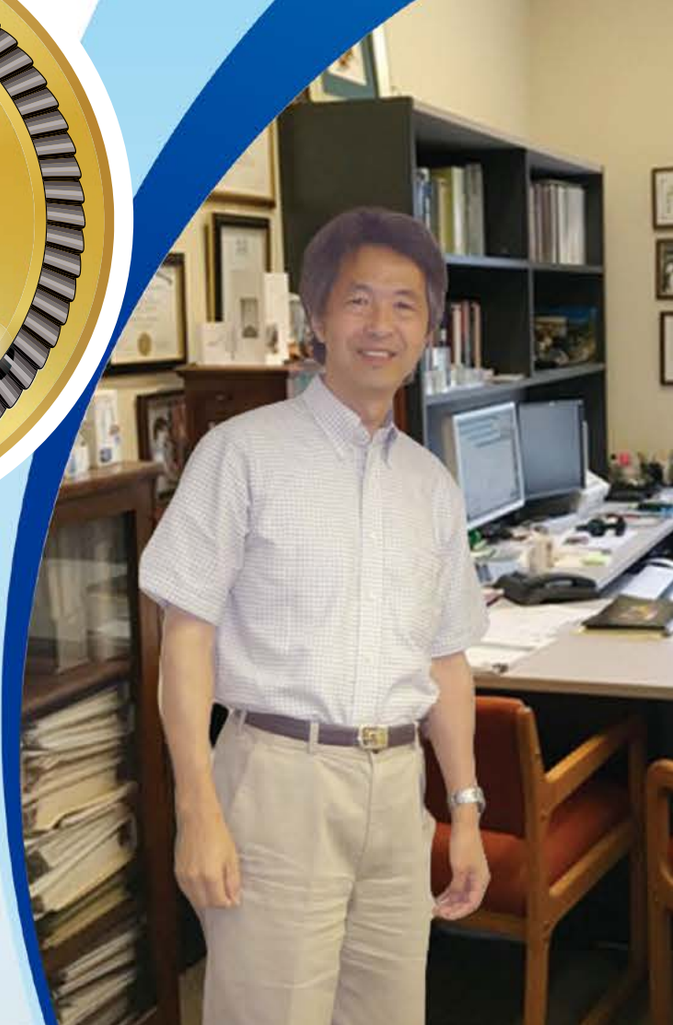
ISA
International SSL Alliance

ISA
Global SSL
Award of
Outstanding
Achievement
2025



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Solid state lighting (SSL) is a new successful lighting revolution after incandescent lamp and fluorescent lamp, not only its low carbon emission and provide comfortable lighting, but also it is an important path to improve people's livelihood and to contribute sustainable development. ISA has been seeking to foster and stimulate this great lighting revolution, and is proud of being able to contribute to the promotion of this industry and its sustainable development.

The course from creation, innovation to startup of SSL and to the formation of an influential industry and to get final recognition and acceptance worldwide is also a process of the cultivation and building of the "ecosystem" of SSL. This "ecosystem" includes researchers, government policy makers, manufacturers, designers, standard setters, inspectors, marketing, ultimate users, etc. Building of this "ecosystem" requires the joint efforts of tens of thousands of individuals and collectives, as well as international communications and cooperations among SSL peers .

Without the deep insight and foresight of scientists for the unknown of the humankind, assiduous work and fortitudinous spirit of engineers and the risk spirit and unremitting efforts of entrepreneurs, we cannot enjoy the well-being brought by SSL. Also, without the guidance, support and service of relevant government departments to this "ecosystem" , this achievement cannot be applied universally so quickly. When we review and declare this history, we should remember the outstanding individuals, groups and organizations creating this history.

Just for the above reason, ISA started to launch the "Global SSL Award of Outstanding Achievement" from 2013 to pay the utmost respect to and manifest these outstanding contributors, and also to inspire more and more individuals and groups to devote to this great cause, to move forward the history with their knowledge and innovation, to create more exciting results, to make contributions to human beings and to benefit all mankind.

Jianlin Cao

Jianlin Cao
President of ISA

ISA Introduction

ISA is a non-for-profit international organization consists of regional alliances, association/society, leading companies and renowned universities in global Solid State Lighting (SSL) field.

