**Publication List**

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**Total Citations > 1414 H-index: 21 i10-index: 35**

***SCI Journal***

1. Chun-Pin Huang, Muzafar Ahmad Rather, Chien-Ting Wu, Ravi Loganathan, Ying-Hao Ju, Kun-Lin Lin, Jen-Inn Chyi, and **Kun-Yu Lai\***, “[Crystal Transformation of Cubic BN Nanoislands to Rhombohedral BN Sheets on AlN for Deep-UV Light-Emitting Diodes](https://pubs.acs.org/doi/full/10.1021/acsanm.0c00681)”,  *ACS Appl. Nano Mater.* **3**, 5285 (2020).
2. Chun-Pin Huang, Kapil Gupta, Chuan-Pu Liu, and **Kun-Yu Lai\***, “[Ultra-flat AlN grown with a pulsed H2 etching condition](http://iopscience.iop.org/article/10.7567/1882-0786/aaf5c2)”, *Appl. Phys. Express* **12**, 015509(2019). (SCI 2018 IF: 2.772, 46/148 in PHYSICS, APPLIED)
3. Fan-Ching Chien, Jen-Long Lo, Xingwang Zhang, Ertugrul Cubukcu, Yu-Tang Luo, Kai-Lin Huang, Xiaofang Tang|, Chien-Sheng Chen, Chii-Chang Chen, and **Kun-Yu Lai\***, “[Nitride-based microarray biochips: A new route of plasmonic imaging](https://pubs.acs.org/doi/10.1021/acsami.8b14962)”, *ACS Appl. Mater. Interfaces* **10**, 39898 (2018). (SCI 2018 IF: 8.456, 27/293 in MATERIALS SCIENCE, MULTIDISCIPLINARY)
4. Meng-Cheng Chou, Chia-Yi Lin, Bo-Lin Lin, Chang-Han Wang, Shih-Hui Chang, Wei-Chih Lai, **Kun-Yu Lai**, and Yun-Chorng Chang\*, “[Polarization-Selecting III-Nitride Elliptical Nanorod Light-Emitting Diodes Fabricated with Nanospherical-Lens Lithography](https://cdn-pubs.acs.org/doi/10.1021/acsnano.8b04933)”, *ACS Nano* **12**, 8748 (2018) (SCI 2018 IF: 13.903, 18/293 in MATERIALS SCIENCE, MULTIDISCIPLINARY)

