest advances in 3D bioprinting technology based tis-sue constructs, various printable bioinks, and na-nomaterials. Specifically, the series include re-views on muscle tissue regeneration, conductive hydrogel inks and nano-engineered dECM bioinks, and ZnO nanomaterials for bioprinting.
Edited by	· Prof. Joon Myong Song (Seoul National University, KOREA) · Prof. Su Ryon Shin (Harvard Medical School, USA)
Publications	Prof. Su Ryon Shin (Harvard Medical School, Harvard University, USA) · 주제: Nano-biomaterials and Advanced Fabrication Techniques for Engineering Skeletal Muscle Tissue Constructs in Regenerative Medicine [DOI] https://doi.org/10.1186/s40580-023-00398-y
	Prof. Jinah Jang (POSTECH, KOREA) · 주제: Nanomaterials-incorporated hydrogels for 3D bioprinting technology [DOI] https://doi.org/10.1186/s40580-023-00402-5
	Prof. Mikyung Shin (Sungkyunkwan University, KOREA) · 주제: Recent Advances in 3D Printable Conductive Hydrogel Inks for Neural Engineering [DOI] https://doi.org/10.1186/s40580-023-00389-z
	Prof. Leonard Siebert (Christian-Albrechts-University, GERMANY) · 주제: 3D-printed Wound Dressing Platform for Protein Administration based on Alginate and Zinc Oxide Tetrapods [DOI] https://doi.org/10.1186/s40580-023-00401-6

Series Title	2D material-based photonics
Description	The emergence of 2D van der Waals materials, such as graphene, transition metal dichalcogenides, and hexagonal boron nitride (hBN), has opened up exciting possibilities in the field of nanophotonics. This Collection delves into the fundamental optical properties of 2D materials and explores their diverse applications in photonic devices. Topics of interest include (but not limited to): - Fundamental optical properties (such as exciton) of 2D materials - Light-matter interaction in 2D materials - 2D materials-based nanophotonic device
Edited by	· Prof. Su-Hyun Gong (Korea University, KOREA) · Prof. Sejeong Kim (University of Melbourne, AUSTRALIA)
Publications	Prof. Kyoung-Duck Park (Postech, KOREA) · 주제: Recent progress of exciton transport in two-dimensional semiconductors [DOI] https://doi.org/10.1186/s40580-023-00404-3

Series Title	Smart Nanobiomaterials for Therapeutic and Diagnostic Applications
Description	This special issue introduces the exciting advance-ments in the field of nanobiomaterials and their transformative role in biomedical engineering. Specifi-cally, this issue aims to explore the latest develop-ments in the incorporation of metallic, polymeric, and hybrid nanobiomaterials, which have significantly en-hanced the efficacy of therapeutic agents and diag-nostic devices for various biomedical applications. The issue includes research articles and comprehensive review papers on the following topics. 1. Utilization of metallic, polymeric, or complex hybrid nanobiomaterials to enhance thera-peutic agents or cellular products, by control-ling drug release kinetics or degradation of hydrogels in a spatiotemporal manner. 2. Nanobiomaterial-based approaches for the revolutionization of polymeric or cellular con-structs, leading to advancements in thera-peutic purposes. 3. Development of next-generation nanobiosen-sors utilizing nanobiomaterials for accurate and early diagnosis of various diseases. 4. Exploration of nanomaterials' potential in en-hancing sensitivity and selectivity of diagnos-tic devices and sensor platforms for detecting specific targets of interest. By bringing together cutting-edge research in nano-biomaterials and their impact on biomedical engineer-ing, this special issue aims to drive innovations in therapeutic strategies and disease detection, ulti-mately shaping the future of healthcare.
Edited by	· Prof. Tae-Hyung Kim (Chung-Ang University, KOREA)
Publications	Prof. Kyobum Kim (Dongguk University, KOREA) · 주제: Tailoring tumor-recognizable hyaluronic acid-lipid conjugates to enhance anticancer efficacies of surface-engineered natural killer cells [DOI] https://doi.org/10.1186/s40580-023-00406-1

Series Title	Neuromorphic Computing: Materials, Devices, and Mechanisms
Description	The neuromorphic device concept has attracted renewed interests in the artificial intelligent era. The human brain is composed of over 100 billion neurons interconnected by 100 trillion synapses. Although the synapses are currently slower than conventional electronics, they work effectively at 20 W, thus consuming much less power than the megawatts required by supercomputers. Synapses use not electron but rather ion (H+, Na+, K+, Ca2+, and Cl-) flow to transfer information. Therefore, new device paradigm has been developed to realize the neuromorphic devices. Furthermore, neuromorphic devices have been continuously advanced and expanded to other fields through the convergence with other functional materials and platforms. This special Issue aims to introduce re-cent interdisciplinary approaches for materials, devices, and mechanism towards innovative neuromorphic devices technologies.
Edited by	· Prof. Shinbuhm Lee (Daegu Gyeongbuk Institute of Science and Technology, KOREA)
Publications	Prof. Joshua Yang (Univ. Southern California, USA) · 주제: Filament-free memristors for computing [DOI] https://doi.org/10.1186/s40580-023-00407-0
	Prof. Judith L. MacManus-Driscoll (University of Cambridge, UK) · 주제: Multi-level Resistive Switching in Hafnium-oxide-based Devices for Neuromorphic Computing [DOI] https://doi.org/10.1186/s40580-023-00392-4