The Business of ISA members have covered the whole SSL value chain of upstream, middle stream and downstream of global SSL industry such as epitaxy, packaging application, materials and equipment, design system integration and testing etc.

The currently ISA 84 members, representing more than 4000 individuals & organizations includes major players . The output of which covers more than 70% that of global SSL industry.

The ISA Board of Advisers consists of leading experts and academic "Founder" level experts, such as the inventors of blue LED, yellow LED, Red LED, and OLED. Amongst Professor Shuji Nakamura, the Laureate of Nobel Prize in Physics in 2014, is the Co-Chair of ISA Board of Advisors (BOA) and Professor Hiroshi Amano, the Laureate of the Nobel Prize in Physics in 2014 is the member of ISA BOA.

The major works of ISA are: provide services to promote the development and application of global SSL, standardization, annually Global SSL Industry Report, annually SSL Awards, promote international, national and regional cooperation on SSL, etc.

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The Mission of ISA

Cooperation with the global resources and efforts, ISA looks forward to fostering a more appropriate "eco-system" for the health development of the global SSL and its application. Echo the needs of the society with more added value services to ISA members. Strive to improve people's living and contribute a sustainable human society.

Global SSL Award of Outstanding Achievement

Mission statement

The "Global SSL Award of Outstanding Achievement" aims to recognize outstanding achievement by individuals or organizations to global SSL development in particular for Science and Technology & Standardization & Policy & Application & Industry. This award is one of the highest honor to recognize contribution and achievement in global SSL field.

Categories of the Awards

1. Award of Outstanding Achievement on SSL Science and Technology
2. Award of Outstanding Achievement on SSL Standardization
3. Award of Outstanding Achievement on SSL Policy
4. Award of Outstanding Achievement on SSL Application
5. Award of Outstanding Achievement on SSL Industry

Recurrence

This Award is selected each year based on the number of nominations, and a certain number of winners are awarded. The Council of Management of ISA reserves the right not to make an award in any year or to make more than one.

Any organization in the SSL industry can nominate.

Statement

Global SSL Award of Outstanding Achievement

- Accept nominations for excellence around the world
- Judged by worldwide authoritative experts
- Widely promoted with global impacts
- Remember the achievements and manifest the contributions

Global SSL Award of Outstanding Achievement

Dr. Yoshi Ohno

Brief introduction

Dr. Yoshi Ohno started his career at the Panasonic Lighting Research Laboratory in Osaka, Japan in 1978. He holds a Ph.D. in engineering from Kyoto University. Yoshi was given an opportunity to work as a guest researcher at National Bureau of Standards (now NIST) from 1984 to 1986. He later moved to the US in 1992 and joined National Institute of Standards and Technology (NIST) as Project Leader for Photometry. From 2003 to 2012, Dr. Ohno was Group Leader in the Optical Technology Division (now Sensor Science Division) and he became a NIST Fellow in 2010. With over 150 publications, Yoshi's research spans from photometry, colorimetry and spectroradiometry, to colour science and vision science, with a focus on solid state lighting (SSL). After 32 years of service at NIST, Dr. Ohno retired in late 2024, but continues his research at NIST as a special guest researcher, and keeps active in international committees.

Dr. Ohno has been very active in Illuminating Engineering Society (IES) since 1992, contributing to – and leading – the development of many standards for photometry and SSL. Yoshi became an IES Fellow in 2006. He chaired the working groups that produced IES LM-79 Electrical and Photometric Measurements of SSL products and LM-85 Electrical and Photometric Measurements of high-power LEDs. He also led the development of American National Standards Institute (ANSI) C78.377 Chromaticity specifications for SSL products.

Dr. Ohno has also been very active in the International Commission on Illumination (CIE). In 1997, he became Secretary of CIE Division 2 (Physical Measurement of Light and Radiation), and later Director of CIE Division 2 in 2007. Yoshi then served as CIE Vice President - Technical from 2011 to 2015, after which he was elected to be CIE President from 2015 to 2019. He chaired five Technical Committees that produced important CIE publications including CIE S 025:2015 Test Method for LED Lamps, LED Luminaires and LED Modules, CIE TN001:2014 Chromaticity difference specification for light sources, and CIE 18:2019 The Basis of Physical Photometry 3rd edition. He also contributed to many other CIE TCs in photometry and colorimetry.

