

## YOUNG MIN SONG

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### RESEARCH INTERESTS

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**Flexible Optoelectronics/Photonics** including compound eye cameras, flexible micro-LEDs, transparent electrodes, passive radiative cooling, nanowires/rods for security

- Bio-inspired imaging systems, flexible image sensors
- Multi-functional nanophotonics
- Advanced healthcare optoelectronic systems
- Unconventional micro/nano-structures

### EDUCATION

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- Ph.D. Degree      **Gwangju Institute of Science and Technology(GIST), Korea**  
School of Information and Mechatronics, Sept. 2006~ Feb. 2011  
Advisor: Prof. Yong Tak Lee
- M.S. Degree      **Gwangju Institute of Science and Technology(GIST), Korea**  
Department of Information and Communications, Mar. 2004~ Feb. 2006  
Advisor: Prof. Yong Tak Lee
- B.S. Degree      **Yonsei University, Korea**  
Department of Biomedical Engineering, Mar 1999~ Feb. 2004

### WORK EXPERIENCES

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- Professor** (2021 – present), EECS, GIST, Korea  
**Adjunct Professor** (2020 – present), AI graduate school, GIST, Korea  
**Adjunct Professor** (2021 – present), MSE, Korea Univ., Korea  
**Affiliated Professor** (2020 – present), Anti-Viral Research Center, GIST, Korea  
**Chief Executive Officer** (2019 – present), FOEL Inc., Korea (<https://www.foel.cool>)
- Co-founder** (2018), The VELA Inc., Korea  
**Associate Professor** (2018 – 2021), EECS, GIST, Korea  
**Assistant Professor** (2016 – 2018), EECS, GIST, Korea  
**Assistant Professor** (2013 – 2016), EE, Pusan National University, Korea
- Postdoctoral research associate** (2011 – 2013), MSE, Univ. of Illinois at Urbana Champaign, USA  
Advisor: Prof. John A. Rogers  
**Postdoctoral research associate** (2011 – 2011), Ultrafast Fiber-Optic Networks Research Center, GIST, Korea  
Advisor: Prof. Yong Tak Lee

## HONORS AND AWARDS

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**Member of Y-KAST** (2021)  
**Merit Award**, Ministry of SMEs and Startups (MSS), Korea (2020)  
**Achievement Award**, GIST (2020)  
**OSK Rising Star 30**, Optical Society of Korea (2020)  
**2019 Top 10 Nano Technology in Korea**, MSIT, Korea (2019)  
**Best poster award**, ISGMA 2017 (2017)  
**2013 Top 10 leading Science in Korea**, ‘insect’s eye camera’  
**Top 10 stories of 2013 in *Nature***, digital fly’s eye cameras  
**Golden Prize**, the 17<sup>th</sup> Samsung HumanTech Thesis Award, Samsung Electronics, Korea (2011)  
**Bronze Prize**, the 17<sup>th</sup> Samsung HumanTech Thesis Award, Samsung Electronics, Korea (2011)  
**Minister’s Award for outstanding graduate research** by the Ministry of Education, Science and Technology (MEST), Korea (2011)  
**DASAN Scholarship** from the GIST on DASAN project (2010)  
**National Graduate Science & Technology Scholarship** by Korea Student Aid Foundation (KOSAF) (2009-2010)  
**Highest Honors Student** in Yonsei University (2002, 2003)

## ARCHIVAL JOURNALS

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+Co-first author, \*Co-correspondence

Google Scholar Citations: 7105 (in total), h-index: 33 (Last update - Oct. 2021)