II

2023년도 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 2023년도 출판논문 인용 분석

1. 논문별 인용 현황

호	교신저자	제목	SCIE
01	Jin-Woo Oh (Pusan National University, Korea)	The development progress of multi-array colourimetric sensors based on the M13 bacteriophage	12
02	Min Ji (Southeast University, Korea)	Transmissible H-aggregated NIR-II fluorophore to the tumor cell membrane for enhanced PTT and synergistic therapy of cancer	10
03	Suyoun Lee (Korea Institute of Science and Technology(KIST), Korea)	Investigation of the mechanism of the anomalous Hall effects in Cr2Te3/(BiSb)2(TeSe)3 heterostructure	3
04	Young-Jun Kim (Sungkyunkwan University, Korea)	Reversible flowering of CuO nanoclusters via conversion reaction for dual-ion Li metal batteries	3
05	Bong Geun Chung (Sogang University, Korea)	Effect of gut microbiome-derived metabolites and extracellular vesicles on hepatocyte functions in a gut-liver axis chip	14
06	Soo Young Kim (Korea University, Korea)	Hollow Ni/NiO/C composite derived from metal-organic frameworks as a high-efficiency electrocatalyst for the hydrogen evolution reaction	35
07	Li Lei (Guizhou Medical University, China)	Self-assembled, hemin-functionalized peptide nanotubes: an innovative strategy for detecting glutathione and glucose molecules with peroxidase-like activity	8
08	Jeong-Woo Choi (Sogang University, Korea)	Nanomaterial-based biohybrid hydrogel in bioelectronics	27
09	Shinbuhm Lee (Daegu Gyeongbuk Institute of Science&Technology (DGIST), Korea)	Strong conductivity enhancement of La-doped BaSnO3 transparent films on Al2O3 with the assistance of templated epitaxy for electromagnetic shielding in extreme environments	1
10	Young Jun Chang (University of Seoul, Korea)	Machine-learning-assisted analysis of transition metal dichalcogenide thin-film growth	16
12	Byoung Hun Lee (Pohang University of Science And Technology (POSTECH), Korea)	Demonstration of p-type stack-channel ternary logic device using scalable DNTT patterning process	2
13	Sungjoo Lee (Sungkyunkwan University, Korea)	Anisotropy of impact ionization in WSe2 field effect transistors	5
14	Hao F. Zhang (Northwestern University, USA)	Spectroscopic single-molecule localization microscopy: applications and prospective	8

호	교신저자	제목	SCIE
15	Monika Fleischer (Eberhard Karls University Tübingen, Germany)	Shape-altering flexible plasmonics of in-situ deformable nanorings	3
16	Maria Clelia Righi (Alma Mater Studiorum – University of Bologna, Italy)	Effect of vacancies and edges in promoting water chemisorption on titanium-based MXenes	14
17	Taejong Paik (Chung-Ang University, Korea)	Colloidal inorganic nano- and microparticles for passive daytime radiative cooling	15
18	Benjamin T. Diroll (Argonne National Laboratory, USA)	Optical anisotropy of CsPbBr3 perovskite nanoplatelets	5
19	Hyun S. Kum (Yonsei University, Korea)	Understanding the 2D-material and substrate interaction during epitaxial growth towards successful remote epitaxy: a review	16
20	Sang-Hoon Bae (Washington University in St. Louis, USA)	Applications of remote epitaxy and van der Waals epitaxy	20
21	Won-Gun Koh (Yonsei University, Korea)	Water-stable, biocompatible, and highly luminescent perovskite nanocrystals-embedded fiber-based paper for anti-counterfeiting applications	13
22	Jin Young Kim (Seoul National University, Korea)	Interfacial modification in perovskite-based tandem solar cells	6
23	Yuelong Li (Nankai University, China)	Perovskite single-crystal thin films: preparation, surface engineering, and application	10
24	Junsuk Rho (POSTECH, Korea)	Recent advancements of metalenses for functional imaging	29
25	Kyoung G. Lee (National Nanofab Center (NNFC), Korea)	Polyaniline-based 3D network structure promotes entrapment and detection of drug-resistant bacteria	5
26	Jaemoon Yang (Yonsei University, Korea)	Intracellular lipophilic network transformation induced by protease-specific endocytosis of fluorescent Au nanoclusters	0
27	Jangwon Seo (KAIST, Korea)	Recent progress of eco-friendly manufacturing process of efficient perovskite solar cells	20
28	Dong Hoe Kim (Korea University, Korea)	Progress and outlook of Sn-Pb mixed perovskite solar cells	14
29	Chulhong Kim (POSTECH, Korea)	Functional photoacoustic imaging: from nano- and micro- to macro-scale	39
30	Cheng Sun (Northwestern University, USA)	Highly sensitive ultrasound detection using nanofabricated polymer micro-ring resonators	11
31	Jung-Kun Lee (University of Pittsburgh, USA)	Optical engineering of PbS colloidal quantum dot solar cells via Fabry–Perot resonance and distributed Bragg reflectors	3