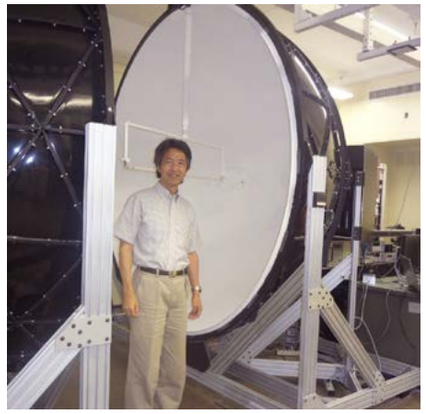
Yoshi has also been very active in the international metrology community, in particular, the Consultative

Committee for Photometry and Radiometry (CCPR) in International Committee for Weights and Measures (CIPM). He served as Chair of Working Group on Key Comparisons in CCPR from 2006 to 2018 and has served as the NIST representative for CCPR until 2024. Dr. Ohno has been one of key expert members of IEA 4E SSL Annex (now the SSLC Platform) since 2010. He was Leader for the SSL Testing Task, and led three SSL interlaboratory comparisons. Dr. Ohno has also been active in International SSL Alliance (ISA), being a member of Board of Advisors since 2015 and the chair of Technical Committee on standardisation since 2021.

Dr. Ohno received several awards, including CIE de Boer Gold Pin Award in 2007, Arthur Flemming Award in 2007, U.S. Department of Commerce Silver Medal Award in 2009, U.S. Dept. of Energy SSL Visionary Award in 2014, and NIST Stephen Carpenter Award in 2020.

Outstanding Achievements Brief

Dr. Yoshi Ohno, as a world expert in photometry, made his outstanding contributions to solid state lighting (SSL) by leading development of several important standards on SSL, in particular, those critically needed to start Energy Star and other SSL programs in U.S. Department of Energy (DOE). He chaired several working groups or technical committees in IES, ANSI, and CIE for these standard developments. Dr. Ohno has also been active in the International Energy Agency (IEA) 4E SSL Annex since 2010, leading three large-scale international interlaboratory comparisons of measurement of SSL products. He has also been active in International Solid State Lighting Alliance (ISA) as the chair of Technical Committee on Standardisation (TCS) since 2021, managing development of many standard publications from ISA. His outstanding achievements are detailed in (1) to (7) below.



(1) Scientific contribution for photometry and measurement of luminous flux

As one of his early works at NIST, Dr. Ohno developed a new method for absolute measurement of luminous flux using an integrating sphere, which led to re-establishment of the primary scale of the lumen at NIST, and it was proved to be very close to the world mean (in the 1998 international comparison of luminous flux). He published several papers, and this became his major achievement in photometry, and he became well recognised as the world expert in photometry. He then was invited to lead the development of an IES standard, LM-78 Total Luminous Flux Measurement of Lamps Using an Integrating Sphere Photometer published in 2007, which is used as an important guide for lighting measurements.

(2) Leading development of the first test method for SSL products (IES LM-79)

Around 2005, as high-power white LEDs started to be used in general illumination applications, SSL was

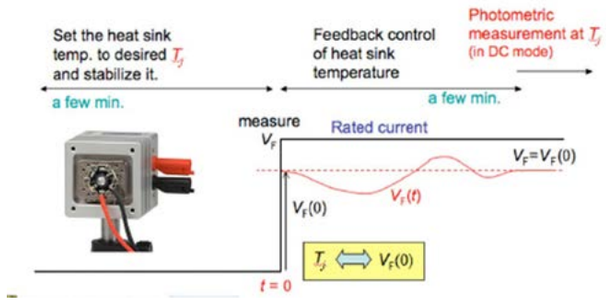
recognised as offering a big opportunity for energy savings worldwide. The U.S. Congress launched a national programme to promote SSL, and DOE undertook its delivery, co-developing Energy Star and other federal programmes as means to promote SSL. For such regulatory programs, several new standards were urgently needed, including a test method for SSL products. Dr. Ohno, as a well-recognised world expert in photometry, was asked to lead this development. He chaired a working group in IES Testing Procedures Committee, drafted many parts of the document, and successfully completed IES LM-79 Electrical and Photometric Measurements of Solid State Lighting Products, which was published in 2008. This was the first standardised test method of SSL products, and was quickly adopted worldwide, becoming a de-facto international standard.