139. S.-H Park, H. Lee, S. Lee, A. J. Minnich, W.-L. Jeong, D.-S Lee, S.-S. So, J.-H. Lee, **Y. M. Song**, Y.-D. Jho, Annealing-based Manipulation of Thermal Phonon Transport from Light Emitting Diodes to Graphene, **J. Appl. Phys.** 130, 244303 (2021)
138. S. -Y. Heo, D. H. Kim, **Y. M. Song\***, G. J. Lee\*, Determining the effectiveness of radiative cooler-integrated solar cells, **Adv. Energy Mater.** 2103258 (2021).
137. H. M. Kim+, M. S. Kim+, S. Chang+, J. Jeong, H. -G. Jeon\*, **Y. M. Song\***, Vari-Focal Light Field Camera for Extended Depth of Field, **Micromachines** 12, 1453 (2021).
136. D. H. Kim+, G. J. Lee+, S. -Y. Heo, S. Son, K. M. Kang, H. Lee, Y. M. Song\*, Ultra-thin and near-unity selective emitter for efficient cooling, **Opt. Express** 29, 20 (2021).
135. S. K. Heo+, J. Ha+, S. J. Son, I. S. Choi, H. Lee, S. Oh, J. Jekal, M. H. Kang, G. J. Lee, H. H. Jung, J. Yea, T. Lee, Y. Lee, J.-W. Choi, S. Xu, J. H. Choi, J.-W. Jeong, **Y. M. Song**, J.-C. Rah\*, H. Keum\*, K.-I. Jang\*, Instant, multi-scale dry transfer printing by atomic diffusion control at heterogeneous interfaces, **Sci. Adv.** 7, eabh0040 (2021).
134. Z. F. Mira+, S.-Y. Heo+, D. H. Kim, G. J. Lee, **Y. M. Song\***, Multilayer Selective Passive Daytime Radiative Cooler Optimization Utilizing Memetic Algorithm, **J. Quant. Spectrosc. Radiat. Transf.** 272, 107774 (2021).
133. M. S. Kim+, M. S. Kim+, G. J. Lee, S.-H. Sunwoo, S. Chang, **Y. M. Song\***, and D.-H. Kim\*, Bio-inspired artificial vision and neuromorphic image processing devices, **Adv. Mater. Technol.**, 2100144 (2021).
132. J. H. Lee+, Y. J. Kim+, Y. J. Yoo, S. Chang, G. J. Lee, J. H. Ko, K. M. Kang, D. Chanda, and **Y. M. Song\***, Colored, Covert Infrared Display through Hybrid Planar-Plasmonic Cavities, **Adv. Opt. Mater.**, 2100429 (2021).  
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131. D. H. Kim+, G. J. Lee+, S. -Y. Heo, I. -.S Kang\* and **Y. M. Song\***, Thermostat property of Janus emitter in enclosures, **Sol. Energy Mater Sol. Cells.**, 230, 111173 (2021).