호	교신저자	제목	SCIE
32	Sung-Kwan Mo (Lawrence Berkeley National Laboratory, USA)	Enhanced thermoelectric performance of SnSe by controlled vacancy population	6
33	Sungjun Kim (Dongguk University, Korea)	Mimicking biological synapses with a-HfSiOx-based memristor: implications for artificial intelligence and memory applications	31
34	Jeong-Eun Park (Gwangju Institute of Science and Technology (GIST), Korea)	Strong coupling in plasmonic metal nanoparticles	12
35	Guixin Cao (Shanghai University, China)	Vertical nanoscale strain-induced electronic localization in epitaxial La2/3Sr1/3MnO3 films with ZrO2 nanopillar inclusions	0
36	Wooram Park (Sungkyunkwan University, Korea)	Lipid nanoparticle-based mRNA delivery systems for cancer immunotherapy	20
37	Zhengtang Luo (Hong Kong University of Science and Technology, Hong Kong)	Two-dimensional materials for high density, safe and robust metal anodes batteries	10
38	Oi Lun Li (Pusan National University, Korea)	Recent progress of low-temperature plasma technology in biorefining process	7
39	Zhiqiang Liu (Chinese Academy of Sciences, China)	Lattice modulation strategies for 2D material assisted epitaxial growth	7
40	Young Joon Hong (Sejong University, Korea)	Unveiling the mechanism of remote epitaxy of crystalline semiconductors on 2D materials-coated substrates	2
41	Mikyung Shin (Sungkyunkwan University, Korea)	Recent advances in 3D printable conductive hydrogel inks for neural engineering	16
42	Vincent M. Rotello (University of Massachusetts, USA)	Biomimetic and bioorthogonal nanozymes for biomedical applications	14
44	Judith MacManus-Driscoll (University of Cambridge, UK)	Multi-level resistive switching in hafnium-oxide-based devices for neuromorphic computing	14
45	Sungsu Park (Sungkyunkwan University, Korea)	3D printed fluidic swab for COVID-19 testing with improved diagnostic yield and user comfort	2
47	Sanjay Mathur (University of Cologne, Germany)	Potential and perspectives of halide perovskites in light emitting devices	8
48	Su Ryon Shin (Brigham and Women's Hospital, USA)	Nano-biomaterials and advanced fabrication techniques for engineering skeletal muscle tissue constructs in regenerative medicine	10
50	Shinbuhm Lee (DGIST, Korea)	La-doped BaSnO3 for electromagnetic shielding transparent conductors	0
51	Oh Seok Kwon (Korea Reseach Institute of Bioscience & BioTechnology. (KRIBB), Korea)	Recombinant protein embedded liposome on gold nanoparticle based on LSPR method to detect Corona virus	5

호	교신저자	제목	SCIE
52	Jinah Jang (POSTECH, Korea)	Nanomaterials-incorporated hydrogels for 3D bioprinting technology	7
53	Leonard Siebert (Kiel University, Germany)	3D-printed wound dressing platform for protein administration based on alginate and zinc oxide tetrapods	7
54	Lin Shao (Texas A&M University, USA)	Phase patterning of metallic glasses through superfast quenching of ion irradiation-induced thermal spikes	1
55	Min Hyuk Park (Seoul National University, Korea)	Role of oxygen vacancies in ferroelectric or resistive switching hafnium oxide	19
56	Kyobum Kim (Dongguk University, Korea)	Tailoring tumor-recognizable hyaluronic acid-lipid conjugates to enhance anticancer efficacies of surface-engineered natural killer cells	7
57	Kyoung-Duck Park (POSTECH, Korea)	Recent progress of exciton transport in two-dimensional semiconductors	1
58	J. Joshua Yang (University of Southern California, USA)	Filament-free memristors for computing	4
59	Cedomir Petrovic (Brookhaven National Laboratory, USA)	Nanoscale inhomogeneity and the evolution of correlation strength in FeSe1-xSx	1
총 계			578
평 균			10.6

2. 국가별 인용 현황

- 인용 국가 수는 52개국으로 논문 국가 수(12개국) 대비 비교적 다양한 나라에서 인용되고 있음을 알 수 있음
- 그러나 한국과 중국에서의 인용 비율이 약 53%로 특정 국가에 인용 수가 편중된 편임

국가	인용횟수
China	205
Korea	168
USA	68
India	44
England	16
Italy	15
Japan	14
Australia	13
Germany	12
Iran	11
Saudi Arabia	10
Canada	9
Russia	9
Spain	8
Singapore	7
Austria	6
Belgium	6
France	6
Poland	6
Taiwan	5
Malaysia	4
Scotland	4
Bangladesh	3
Israel	3
Pakistan	3
Romania	3

국가	인용횟수
Switzerland	3
Vietnam	3
Brazil	2
Chile	2
Czech Republic	2
Denmark	2
Egypt	2
Ethiopia	2
Finland	2
Greece	2
Iraq	2
Mexico	2
Sweden	2
Thailand	2
Turkiye	2
U Arab Emirates	2
Argentina	1
Hungary	1
Indonesia	1
Ireland	1
Netherlands	1
Nigeria	1
Norway	1
Portugal	1
Ukraine	1
Zambia	1
총 계	702

3. 논문형식별 인용 현황

- 2023년도 Review 논문의 편당 평균 인용 횟수는 14회로 타 논문형식 대비 약 2배 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
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
2023	논문 편 수	55	28(51%)	27(49%)	-
	총 인용횟수	578	378(65%)	200(35%)	-
	평균 인용횟수	11	14	7	

- 2023년도 Thematic Series를 출판하여 총 9개 시리즈 24편의 논문이 출판 되었으며 Series 평균 30.5회, 논문 당 평균 인용 11.6회의 실적을 보여줌 (SCIE 기준)