LM-79 was widely used in Energy Star and many other programmes like DOE's Lighting Facts programme and CaLiPER. Dr. Ohno also made key contributions in establishing NIST's SSL proficiency testing programme, the Measurement Assurance Program (MAP), which was needed by National Voluntary Laboratory Accreditation Program (NVLAP) which was starting a SSL test lab accreditation scheme, certifying laboratory's compliance to IES LM-79. NIST MAP now serves more than one hundred labs worldwide.

Dr. Ohno also contributed to several other important standards from IES such as LM-80 Measuring Lumen Maintenance of LED light sources, also published in 2008.

(3) Leading development of the first test method for high-power LEDs (IES LM-85)

After LM-79 was published, Dr. Ohno started leading development of another standard urgently needed in the industry, a test method for high-power LEDs. At that time different test methods were used in the industry and there were large variations in the results. Dr. Ohno chaired a working group that produced IES LM-85-14 Electrical and Photometric Measurements of High Power LEDs, published in 2014, which standardised measurement of high-power LEDs (LED packages) by specifying three recommended methods (one-shot pulse method, continuous pulse method, and DC method). The standard set out the requirements for each method so that the different measurement methods would have acceptable agreement. The DC method was developed by NIST, with Ohno's contribution, using a steady DC current to drive the LED being tested, maintaining a specified junction temperature by monitoring its forward voltage and controlling the temperature with an active heat sink. This method is considered to give the lowest uncertainty and is used as the reference when comparing accuracy of the pulse methods.

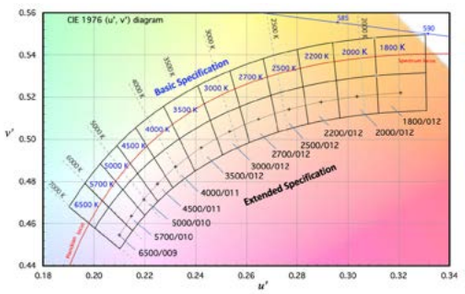


DC method (LM-85)

(4) Leading development of the first standard for chromaticity specifications for SSL (ANSI C78.377)

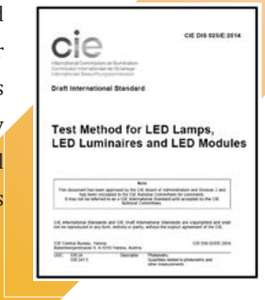
Another standard urgently needed for the Energy Star programme was the specification of chromaticity of SSL products. The existing standard (IEC 60081-1997 or ANSI C78.376-2001) for fluorescent lamps could not be used because the chromaticity tolerances (5 step or 4 step MacAdam ellipses) were too small for white LEDs available at that time. ANSI formed a task group in 2006 to develop a new specification for LED lighting products and invited Dr. Ohno to lead this task group given his deep expertise in colorimetry with extensive research on colour measurement. This work was very difficult, as LED manufacturers with competitive commercial interests were using completely different chromaticity bins with large variation in sizes. As an independent technical expert, Dr. Ohno handled this well and completed the work in two years, working closely with all members of the task group to finally arrive at a set of 7-step quadrangles which was agreed by all manufacturers. As the result, ANSI C78.377 Chromaticity Specifications for Solid State Lighting Products was published in 2008, in time for the start of Energy Star for LED lamps. This standard was improved and extended in 2011, 2015, 2017, and 2024, and each time, Dr. Ohno led the technical work. With no such standard from IEC or other international standardising body, ANSI C78.377 is widely used internationally.