130. Y. Lee+, T. Kang+, H. R.Cho+, G. J. Lee+, O. K. Park, S. Kim, B. Lee, H. M.Kim, G. D. Cha, H. Kim, **Y. M. Song\***, S. H. Choi\*, T. Hyeon\*, and D.-H Kim\*, Localized delivery of theranostic nanoparticles and high-energy photons using microneedles-on-bioelectronics, **Adv. Mater.**, 2100425 (2021).
129. K.-J. Ko+, S.-R. Shin+, H. B. Lee, E. Jeong, Y. J. Yoo, H. M. Kim, **Y. M. Song\***, J. Yun\* and J.-W. Kang\*, Fabrication of an oxide/metal/oxide structured electrode integrated with anti-reflective film to enhance performance in flexible organic light-emitting diodes, **Mater. Today Energy.**, 20, 100704 (2021).
128. M. H. Kang+, G. J. Lee+, J. H. Lee, M. S. Kim, Z. Yan, J.-W. Jeong, and **Y. M. Song**, Outdoor-useable, Wireless/Battery-free Patch-type Tissue Oximeter with Radiative Cooling, **Adv. Sci.**, 2004885 (2021).  
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127. Y. J. Yoo+, S.-Y. Heo+, Y. J. Kim+, J. H. Ko, Z. F. Mira and Y. M. Song\*, Functional photonic structures for external interaction with flexible/wearable devices, *Nano Research*, 21, 3388 (2021).
126. M. H. Kang+, G. J. Lee+, J. H. Yun and **Y. M. Song\***, NFC-Based Wearable Optoelectronics Working with Smartphone Application for Untact Healthcare, **Sensors**, 21, 878 (2021).
125. J. H. Lee, S. Chang, M. S. Kim, Y. J. Kim, H. M. Kim, and **Y. M. Song**, High-Identical Numerical Aperture, Multifocal Microlens Array through Single-Step Multi-Sized Hole Patterning Photolithography, **Micromachines** 11, 1068 (2020).
124. C. Choi+, J. Leem+, M. S. Kim+, A. Taqieddin, C. Cho, K. W. Cho, G. J. Lee, H. Seung, H. J. Bae, **Y. M. Song**, T. Hyeon, N. R. Aluru, S. Nam\*, and D.-H. Kim\*, Curved neuromorphic image sensor array using a MoS<sub>2</sub>-organic heterostructure inspired by the human visual recognition system, **Nat. Commun.** 11, 5934 (2020).
123. G. J. Lee+, D. H. Kim+, S.-Y. Heo and **Y. M. Song**, Spectrally and Spatially Selective Emitters Using Polymer Hybrid Spoof Plasmonics, **ACS Appl. Mater. Interfaces** 12, 53206 (2020).
122. K. J. Lee+, J.-W. Min+, B. Turedi, A. Y. Alsalloum, J.-H. Min, Y. J. Kim, Y. J. Yoo, S. Oh, N. Cho, R. C. Subedi, S. Mitra, S. E. Yoon, J. H. Kim, K. Park, T.-H. Chung, S. H. Jung, J.-H. Baek, **Y. M. Song**, I. S. Roqan, T. K. Ng, B. S. Ooi\*, and O. M. Bakr\*, **ACS Energy Lett.**, 5, 3295–3303 (2020).
121. S.-Y. Heo+, G. J. Lee+, D. H. Kim, Y. J. Kim, S. Ishii, M. S. Kim, T. J. Seok, B. J. Lee, H. Lee, **Y. M. Song**, A Janus emitter for passive heat release from enclosures, **Sci. Adv.** 6, eabb1906 (2020).
120. S. Chang, G. J. Lee, Y. M. Song, Recent advanced in vertically aligned nanowires for photonics applications, *Micromachines* 11, 726 (2020).
119. Y. J. Yoo+, W.-G. Kim+, J. H. Ko+, Y. J. Kim, Y. Lee, S. G. Stanciu, J.-M. Lee, S. Kim, J.-W. Oh\*, **Y. M. Song\***, Large-area virus coated ultra-thin colorimetric sensors with a highly lossy resonant promoter for enhanced chromaticity, **Adv. Sci.**, 2000978 (2020).  
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118. Y. J. Yoo+, J. H. Ko+, W.-G. Kim+, Y. J. Kim, D.-J. Kong, S. Kim, J.-W. Oh\*, **Y. M. Song\***, Dual mode colorimetric sensor based on ultra-thin resonating facilitator capable of nanometer-thick virus detection for environment monitoring, **ACS Appl. Nano. Mater.** 3, 6636 (2020).
117. M. S. Kim+, G. J. Lee+, C. Choi+, M. S. Kim+, M. Lee, S. Liu, K. W. Cho, H. M. Kim, H. Cho, M. K. Choi, N. Lu, **Y. M. Song\***, D. H. Kim\*, An aquatic vision inspired camera based on a monocentric lens and a silicon nanorod photodiode array, **Nat. Electron.** 3, 546 (2020).
116. G. J. Lee+, K. Park+, M. S. Kim, S. Chang, T. J. Seok, H.-G. Park, G. Ju, K. Kim, **Y. M. Song**,