Series Title	Publications title	인용	인용 합계
Nanophotonics meet functional imaging	Spectroscopic single-molecule localization microscopy: applications and prospective	8	87
	Recent advancements of metalenses for functional imaging	29	
	Functional Photoacoustic Imaging: from Nano- and Micro- to Macro-scale	39	
	Highly Sensitive Ultrasound Detection Using Nanofabricated Polymer Micro-ring Resonators	11	
Synthesis and Applications of Colloidal Nanocrystals for Emerging Applications	Colloidal Inorganic Nano- and Microparticles for Passive Daytime Radiative Cooling	15	20
	Optical anisotropy of CsPbBr3 perovskite nanoplatelets	5	
Remote and van der Waals epitaxy	Unveiling the mechanism of remote epitaxy of crystalline semiconductors on 2D materials-coated substrates	2	45
	Understanding the 2D-material and substrate interaction during epitaxial growth towards successful remote epitaxy: a review	16	
	Applications of Remote epitaxy and van der Waals epitaxy	20	
	Lattice modulation strategies for 2D material assisted epitaxial growth	7	

Series Title	Publications title	인용	인용 합계
PV technology leading a sustainable carbon-neutral society: Perovskite Solar Cells	Progress and outlook of Sn-Pb mixed perovskite solar cells	14	50
	Perovskite Single-Crystal Thin Films: Preparation, Surface Engineering, and Application	10	
	Interfacial Modification in Perovskite-Based Tandem Solar Cells	6	
	Recent progress of eco-friendly manufacturing process of efficient perovskite solar cells	20	
Emerging quantum phenomena in van der Waals materials	Nanoscale inhomogeneity and the evolution of correlation strength in FeSe_S	1	7
	Enhanced thermoelectric performance of SnSe by controlled vacancy population	6	
3D bioprinting-based biomaterials for tissue engineering	Nano-biomaterials and Advanced Fabrication Techniques for Engineering Skeletal Muscle Tissue Constructs in Regenerative Medicine	10	40
	Nanomaterials-incorporated hydrogels for 3D bioprinting technology	7	
	Recent Advances in 3D Printable Conductive Hydrogel Inks for Neural Engineering	16	
	3D-printed Wound Dressing Platform for Protein Administration based on Alginate and Zinc Oxide Tetrapods	7	
2D material-based photonics	Recent progress of exciton transport in two-dimensional semiconductors	1	1
Smart Nanobiomaterials for Therapeutic and Diagnostic Applications	Tailoring tumor-recognizable hyaluronic acid-lipid conjugates to enhance anticancer efficacies of surface-engineered natural killer cells	7	7
Neuromorphic Computing: Materials, Devices, and Mechanisms	Filament-free memristors for computing	4	18
	Multi-level Resistive Switching in Hafnium-oxide-based Devices for Neuromorphic Computing	14	
총 계			**275**
Thematic Series (논문별) 평균 인용 수			**30.5 (11.6)**

- 2023년도 7개 분과별로 출판된 논문 편 수는 아래와 같으며, 출판 논문별 평균 인용 수는 Nanophotonics(NP) 분과가 14.3으로 가장 높았음 (SCIE 기준)

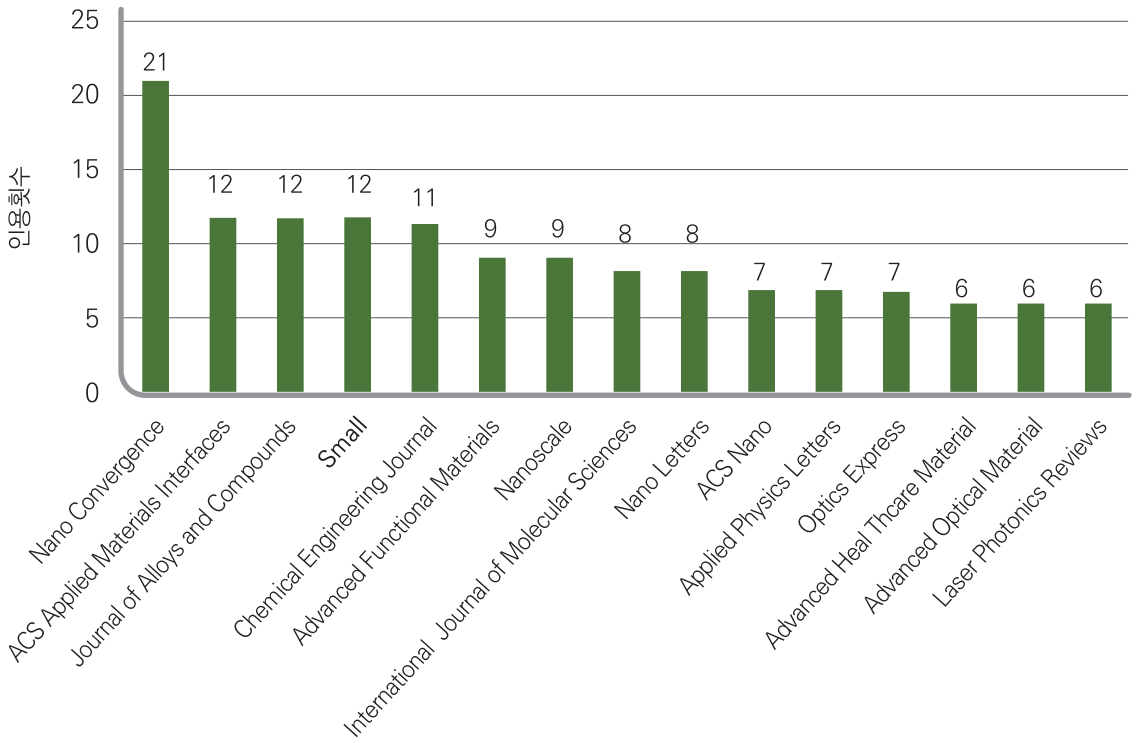
분과	출판 논문 편 수	논문별 평균 인용 수
Nanoelectronics(NE)	7	11.0
Nanophotonics(NP)	8	14.3
Nanomaterials(NM)	12	11.2
Nanoenergy&Nanoenvironment(EE)	5	10.4
Nanofabrication&Nanocharacterization(FC)	3	13.0
Nanobio&Nanomedicine(BM)	12	9.6
Emerging Nanotechnology(EN)	8	6.6