The two standards IES LM-79 and ANSI C78.377 Dr. Ohno worked on quickly spread in the world and underpinned many regulatory programmes on SSL. The positive economic impact of these two standards was analysed by U.S. Department of Commerce and found to be significant. NIST was recognised for this outstanding contribution to the promotion of SSL by leadership in developing these standards in the publication "The Economic Benefits of NIST's Role in the Market Transition to Solid State Lighting Technology", R. Blank, U.S. Department of Commerce Acting Secretary and P. Gallagher, NIST Director, December 2012).



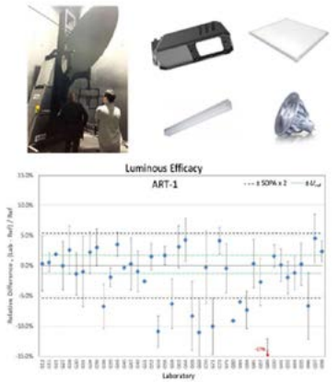
(5) Leading development of the international test method for SSL products (CIE S 025)

While LM-79 was successful and widely used, it was a regional standard, and an international standard for test method of LED lighting products was highly needed. In 2012, Dr. Ohno undertook chairing CIE TC 2-71 for developing a CIE standard on a global test method for SSL products. This work was challenging because of differences in the practice for measurement assurance in different countries and regions. But, after four years of his dedication and hard work, CIE S 025 Test Method for LED lamps, LED luminaires, and LED modules was successfully published in 2015. This was the first international test method for SSL for which the global lighting industry had been waiting many years. This standard is used by International Electrotechnical Commission (IEC) in their many standards on SSL products and by lighting regulations and quality assurance programmes in Europe and around the world.



(6) Leading large-scale Interlaboratory Comparisons of measurement of SSL products in IEA 4E SSL Annex

The International Energy Agency's 4E SSL Annex (now named Smart Sustainability in Lighting and Controls (SSLC) Platform) started in 2010. Dr. Ohno is one of the key international expert members from its start. Among many important projects the SSL Annex conducted, Dr. Ohno served as Leader for two large-scale international interlaboratory comparisons (IC) of measurement of SSL products. First, IC 2013 was the first international IC of measurement of SSL products (LED lamps), with 55 participating laboratories worldwide and a further 55 linked labs, created the largest international IC with 110 labs overall. IC 2023 compared measurement of luminous flux, luminous efficacy, and four colour quantities, and was used as a proficiency test by many of the participants. Second, IC 2017 was the first international IC of goniophotometric measurement of SSL products (LED luminaires). IC 2017 had 42 participating laboratories worldwide, comparing several goniophotometric quantities as well as common photometric and colorimetric quantities. These ICs provided precious data on measurement variations of these quantities among SSL testing labs worldwide, as well as identifying several problems that needed to be addressed. Finally, Dr. Ohno is serving as a Co-Leader for IC 2023 on measurement of temporal light modulation (TLM) quantities of LED lamps. This IC was necessary as the European Commission and other governmental bodies have adopted mandatory requirements that limit PstLM (flicker) and SVM (stroboscopic effects) for all lighting products sold in Europe. This IC has 19 participating laboratories worldwide, and is currently being completed.



(7) Contributions in research of colour quality of SSL

Dr. Ohno also contributed significant research in colour quality of SSL sources. He investigated problems in CRI and developed a proposed new metric called Colour Quality Scale (CQS) as well as a CQS simulation EXCEL tool which was widely used as a design tool in the SSL industry. He was also the primary author of CIE TN001 Chromaticity Difference Specification for Light sources, published in 2014. He developed NIST Spectrally Tuneable Lighting Facility and conducted many vision experiments, one of which led to the 2017 revision of ANSI C78.377 (extended specifications). Dr. Ohno's colour research also contributed to developments of IES TM-30 and CIE 2017 Colour Fidelity Index.

• Juries' Comments

Dr. Yoshi Ohno is an internationally well established expert in the field of photometry, colorimetry and spectroradiometry, to colour science and vision science, with a focus on solid-state lighting (SSL). The last decades he had been leading official in most related international scientific and engineering societies, having leading rore in international initiatives on testing and international standards on SSL technologies. His invaluable contribution to the international recognition of ISA as long time Chairman of ISA TCS makes him a foremost candidate to obtain the award of AOA.