- Selective and sensitive photon sieve based on III-V semiconductor nanowire forest fabricated by lithography-free process, **Adv. Opt. Mater.**, 2000198 (2020).  
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115. S. Kim, H. Song, H. Ahn, S. W. Jun, S. Kim, **Y. M. Song**, S. Y. Yang, C.-S. Kim, K. Kim, 3D super-resolved imaging in live cells using sub-diffractive plasmonic localization of hybrid nanopillar arrays, **Nanophotonics**, Ahead of Publication (2020).
114. H. B. Lee, N. Kumar, M. M. Ovhal, Y. J. Kim, **Y. M. Song**, J. W. Kang, Dopant-free, amorphous-crystalline heterophase SnO<sub>2</sub> electron transport bilayer enables >20% efficiency in triple-cation perovskite solar cells, **Adv. Funct. Mater.** 2001559 (2020).
113. S. H. Chew, A. Gliserin, S. Choi, X. T. Geng, S. Kim, W. Hwang, K. Baek, N. D. Anh, Y.-J. Kim, **Y. M. Song**, D. E. Kim, S.-Y. Jeong, S. Kim, Large-area grain-boundary-free copper films for plasmonics, **Appl. Sur. Sci.** 521 (2020).
112. Y. J. Kim+, Y. J. Yoo+, M. H. Kang, J. H. Ko, M. R. Park, D. E. Yoo, D. W. Lee, K. Kim, I. -S. Kang\*, and **Y. M. Song\***, Mechanotunable optical filters based on stretchable silicon nanowire arrays, **Nanophotonics**, Ahead of Publication (2020).
111. H. M. Kim+, M. S. Kim+, G. J. Lee, H. J. Jang, and **Y. M. Song**, Miniaturized 3D Depth Sensing-Based Smartphone Light Field Camera, **Sensors** 20, 2129 (2020).
110. G. J. Lee, H. M. Kim, and **Y. M. Song**, Design and Fabrication of Microscale, Thin-Film Silicon Solid Immersion Lenses for Mid-Infrared Application, **Micromachines** 11, 250 (2020).
109. J. W. Leem, M. S. Kim, S. H. Choi, S. R. Kim, S. W. Kim, **Y. M. Song**, R. J. Young, and Y. L. Kim, Edible unclonable functions, **Nat. Commun.** 11, 328 (2020).
108. S. G. Stanciu\*, D. E. Tranca, L. Pastorino\*, S. Boi, **Y. M. Song\***, Y. J. Yoo, S. Ishii\*, R. Hristu, F. Yang, G. Bussetti, and G. A. Stanciu, Characterization of Nanomaterials by Locally Determining their Complex Permittivity with Scattering-Type Scanning Near Field Optical Microscopy, **ACS Appl. Nano Mater.** 3, 2 (2020).
107. H. Song, W. -K. Lee, J. Lee, S. -H. Lee, **Y. M. Song**, K. Kim, and J. -H. Choi, Comparison of Fabrication Methods Based on Nanoimprinting Lithography for Plasmonic Color Filter Fabrication, **Plasmonics** 1,8 (2020).
106. J. H. Ko+, Y. J. Yoo+, Y. J. Kim, S.-S. Lee, and **Y. M. Song**, Flexible, large-area covert polarization display based on ultrathin lossy nanocolumns on a metal film, **Adv. Funct. Mater.** 1908592 (2020).  
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105. X. Sheng, L. Gao, **Y. M. Song**, H. Tao, and S. -H. Yun, Bio-inspired and bio-integrated photonic materials and devices: feature issue introduction, **Opt. Mater. Express** 10(1), 155-156 (2020).
104. D. Seo, C.-S. Park and **Y. M. Song**, Design of Microdisk-Shaped Ge on Si Photodetector with Recess Structure for Refractive-Index Sensing, **Sensors** 19, 5253 (2019).
103. Y. J. Yoo, Y. J. Kim, S. -Y. Kim, J. H. Lee, K. Kim, J. H. Ko, J. W. Lee, B. H. Lee, and **Y. M. Song**, Mechanically robust antireflective moth-eye structures with a tailored coating of dielectric materials, **Opt. Mater. Express** 9, 372482 (2019).
102. K. Park+, Y. J. Kim+, T. Yoon, S. David and **Y. M. Song**, A methodological review on material growth and synthesis of solar-driven water splitting photoelectrochemical cells, **RSC Adv**, 9, 30112 (2019).
101. Y. J. Kim, Y. J. Yoo, D. E. Yoo, D. W. Lee, M. Kim, H. J. Jang, Y. -C. Kim, J. -H. Jang, I. -S. Kang\*, and **Y. M. Song\***, Enhanced light harvesting in photovoltaic devices using an edge-located