4. 인용 학술지 분포

▶ 학술지별 인용횟수

- 우리 저널을 가장 많이 인용한 저널은 'Nano convergence'로 총 21회 인용함
- 우리 저널을 인용한 학술지 중 우리 저널보다 더 높은 IF를 기록한 학술지는 총 28개로 약 10.9% 비율을 보이고 있음

상위 15개 인용 학술지 인용횟수



전체 인용학술지 인용횟수 및 IF 분포표

#	순위	인용 저널	IF	인용횟수
1	1	Nano Convergence	13.5	21
2	2	ACS Applied Materials Interfaces	8.5	12
3		Journal Of Alloys And Compounds	5.8	12
4		Small	13	12
5	5	Chemical Engineering Journal	13.4	11
6	6	Advanced Functional Materials	18.5	9
7		Nanoscale	5.8	9
8	8	International Journal Of Molecular Sciences	4.9	8
9		Nano Letters	9.6	8
10	10	ACS Nano	15.8	7
11		Applied Physics Letters	3.5	7
12		Optics Express	3.2	7

#	순위	인용 저널	IF	인용횟수
13	13	Advanced Healthcare Materials	10	6
14		Advanced Optical Materials	8	6
15		Laser Photonics Reviews	9.8	6
16	16	Advanced Materials	27.4	5
17		Advanced Science	14.3	5
18		Applied Surface Science	6.3	5
19		International Journal Of Hydrogen Energy	8.1	5
20		Journal Of Materials Chemistry A	10.8	5
21		Journal Of Materials Chemistry C	5.7	5
22		Journal Of Nanobiotechnology	10.6	5
23		Nanomaterials	4.4	5
24	24	Advanced Electronic Materials	5.3	4
25		Gels	5	4
26		International Journal Of Biological Macromolecules	7.7	4
27		Journal Of Biomedical Optics	3	4
28	28	Nature Communications	14.7	4
29		ACS Applied Electronic Materials	4.4	3
30		ACS Applied Nano Materials	5.3	3
31		ACS Sensors	8.3	3
32		Angewandte Chemie International Edition	16.1	3
33		Applied Materials Today	7.2	3
34		Carbon	10.5	3
35		Electronics	2.6	3
36		Inorganic Chemistry	4.3	3
37		Korean Journal Of Chemical Engineering	3	3
38		Materials	3.1	3
39		Materials Horizons	12.2	3
40		Materials Today Communications	3.7	3
41		Materials Today Physics	10	3
42		Microchemical Journal	4.9	3
43		Nano Energy	16.8	3
44		Nanophotonics	6.5	3
45	28	Nanoscale Horizons	8	3
46		Photonics	2.1	3
47		Physical Chemistry Chemical Physics	2.9	3
48		Sensors And Actuators B Chemical	8	3
49		Separation And Purification Technology	8.2	3
50		Small Methods	10.7	3
51	51	ACS Applied Bio Materials	4.7	2
52		ACS Biomaterials Science Engineering	5.5	2
53		ACS Photonics	6.5	2
54		Advanced Engineering Materials	3.4	2
55		Applied Sciences Basel	2.5	2

#	순위	인용 저널	IF	인용횟수
56		Biomolecules	4.8	2
57		Biosensors Basel	4.9	2
58		Chemistry Of Materials	7.2	2
59		Coordination Chemistry Reviews	20.3	2
60		Current Applied Physics	2.4	2
61		Energies	3	2
62		Energy Environmental Science	32.4	2
63		Energy Materials	11.8	2
64		Exploration	-	2
65		Frontiers In Bioengineering And Biotechnology	4.3	2
66		IEEE Transactions On Electron Devices	2.9	2
67		IEEE Transactions On Instrumentation And Measurement	5.6	2
68		International Journal Of Energy Research	4.3	2
69		Journal Of Chemical Physics	3.1	2
70		Journal Of Controlled Release	10.5	2
71		Journal Of Drug Delivery Science And Technology	4.5	2
72		Journal Of Energy Chemistry	14	2
73		Journal Of Energy Storage	8.9	2
74		Journal Of Physical Chemistry Letters	4.9	2
75		Journal Of Physics D Applied Physics	3.1	2
76		Langmuir	3.7	2
77	51	Light Science Applications	20.6	2
78		Materials Advances	5.2	2
79		Materials Today Bio	8.7	2
80		Micromachines	3	2
81		Nano Research	9.6	2
82		Nanotechnology	2.9	2
83		New Journal Of Chemistry	2.7	2
84		NPJ 2D Materials And Applications	9.2	2
85		Photoacoustics	7.1	2
86		Photons Plus Ultrasound Imaging And Sensing 2024	-	2
87		Plasmonics	3.3	2
88		Polymers	4.7	2
89		Progress In Biomedical Optics And Imaging	1.1	2
90		Results In Chemistry	2.5	2
91		Science Advances	11.7	2
92		Sensors And Actuators Reports	6.5	2
93		Signal Transduction And Targeted Therapy	40.8	2
94		Solar Rrl	6	2
95		Surfaces And Interfaces	5.7	2
96		Talanta	5.6	2
97		TrAC Trends In Analytical Chemistry	11.8	2
98		Wiley Interdisciplinary Reviews Nanomedicine And Nanobiotechnology	6.9	2