Dr. Ohno's contribution to the quality control of SSLs through standardized testing procedures, and hence widespread acceptance of and improvement in SSLs, is truly global. He has been at the forefront of promoting SSLs through rigorous testing from the beginning, leading the work that underpinned ENERGY STAR in USA, and is now used in labs worldwide. This work was later globalized when Dr Ohno led the technical committee that developed an international test method for SSL products (CIE S 025). His further 'firsts' with high power LEDs and chromaticity specifications, plus his leadership of large scale inter-laboratory comparisons of measurement of SSLs show him as the comprehensive world leader in development of SSL testing. The assurances that such testing provides drives the development of better products, and their acceptance by the public, and public bodies. Dr Ohno has enabled the global acceptance of SSL products and left a lasting legacy in his rigorous test methods.

Outstanding achievements.

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Global SSL Award of Outstanding Achievement

Prof. Jinmin Li

Brief introduction

Professor Jinmin LI obtained his Master's degree in Semiconductor Materials from the 13th Research Institute of the Ministry of Electronics Industry in 1984 and his Ph.D. in Optics (Optoelectronics) from the Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences (CAS) in 1991. He served as a Research Fellow at the Institute of Semiconductors, CAS in 1995, and later assumed the role of Director of the Institute (2004), Director of the Semiconductor Lighting R&D Center (2006), Director of the State Key Laboratory of Semiconductor Lighting Joint Innovation (2012), and was appointed as Dean of the School of Semiconductor and Physics at North University of China in 2022, where he remains active in semiconductor education and research.

Professor Jinmin LI has been recognized with numerous prestigious awards, including the First Prize of the National Science and Technology Progress Award (Ranked 1st), the Ho Leung Ho Lee Foundation Prize for Scientific and Technological Innovation, and the Second Prize of the National Technology Invention Award (Ranked 1st). He promoted the establishment of the International Semiconductor Alliance (ISA). He presided over and formulated more than 40 alliance standards and 4 national standards, and promoted the formulation of 5 international recommended standards and technical reports of the ISA. His scholarly output includes 261 SCI-indexed papers, 19 invited conference presentations, 2 books, 1 contributed English book, and 81 authorized invention patents (including 3 international patents).

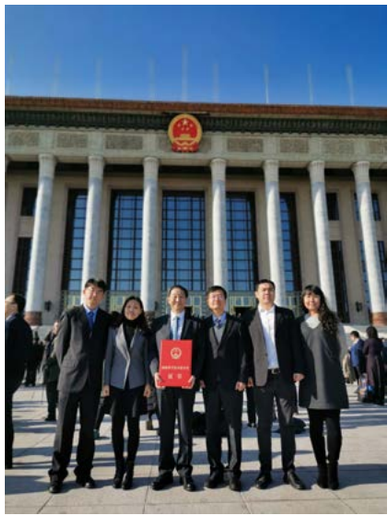

Fig. 1 Professor Jinmin LI and his team winning the First Prize of the National Science and Technology Progress Award

Professor Jinmin LI has dedicated his career to the research of semiconductor materials and devices, making pioneering contributions to the development of semiconductor lighting technology and industry in China.

Outstanding Achievements Brief

I. Breakthroughs in Core Semiconductor Lighting Devices

At the launch of China National Semiconductor Lighting Engineering Project in 2003, the luminous efficiency of light-emitting diodes (LEDs) was only 15 lm/W, and high-end chips were entirely dependent on imports. Efficiency droop, low light extraction efficiency (LEE), and inadequate thermal management are the three primary challenges that hinder the performance and commercialization of LED chips.

1. Professor Jinmin LI and his team dedicated nearly two decades to tackling these technical barriers, ultimately developing a comprehensive technology for high-efficiency and long-lifetime semiconductor lighting.

He established a theoretical model to clarify the mechanisms behind efficiency degradation such as point defect trapping, delocalization, and non-radiative recombination via dislocations. This work revealed the carrier recombination mechanisms in nitride-based LEDs under high injection currents. He proposed a new quantum well and electron-blocking layer structure based on energy band engineering, which improved the maintenance rate of LED chips quantum efficiency by four times.