- one-dimensional grating polydimethylsiloxane membrane, **ACS Appl. Mater. Interfaces** 11, 36020 (2019).
100. J. Jang, H. Kim, **Y. M. Song**, and J.-U. Park, Implantation of electronic visual prosthesis for blindness restoration, **Opt. Mater. Express** 9, 3878 (2019).
99. G. J. Lee, Y. J. Kim, H. S. Song, D. E. Yoo, D.-W. Lee, I.-S. Kang\*, and **Y. M. Song\***, The Facile Implementation of Soft/Tunable Multiband Optical Filters by Stacking Vertical Silicon Nanowire Arrays for Smart Sensing, **Adv. Intell. Syst** 1900072 (2019).
98. D. H. Kim+, Y. J. Yoo+, J. H. Ko, Y. J. Kim, and **Y. M. Song**, Standard red green blue (sRGB) color representation with a tailored dual-resonance mode in metal/dielectric stacks, **Opt. Mater. Express** 9, 003342 (2019).
97. H. J. Jang, Y. J. Kim, Y. J. Yoo, G. J. Lee, M.S. Kim, K. S. Chang\*, and **Y. M. Song\***, Double-Sided Anti-Reflection Nanostructures on Optical Convex Lenses for Imaging Applications, **Coatings** 9, 404 (2019).
96. V. Siva, K. W. Park, M. S. Kim, Y. J. Kim, G. J. Lee, M. J. Kim and **Y. M. Song**, Mapping the Structural, Electrical, and Optical Properties of Hydrothermally Grown Phosphorus-doped ZnO Nanorods for Optoelectronic Device Applications, **Nanoscale Res. Lett.** 14, 110 (2019).
95. Y. J. Kim, Y. J. Yoo, G. J. Lee, D. E. Yoo, D. W. Lee, V. Siva, H. S. Song, I. S. Kang\*, and **Y. M. Song\***, Enlarged Color Gamut Representation Enabled by Transferable Silicon Nanowire Arrays on Metal–Insulator–Metal Films, **ACS Appl. Mater. Interfaces** 11, 11849 (2019).
94. H. S. Song+, G. J. Lee+, D. E. Yoo, Y. J. Kim, Y. J. Yoo, D. W. Lee, V. Siva, I. S. Kang\* and **Y. M. Song\***, Reflective color filter with precise control of the color coordinate achieved by stacking silicon nanowire arrays onto ultrathin optical coatings, **Sci. Rep.** 9, 3350 (2019).
93. H. M. Kim+, M. S. Kim+, G. J. Lee, Y. J. Yoo, **Y. M. Song**, Large area fabrication of engineered microlens array with low sag height for light-field imaging, **Opt. Express** 27, 4 (2019)
92. G. J. Lee, Y. J. Kim, H. M. Kim, Y. J. Yoo, **Y. M. Song**, Colored, Daytime Radiative Coolers with Thin-Film Resonators for Aesthetic Purposes, **Adv. Opt. Mater.** 1800707 (2018)  
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91. Y. J. Kim, G. J. Lee, S. K. Kim, J. W. Min, S. Y. Jeong, Y. J. Yoo, S. H. Lee, **Y. M. Song**, Efficient Light Absorption by GaN Truncated Nanocones for High Performance Water Splitting Applications, **ACS Appl. Mater. Interfaces** 10, 28672 (2018)
90. K. J. Ko, H. B. Lee, H. M. Kim, G. J. Lee, S. R. Shin, N. Kumar, **Y. M. Song**, J. W. Kang, High-performance, color-tunable fiber shaped organic light-emitting diodes, **Nanoscale**, Advance Article (2018)
89. H. H. Jung, J. W. Song, S. Nie, H. N. Jung, M. S. Kim, J. W. Jeong, **Y. M. Song\***, J. Z. Song\*, and K. I. Jang\*, Thin Metallic Heat Sink for Interfacial Thermal management in Biointegrated Optoelectronic Devices, **Adv. Mater. Technol.** 1800159 (2018)  
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88. H. M. Kim, G. J. Lee, M. S. Kim, and **Y. M. Song**, Fabrication of Flexible Image Sensor Based on Lateral NIPIN Phototransistors, **J. Vis. Exp.** E57502 (2018)
87. B. H. Kim, J. Lee, S. M. Won, Z. Xie, J.-K. Chang, Y. Yu, Y. K. Cho, H. Jang, J. Y. Jeong, Y. Lee, A. Ryu, D. H. Kim, K. H. Lee, J. Y. Lee, F. Liu, X. Wang, Q. Huo, S. Min, D. Wu, B. Ji, A. Banks, J. Kim, N. Oh, H. M. Jin, S. Han, D. Kang, C. H. Lee, **Y. M. Song**, Y. Zhang, Y. Huang, K.-I. Jang, and J. A. Rogers, Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process, **ACS Nano**. Article ASAP (2018)