#	순위	인용 저널	IF	인용횟수
99		2024 IEEE International Reliability Physics Symposium Irps 2024	-	1
100		ACS Catalysis	11.7	1
101		ACS Materials Letters	9.9	1
102		ACS Omega	3.7	1
103		Acta Biomaterialia	9.4	1
104		Advanced Composites And Hybrid Materials	23.2	1
105		Advanced Energy And Sustainability Research	6.2	1
106		Advanced Energy Materials	24.4	1
107		Advanced Materials Technologies	6.4	1
108		Advanced Photonics Nexus	-	1
109		Advanced Photonics Research	3.7	1
110		Advanced Sensor Research	-	1
111		Advances In Colloid And Interface Science	16	1
112		Aggregate	13.9	1
113		Aiche Journal	3.5	1
114		Antibiotics Basel	4.3	1
115	99	APL Materials	5.3	1
116		APL Photonics	5.4	1
117		Beilstein Journal Of Nanotechnology	2.6	1
118		Biocell	0.8	1
119		Bioengineering Translational Medicine	6.1	1
120		Biomacromolecules	5.5	1
121		Biomaterials Science	5.8	1
122		Biomedical Engineering Online	2.9	1
123		Biomedical Optics Express	2.9	1
124		Bionanoscience	3	1
125		Biosensors Bioelectronics	10.7	1
126		Bme Frontiers	5	1
127		Cancer Communications	20.1	1
128		Carbohydrate Polymers	10.7	1
129		Catalysis Today	5.2	1
130		Cell Reports Physical Science	7.9	1
131		Cellular And Molecular Bioengineering	2.3	1
132		Cellulose	4.9	1
133		Ceramics International	5.1	1
134		Chemcatchem	3.8	1
135		Chemical Biomedical Imaging	-	1
136		Chemical Physics Impact	3.8	1
137		Chemical Reviews	51.5	1
138		Chemical Science	7.6	1
139		Chemical Society Reviews	40.4	1
140		Chemicke Listy	0.6	1
141		Chemsuschem	7.5	1

#	순위	인용 저널	IF	인용횟수
142		Chinese Journal Of Analytical Chemistry	1.2	1
143		Chinese Journal Of Catalysis	0.542	1
144		Chinese Science Bulletin Chinese	1.1	1
145		Cleaner Engineering And Technology	5.3	1
146		Cleaner Materials	-	1
147		Cns Neuroscience Therapeutics	4.8	1
148		Coatings	2.9	1
149		Cognitive Neurodynamics	3.1	1
150		Colloid And Polymer Science	2.2	1
151		Colloids And Surfaces B Biointerfaces	5.4	1
152		Current Opinion In Solid State Materials Science	12.2	1
153		Desalination	8.4	1
154		Digital Discovery	6.2	1
155		Discover Nano	-	1
156		Electrochimica Acta	5.5	1
157		Electronics Letters	0.7	1
158		Energy Advances	3.2	1
159		Energy Environmental Materials	13	1
160		Energy Fuels	5.2	1
161		Energy Storage	3.6	1
162		Energy Storage Materials	18.9	1
163	99	Environmental Science Technology	10.9	1
164		Experimental And Molecular Medicine	9.5	1
165		Flatchem	5.9	1
166		Foods	4.7	1
167		Frontiers In Materials	2.6	1
168		Frontiers In Pharmacology	4.4	1
169		Frontiers In Sustainable Food Systems	3.7	1
170		IEEE Access	3.4	1
171		IEEE Electron Device Letters	4.1	1
172		IEEE Journal Of The Electron Devices Society	2	1
173		Immunological Reviews	7.5	1
174		Industrial Lubrication And Tribology	1.5	1
175		International Journal Of Bioprinting	6.8	1
176		International Journal Of Pharmaceutics X	5.2	1
177		International Journal Of Precision Engineering And Manufacturing Green Technology	5.3	1
178		International Journal Of Surgery	12.5	1
179		International Reliability Physics Symposium	-	1
180		Iscience	4.6	1
181		Journal Of Advanced Ceramics	18.6	1
182		Journal Of Analytical Atomic Spectrometry	3.1	1
183		Journal Of Applied Physics	2.7	1