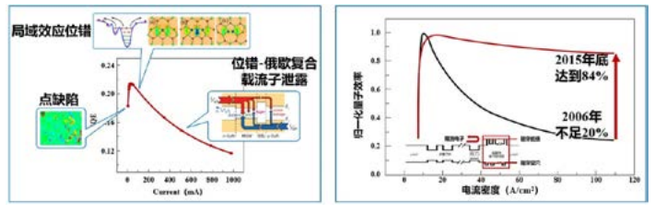

Fig. 2 Theoretical model of efficiency droop and its enhancement effects

2. He introduced a broad-spectrum omnidirectional film structure and preparation technology, featuring fused film interfaces and extended central wavelength. This work elucidated the photon transmission process in high-refractive-index, multi-optical interface systems and achieved effective control of this process. He also invented a new technology of chip interface light extraction, enhancing LEE by 1.6 times. It resolved the key challenge of low LEE in GaN-based LEDs.

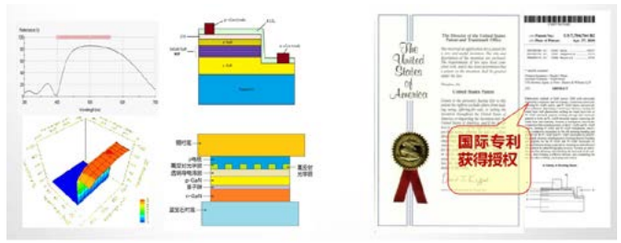

Fig. 3 The film structure and preparation technology, and related U.S. invention patent

3. He proposed a metal composite substrate and flip-chip technology and developed a thermal flow control model for nitride-based LEDs devices. This work invented a kind of ultra-low thermal resistance packaging structure and thermal channel management technology. These innovations broke through the issue of thermal

management and led to the development of ultra-low thermal resistance LED chips, reducing thermal resistance by 50% compared with traditional structures.

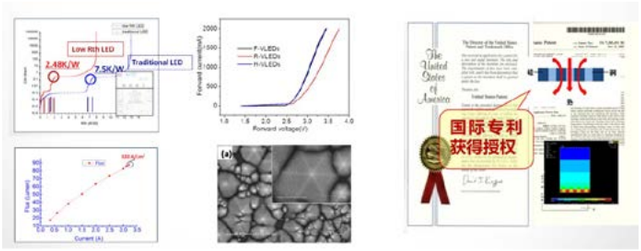

Fig. 4 Metal composite substrate and flip-chip technology, and related U.S. invention patent

By addressing the three major challenges of efficiency droop, low light extraction efficiency (LEE), and inadequate thermal management of nitride-based LEDs, Professor Jinmin LI developed high-efficiency and high-reliability semiconductor lighting devices. The achievements mentioned above were assessed by experts as being at the globally advanced level (as of 2014). The related outcomes have accelerated the full-chain domestication of China's lighting industry technology, achieving independent and controllable supply. The achievement appraisal also stated that "this work not only carries significant academic value but has also enabled large-scale industrial application, advancing the development of China's semiconductor lighting industry."

II. Pioneering the New Field of Ultraviolet Semiconductor Research

Ultraviolet (UV) LEDs represent a major focus of international competition in the nitride semiconductor field. Under the Minamata Convention on Mercury, UV LEDs are set to replace traditional UV light sources containing hazardous mercury. In 2020, National Health Commission of the People's Republic of China highlighted that "SARS-CoV-2 is sensitive to UV light and heat", and UV LEDs have been proven to efficiently inactivate the SARS-CoV-2 virus. Aluminum nitride (AlN) is a crucial base material for UV LED production. The slow lateral coalescence rate of AlN results in poor crystal quality of the material, which constitutes a fundamental challenge hindering the development of UV LEDs.