1. Tsung-Hsun Yang, Shin-Mei Wu, Ching-Cherng Sun\*, Benoit Glorieux, Ching-Yi Chen, Yu-Yu Chang, Xuan-Hao Lee, Yeh-Wei Yu, Te-Yuan Chung, and **Kun-Yu Lai**, “[Stabilizing CCT in pcW-LEDs by self-compensation between excitation efficiency and conversion efficiency of phosphors](https://www.osapublishing.org/oe/abstract.cfm?uri=oe-25-23-29287)”, *Optics Express* **25**, 29287 (2017) (SCI 2018 IF: 3.561, 20/95 in Optics)
2. Ming-Jui Lee, Wei-Ting Lin, Chun-Pin Huang, Sheng-Hui Chen, and **Kun-Yu Lai\***, “[Self-assembly semipolar AlN nanopyramids grown on powder-compressed AlN substrates](http://onlinelibrary.wiley.com/doi/10.1002/pssa.201700127/abstract)”, *Phys. Status Solidi A* **214** 1700127 (2017) (SCI 2018 IF = 1.606, 199/293 in MATERIALS SCIENCE, MULTIDISCIPLINARY)
3. Chun-Pin Huang, Kapil Gupta, Chao-Hung Wang, Chuan-Pu Liu, and **Kun-Yu Lai\***, “[High-quality AlN grown with a single substrate temperature below 1200 ºC](https://www.nature.com/articles/s41598-017-07616-8)”, *Scientific Reports* **7**, 7135 (2017) (SCI 2018 IF: 4.011, 15/69 in MULTIDISCIPLINARY SCIENCES)
4. Chuan-Pei Lee, **Kun-Yu Lai**, Chin-An Lin, Chun-Ting Li, Kuo-Chuan Ho, Chih-I Wu, Shu-Ping Lau, Jr-Hau He\*, “[A paper-based electrode using a graphene dot/PEDOT:PSS composite for flexible solar cells](http://www.sciencedirect.com/science/article/pii/S221128551730246X)”, *Nano Energy* **36**, 260 (2017) (SCI 2018 IF: 15.548, 16/293 in MATERIALS SCIENCE, MULTIDISCIPLINARY)
5. Li-Ko Yeh, Wei-Cheng Tian, **Kun-Yu Lai\*** and Jr-Hau He\*, “[Exceptionally omnidirectional broadband light harvesting scheme for multi-junction concentratorsolar cells achieved *via* ZnO nanoneedles](http://www.nature.com/articles/srep39134)”, *Scientific Reports* **6**, 39134 (2016) (SCI 2018 IF: 4.011, 15/69 in MULTIDISCIPLINARY SCIENCES)
6. Yu-Lin Tsai, **Kun-Yu Lai\***, Ming-Jui Lee, Yu-Kuang Liao, Boon S. Ooi\*, Hao-Chung Kuo\* and Jr-Hau He\*, “[Photon management of GaN-based optoelectronic devices *via* nanoscaled phenomenon](http://www.sciencedirect.com/science/article/pii/S0079672716300167)”, *Progress in Quantum Electronics* **49**, 1 (2016) (SCI 2018 IF: 5.105, 34/266 in ENGINEERING, ELECTRICAL & ELECTRONIC)
7. Amal M. Al-Amri, Po-Han Fu, **Kun-Yu Lai\***, Hsin-Ping Wang, Lain-Jong Li\* and Jr-Hau He\*, “[Efficiency Enhancement of InGaN-Based Solar Cells via Stacking Layers of Light-Harvesting Nanospheres](http://www.nature.com/articles/srep28671)”, *Scientific Reports* **6**, 28671 (2016) (SCI 2018 IF: 4.011, 15/69 in MULTIDISCIPLINARY SCIENCES)
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11. Guan-Jhong Lin, Tien-Jung Chen\*, Ming-Jui Lee, Jin-Jei Wu, **Kun-Yu Lai** and Ying-Jay Yang, “[Effect of Crosslinking Polymer Networks on the Molecular Reorientation and Electro-Optical Performance of In-Plane Switching Vertically Aligned Liquid Crystal Devices](http://onlinelibrary.wiley.com/doi/10.1002/polb.23744/abstract)”, *J. Polym. Sci. B* **53**, 1123 (2015) (SCI 2018 IF: 2.596, 29/87 in Polymer Science)
12. Jen-Hsiung Liao, Hsiao-Wei Huang, Lung-Chieh Cheng, Hsueh-Hsing Liu, Jen-Inn Chyi, Dong-Po Cai, Chii-Chang Chenand **Kun-Yu Lai\***, “[Yellow-emitting Si-doped GaN: Favorable characteristics for intermediate band solar cells](http://www.sciencedirect.com/science/article/pii/S092702481400539X)”, *Sol. Ener. Mater. Sol. Cells* **132**, 544 (2015) (SCI 2018 IF: 6.019, 48/293 in MATERIALS SCIENCE, MULTIDISCIPLINARY)
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15. Po-Han Fu, Guan-Jhong Lin, Hsin-Ping Wang, **Kun-Yu Lai**\* and Jr-Hau He\*, “[Enhanced light extraction of light-emitting diodes *via* nano-honeycomb photonic crystals](http://www.sciencedirect.com/science/article/pii/S2211285514000822)”, *Nano Energy* **8**, 78 (2014) (SCI 2018 IF: 15.548, 16/293 in MATERIALS SCIENCE, MULTIDISCIPLINARY)
16. Hsin-Ping Wang, Der-Hsien Lien, Meng-Lin Tsai, Chin-An Lin, Hung-Chih Chang, **Kun-Yu Lai** and Jr-Hau He\*, “[Photon management in nanostructured solar cells](http://pubs.rsc.org/en/content/articlelanding/2014/tc/c3tc32067g#!divAbstract)”, *J. Mater. Chem. C,* **2**, 3144 (2014) (SCI 2018 IF: 6.641, 44/293 in MATERIALS SCIENCE, MULTIDISCIPLINARY)
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19. C.H. Ho, Y.H. Hsiao, D.H. Lien, M. S. Tsai, D. Chang, **K.Y. Lai**, C.C. Sun and J.H. He\*, “[Enhanced light-extraction from hierarchical surfaces consisting of p-GaN microdomes and SiO2 nanorods for GaN-based light-emitting diodes](http://scitation.aip.org/content/aip/journal/apl/103/16/10.1063/1.4824848)”, *Appl. Phys. Lett.* **103**, 161104 (2013) (SCI 2018 IF: 3.521, 31/148 in PHYSICS, APPLIED)
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***International Conference***

1. Fan-Ching Chien, Jen-Long Lo, Xingwang Zhang, Ertugrul Cubukcu, Yu-Tang Luo, Kai-Lin Huang, Xiaofang Tang|, Chien-Sheng Chen, Chii-Chang Chen, and **Kun-Yu Lai\***, “A plasmonic biosensor built with InGaN quantum wells”, *International Workshop on Nitride Semiconductors, Kanazawa, Japan, 2018.*
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3. **K. Y. Lai\***, “Nitride-based Surface Plasmon Resonance Biosensors”, *MRS Spring Meeting, Phoenix, USA, 2017.*
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5. Cheng Han Wu and **K. Y. Lai\***, “P-type GaN Achieved *via* Zn Diffusion from the ZnO Buffer Layer on Si Substrates”, *The 11th International Conference on Nitride Semiconductors, Beijing, China, 2015.*
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8. **K. Y. Lai\*** “Bottom-up nanoheteroepitaxy of GaN on Si”, *The Collaborative Conference on Crystal Growth, Phuket, Thailand, 2014.* **(Invited Speech)**
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