#	순위	인용 저널	IF	인용횟수
184		Journal Of Biomedical Science	9	1
185		Journal Of Biophotonics	2	1
186		Journal Of Colloid And Interface Science	9.4	1
187		Journal Of Environmental Management	8	1
188		Journal Of ExTrACellular Vesicles	15.5	1
189		Journal Of Industrial And Engineering Chemistry	5.9	1
190		Journal Of Information Display	3.7	1
191		Journal Of Inorganic And Organometallic Polymers And Materials	3.9	1
192		Journal Of Lightwave Technology	4.1	1
193		Journal Of Materials Chemistry B	6.1	1
194		Journal Of Materials Science	3.5	1
195		Journal Of Molecular And Engineering Materials	2.4	1
196		Journal Of Molecular Structure	4	1
197		Journal Of Optics India	1.6	1
198		Journal Of Physical Chemistry A	2.7	1
199		Journal Of Physical Chemistry C	3.3	1
200		Journal Of Physics Materials	4.9	1
201		Journal Of Power Sources	8.1	1
202		Journal Of Solid State Chemistry	3.2	1
203		Journal Of The Electrochemical Society	3.1	1
204		Journal Of The Korean Ceramic Society	2.7	1
205	99	Journal Of The Korean Physical Society	0.8	1
206		Journal Of Tissue Engineering	6.7	1
207		Journal Of Vacuum Science Technology B	1.5	1
208		Journal Of Xenobiotics	6.8	1
209		Lab On A Chip	6.1	1
210		Macromolecular Bioscience	4.4	1
211		Macromolecular Rapid Communications	4.2	1
212		Materials Letters	2.7	1
213		Materials Science And Engineering B Advanced Functional Solid State Materials	3.9	1
214		Materials Science Engineering R Reports	31.6	1
215		Materials Science In Semiconductor Processing	4.2	1
216		Materials Today Chemistry	6.7	1
217		Materials Today Sustainability	7.1	1
218		Materials Transactions	1.2	1
219		Microbiological Research	6.1	1
220		Molecules	4.2	1
221		Mrs Communications	1.8	1
222		Nano Futures	2.5	1
223		Nano Micro Letters	31.6	1
224		Nano Today	13.2	1
225		Nanomedicine	4.7	1

#	순위	인용 저널	IF	인용횟수
226	99	Nanosystems Physics Chemistry Mathematics	0.8	1
227		Nature Synthesis	17.5	1
228		New Carbon Materials	6.6	1
229		Nutrients	4.8	1
230		Optical Materials	3.8	1
231		Opto Electronic Advances	15.3	1
232		Pharmaceutics	4.9	1
233		Physica Status Solidi Rapid Research Letters	2.5	1
234		Polymer Plastics Technology And Materials	2.6	1
235		Progress In Materials Science	33.6	1
236		Progress In Organic Coatings	6.5	1
237		Progress In Quantum Electronics	7.4	1
238		Quantitative Imaging In Medicine And Surgery	2.9	1
239		Rare Metals	9.6	1
240		Rsc Advances	3.9	1
241		Science China Materials	6.8	1
242		Science China Physics Mechanics Astronomy	6.4	1
243		Scientific Reports	3.8	1
244		Sensors	3.4	1
245		Sensors And Actuators A Physical	4.1	1
246		Small Structures	13.9	1
247		Softwarex	2.4	1
248		Solar Energy	6	1
249		Solar Energy Materials And Solar Cells	6.3	1
250		Spectrochimica Acta Part A Molecular And Biomolecular Spectroscopy	4.3	1
251		Surface Science	2.1	1
252		Sustainable Energy Technologies And Assessments	7.1	1
253		Symmetry Basel	2.2	1
254		Talanta Open	4.2	1
255		Technologies	4.2	1
256		Toxicological Sciences	3.4	1
257		Waste Management	7.1	1
평균/합계			(평균) 7.4	(합계) 522

인용 학술지 출판사 분포

※상위 10개 출판사

5. 인용 분야 분포

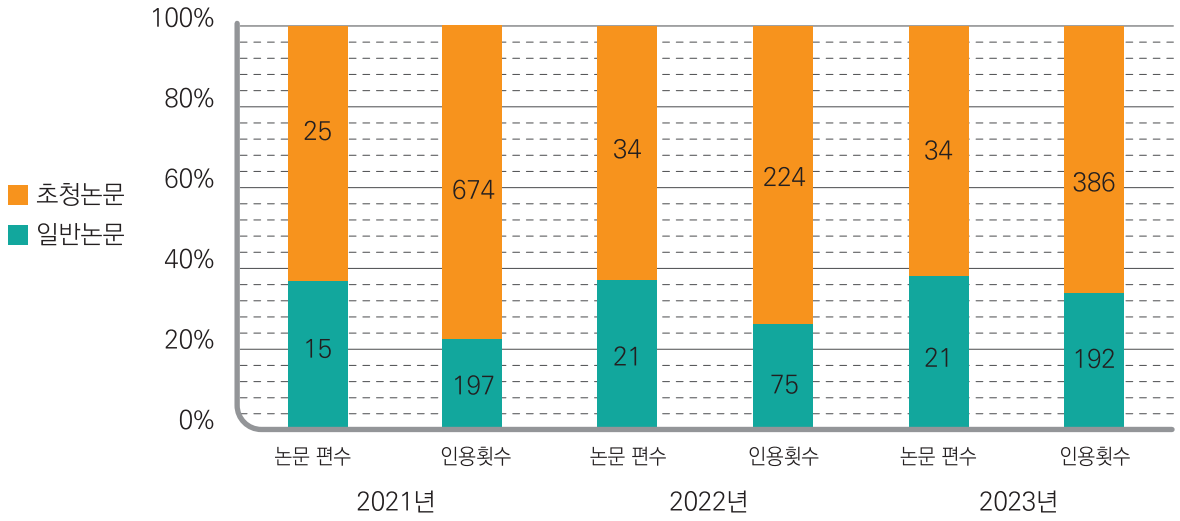
- 인용 분야는 우리 저널이 인덱스 된 3개 카테고리 분야 (‘Materials Science Multidisciplinary’, ‘Nanoscience Nanotechnology’, ‘Physics Applied’)가 매년 가장 높은 비중을 차지하고 있음
- 2023년 우리 저널의 JCR 카테고리에 포함된 분야가 아닌 ‘Chemistry Physical’, ‘Chemistry Multidisciplinary’가 100회 이상 인용 되며 상위 인용 분야로 기록된 점은 출판 논문의 다양성 또는 인지도의 향상으로 인한 변화라고 볼 수 있음