86. S. Y. Jeong, H. M. Shin, Y. R. Jo, Y. J. Kim, S.K. Kim, W. J. Lee, G. J. Lee, J. S. Song, B. J. Moon, S. H. Seo, H. J. An, S. H. Lee, **Y. M. Song**, B. J. Kim, M. H. Yoon, and S. H. Lee, Plasmonic Silver Nanoparticle-Impregnated Nanocomposite BiVO<sub>4</sub> Photoanode for Plasmon-Enhanced Photocatalytic Water Splitting, **J. Phys. Chem. C.** 122, 7088 (2018).
85. G. J. Lee+, C. S. Choi+, D. H. Kim\*, and **Y. M. Song\***, Bioinspired Artificial Eyes: Optic Components, Digital Cameras, and Visual Prostheses, **Adv. Funct. Mater.** 2018, 1705202 (2018).  
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84. C. S. Choi, M. K. Choi, S. Y. Liu, M. S. Kim, O. K. Park, C. K. Im, J. M. Kim, X. L. Qin, G. J. Lee, K. W. Cho, M. B. Kim, E. H. Joh, J. H. Lee, D. H. Son, S. H. Kwon, N. L. Jeon, **Y. M. Song**, N. S. Lu, and D. H. Kim, Human eye-inspired soft optoelectronic device using high-density MoS<sub>2</sub>-graphene curved image sensor array, **Nat. Commun.** 8, 1664 (2017).
83. H. S. Song, Y. J. Yoo, G. J. Lee, K. S. Chang, and **Y. M. Song**, Optical Design of Porous ZnO/TiO<sub>2</sub> Films for Highly Transparent Glasses with Broadband Ultraviolet Protection, **J. Nanomater.** 2738015, 8 (2017).
82. Y. J. Yoo, G. J. Lee, K. I. Jang, and **Y. M. Song**, Fabrication of Ultra-thin Color Films with Highly Absorbing Media Using Oblique Angle Deposition, **J. Vis. Exp.** 126, e56383 (2017).
81. M. S. Kim, G. J. Lee, H. M. Kim, and **Y. M. Song**, Parametric Optimization of Lateral NIPIN Phototransistors for Flexible Image Sensors, **Sensors** 17, 1774 (2017).
80. K. I. Jang, K. Li, H. U. Chung, S. Xu, H. N. Jung, Y. Yang, J. W. Kwak, H. H. Jung, J. Song, C. Yang, A. Wang, Z. Liu, J. Y. Lee, B. H. Kim, J. H. Kim, J. Y. Lee, Y. J. Yu, B. J. Kim, H. K. Jang, K. J. Yu, J. H. Kim, J. W. Lee, J. W. Jeong, **Y. M. Song**, Y. Huang, Y. Zhang & J. A. Rogers, Self-assembled three dimensional network designs for soft electronics, **Nat. Commun.** 8, 15894 (2017).
79. G. J. Lee, Y. J. Yoo, and **Y. M. Song**, Recent advances in imaging systems and photonic nanostructures inspired by insect eye geometry, **Appl. Spectrosc. Rev.** 1 (2017).
78. G. J. Lee, W. I. Nam, and **Y. M. Song**, Robustness of an artificially tailored fisheye imaging system with a curvilinear image surface, **Opt. Laser. Technol.** 96, 50 (2017).
77. B. H. Kim, J. H. Kim, L. Persano, S. W. Hwang, S. M. Lee, J. Y. Lee, Y. J. Yu, Y. S. Kang, S. M. Won, J.H. Koo, Y. K. Cho, G. Hur, A. Banks, J. K. Song, P. Won, **Y. M. Song**, K. I. Jang, D. S. Kang, C. H. Lee, D. Pisignano, and J. A. Rogers, Dry Transient Electronic Systems by Use of Materials that Sublime, **Adv. Funct. Mater.** 27, 1606008 (2017).  
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76. J.-K. Song, D. H. Son, J. M. Kim, Y. J. Yoo, G. J. Lee, L. Wang, M. K. Choi, J. W. Yang, M. C. Lee, K. S. Do, J. H. Koo, N. Lu, J. H. Kim, T. H. Hyeon, **Y. M. Song\***, and D.-H. Kim\*, Wearable Force Touch Sensor Array Using a Flexible and Transparent Electrode, **Adv. Funct. Mater.**, 1605286 (2017).
75. Y. J. Yoo, J. H. Lim, G. J. Lee, K.-I. Jang\*, and **Y. M. Song\***, Ultra-thin films with highly absorbent porous media fine-tunable for coloration and enhanced color purity, **Nanoscale**, (2017).  
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74. K. W. Choi, Y. W. Yoon, J. H. Jung, C. W. Ahn, G. J. Lee, **Y. M. Song**, M. J. Ko, H. S. Lee, B. S. Kim, and I.-S. Kang, Super-Antireflective Structure Films with Precisely Controlled Refractive Index Profile, **Adv. Opt. Mater.**, 5(3) (2016).  
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73. W. I. Nam, E. K. Kang, H. G. Park, D.-H. Jun, **Y. M. Song**, Luminescent coverglass for improved absorption efficiency in III–V photovoltaic modules, **Electron. Lett.**, 52(22), 1891-1892 (2016).