Fig.5 Professor Jinmin LI and his team exploring epitaxial growth technology

Professor Jinmin LI proposed an epitaxial technology for AlN based on nano-patterned sapphire substrates. By controlling the inter-nucleus spacing in the "mosaic" structure, this work significantly improved the lateral coalescence efficiency of AlN. Further epitaxial lateral growth was performed on the nano-patterned AlN template to obtain high-quality AlN material.

Building on the high-quality AlN material, Professor Jinmin LI developed a defect control mechanism for quantum well doping in UV laser diodes and invented a method for high-verticality facet formation. He developed China's first milliwatt-level deep UV LED device and achieved room-temperature optically pumped lasing in laser diodes with wavelengths below 300 nm.

While exploring this new field of UV LED research, Professor Jinmin LI promoted the industrialization of these achievements in Shanxi Province, China. He spearheaded the construction and subsequent mass production of China's largest-scale deep UV LED production line. UV-LED sterilization technology and related products have been pioneered in demonstrative applications within the public health sector of Shanxi Province, playing a critical role in the regularized prevention and control of COVID-19 and supporting the Olympic Winter Games Beijing 2022. For these contributions, he was awarded the 2020 Special Prize for Scientific and Technological Innovation in Shanxi Province.

Fig. 6 Disinfection robots deployed at the venue of Olympic Winter Games Beijing 2022, supporting COVID-19 pandemic control efforts

Professor Jinmin LI is known for his integrity in scholarship and rigorous approach to research, having long been dedicated to working at the forefront of science. As a proposer, promoter, and practitioner of China National Semiconductor Lighting Engineering Project, he has propelled the formation and growth of the semiconductor lighting industry in China, generating substantial economic and social benefits.

Fig.7 Launch of the "China National Semiconductor Lighting Engineering Project" by six Chinese government agencies, including the Ministry of Science and Technology and the Ministry of Industry and Information Technology, in 2003

• Juries' Comments

Prof. Jinmin Li is an excellent scientist, member of CAS and director of the State Key Laboratory of Semiconductor Lighting Joint Innovation, dean of the School of Semiconductor and Physics at North University of China. He has been among the initiators of the establishment of the International Semiconductor Alliance (ISA). His numerous inventions and patents in the field contributed to the fast development of SSL applications making China the woldwide leades in the SSL industry. Ont he basis of his achievements is an excellent candidate for the AOA.Extensive work in the international arena on many aspects of SSL, not only standardization of testing but also smart lighting, health and environmental impacts and quality. Supports governments and policy makers across the world as they implement SSL QA and test facilities. Broad team of experts working together to achieve something beyond their personal research and interests.

Professor Li's has been instrumental in improving LEDs through addressing technical barriers to their early performance: efficiency droop, low light extraction and thermal management. These advances moved out of the laboratory and in industrial application are recognized as advancing China's SSL industry. Professor Li has also led efforts to develop UV LEDs, first through developing systems to provide high quality AlN, the base for UV LED production. He simultaneously encouraged the industrialization of UV LED production in Shanxi province, where collaboration with the public health sector led to UV LED products being used to help control COVID-19 at the 2022 Olympic Games in Beijing. Professor Li's work is clearly vital to China's industry, but its global reach is less clearly identified in his case.

Outstanding achievements.

Global SSL Award of Outstanding Achievement

2025 Jury Panel

Ann Webb

Professor, University of Manchester

Former President of CIE

Guoqi Zhang

Professor, Delft University of Technology

Co-Chair of ISA Board of Advisors

Istvan Barsony

Professor, Centre for Energy Research Hungarian Academy of Sciences, University of Pannonia, Hungary

Former Director of Research Institute for Technical Physics and Materials Science – MFA, Hungarian Academy of Sciences

Member of ISA Board of Advisors

Ling Wu

President of China Advanced Semiconductor Industry Innovation Alliance (CASA)

Member of ISA Council of Management

Shuji Nakamura

Laureate of 2014 Nobel Prize in Physics

Professor, Materials, University of California, Santa Barbara

Research Director of the Solid State Lighting & Energy Center

Co-Chair of ISA Board of Advisors

Warren Julian

Emeritus Professor, University of Sydney

Past President of IIluminating Engineering Society of Australia and New Zealand (IESANZ)

Member of ISA Council of Management