※상위 15개 분야

6. 초청논문 인용 분석

▶ 초청논문 출판 편수 대비 인용 현황

– 총 인용횟수 기준 2023년도 초청논문이 일반 논문보다 약 2배 더 많이 인용되고 있음



출판연도	구분	합 계	초청논문	일반 논문
2021	논문 편 수	40	25(62%)	15(38%)
	총 인용횟수	**871**	**674(77%)**	**197(23%)**
	평균 인용횟수	22	27	13
2022	논문 편 수	55	34(62%)	21(38%)
	총 인용횟수	**299**	**224(75%)**	**75(25%)**
	평균 인용횟수	5	7	4
2023	논문 편 수	55	34(62%)	21(38%)
	총 인용횟수	**578**	**386(67%)**	**192(33%)**
	평균 인용횟수	11	11	9

III

기타활동

1. Nano Convergence Award 시상
2. Nano Convergence Special Session 개최

III 기타활동

1. 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, 수상금(50만원 또는 $500)

| 수상자 선정 방법 |

- 시상위원회에서 수상 후보 검토 후 최종 수상자 결정

수상자 선정결과

부문	수상자	
Outstanding Paper Award (논문상)		구종민 교수 (성균관대학교)
		Prof. Xiangming He (Tsinghua University)
Contribution Award (공로상)		정봉근 교수 (서강대학교)
		이승현 교수 (한양대학교)

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
  * 2023년도 기준으로 만 45세 이상
  * NC저널에 교신저자 또는 제1저자로 논문을 1번 이상 출판한 자
- Nano Convergence Young Investigator Lectureship Award
  * 나노기술분야에서 뛰어난 연구실적을 이룬 자
  * 2023년도 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		박남규 교수 (성균관대학교)
Young Investigator Lectureship		김미소 교수 (성균관대학교)

2. Nano Convergence Special Session 개최

개최 목적

- 국내 최대 규모의 나노기술분야 국제 심포지엄 'NANO KOREA 2023 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: 개회식, Nano Convergence Award 시상식, 수상기념강연 등

2023년도 개최결과

- 주요 사항
  - 행사명: Nano Convergence Special Session 2023
  - 일시: 2023년 7월 6일(목) 09:35~13:00
  - 장소: 일산 킨텍스 제1전시장 210호
  - 주최: 나노기술연구협의회, Springer Nature
  - 후원: Springer Nature

- 성과 요약
  - **(발표규모) 2개국 4명의 초청 연사 강연 진행**
  - **(참가규모) 총 46명 참가**
  - **(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 수상기념 강연을 진행
    * Nano Convergence 출판 및 인용 현황을 소개하고 참가자에게 저널의 투고와 인용을 독려
    * 강연 종료 직후 참가자–편집위원 간 긴밀한 네트워킹 프로그램 진행을 통한 저널 인용성과 홍보 및 투고 가이드라인 안내

- 프로그램

Time	Session	
09:00~09:35	Registration	
09:35~09:37	Opening (chair: Prof. Bong Geun Chung)	**Congratulatory Remarks** **Jinho Ahn** (President, Korea Nanotechnology Research Society)
09:37~09:39		Opening Remarks **William Jo** (Editor-in-Chief, Nano Convergence)
09:39~09:44 (5min)		**Congratulatory Remarks** **Ella Kim** (Senior Publisher, Springer Nature)
09:44~09:50		**Current and Future of Nano Convergence** **Bong Geun Chung** (Executive Editor, Nano Convergence)
09:50~10:05	**Award Ceremony**	
10:05~10:30 (25min)	Session I (chair: Dr. Hyejin Ryu)	Invited Lecture of **Outstanding Paper** Award Winner **Chong Min Koo** (Professor, Sungkyunkwan Univ.) *'Tailoring MXene Defect Engineering & Surface Chemistry for Electronic Applications'*
10:30~10:55 (25min)		Invited Lecture of **Outstanding Paper** Award Winner **Xiangming He** (Professor, Tsinghua Univ.) [Live Streaming] *'Tailoring Practically Accessible Nano Composite Polymer/Inorganic Electrolytes for All-Solid-State Lithium Batteries'*
10:55~11:05	Break	
11:05~11:30 (25min)	Session II (chair: Prof. Hye-Won Seo)	Invited Lecture of **Distinguished Lectureship** Award Winner **Nam-Gyu Park** (Professor, Sungkyunkwan Univ.) *'The discovery of practical perovskite solar cell'*
11:30~11:55 (25min)		Invited Lecture of **Young Investigator Lectureship** Award Winner **Miso Kim**(Professor, Sungkyunkwan Univ.) *'Phononic Crystals and Acoustic Metamaterials for Energy Harvesting'*
11:55~12:00	**Closing Remark**	
12:10~13:00	**Networking Program**	

- 현장 사진

6기 Nano Convergence 편집운영위원회 (2024년도)

2023년도 Nano Convergence 연차실적보고서

발 행 일 2024년 12월

발 행 인 안진호 (나노기술연구협의회 제10대 회장)

편 집 인 조월렴 (Nano Convergence 6기 편집위원장)

발 행 처 나노기술연구협의회
Korea Nanotechnology Research Society

주소: 서울특별시 서초구 남부순환로 354길 14

담당자: 김은진 팀장, 김혜진 대리

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KoNTRS website

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