72. K.-I. Jang, H. N. Jung, J. W. Lee, S. Xu, Y. H. Liu, Y. Ma, J.-W. Jeong, **Y. M. Song**, J. Kim, B. H. Kim, A. Banks, J. W. Kwak, Y. Yang, D. Shi, Z. Wei, X. Feng, U. Paik, Y. Huang, R. Ghaffari, and J. A. Rogers, Ferromagnetic, Folded Electrode Composite as a Soft Interface to the Skin for Long-Term Electrophysiological Recording, **Adv. Funct. Mater.**, 26(34), 7281-7290 (2016).  
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71. H. J. Choi, E. K. Kang, G. W. Ju, **Y. M. Song**, and Y. T. Lee, Shape-controllable, bottom-up fabrication of microlens using oblique angle deposition, **Opt. Lett.**, 41(14), 3328 (2016).
70. W. I. Nam, Y. J. Yoo and **Y. M. Song**, Geometrical shape design of nanophotonic surfaces for thin film solar cells, **Opt. Express**, 24(14), A1033 (2016).
69. E. K. Kang, Y. W. Lee, S. Ravindran, J. K. Lee, H. J. Choi, G. W. Ju, J. W. Min, **Y. M. Song**, I. B. Sohn, and Y. T. Lee, 4 channel  $\times$  10 Gb/s bidirectional optical subassembly using silicon optical bench with precise passive optical alignment, **Opt. Express**, 24(9), 10777 (2016).
68. G. J. Lee and **Y. M. Song**, Theoretical analysis and experiment of subwavelength structure-integrated red AlGaInP light-emitting diodes for uniform field distribution and enhanced light extraction efficiency, **AIP Adv.** 6, 035104 (2016).
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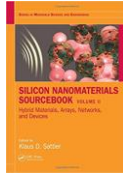
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