


<b>Making Compact Devices Satisfying a Function</b>		
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<b>Affiliated Societies</b>	The Japan Society of Applied Physics	
<b>Keywords</b>	Semiconductors, optical properties of condensed matter and atomic physics-related (13020), Mechanics and mechatronics-related (20010), Electric and electronic materials-related (21050)	

<b>Research Topics</b>
<ul style="list-style-type: none"> <li>• Development of MEMS sensor</li> <li>• Development of applied products using small actuators</li> <li>• Research and development of micro optics</li> </ul>
<b>Research Seeds</b>
<p>Research Subject Study to produce a compact device that satisfies a function.</p> <p>Research Seeds After miniaturizing products that satisfy a function, I undertook R&amp;D leading to various applications such as miniaturization of an image sensor and high sensitivity image sensors, miniaturization of a medical pump, micro optics, and miniaturization of a cooling system. My strong points are broad knowledge of development of semiconductor sensors, actuator application, mechatronics, system design, and evaluation of heat transfer.</p> <p>Patents [1] Jun Suzuki, etc. Droplet measurement system, droplet measurement method, and droplet measurement program. WO2017082381 A1, 2017-5-18. [2] Jun Suzuki, etc. Tube pump. Japan patent JP2016-118148A, 2016-6-30. [3] Jun Suzuki, etc. Cell culture method and cell culture device. WO2016093321 A1, 2016-6-16. [4] Sadahisa Warashina, Jun Suzuki. Infrared image sensor and signal reading method. Japan patent JP5749534B, 2015-7-15. [5] Fumikazu Ojima, Jun Suzuki, Ryusuke Kitaura. Thermal infrared detector. Japan patent JP5456810B, 2014-4-2. [6] Jun Suzuki, etc. Photodetector. Japan patent JP5255873B, 2013-8-7. [7] Jun Suzuki, etc. THz wave detector and manufacturing method. Japan patent JP2011-237312A, 2011-11-24.</p> <p>References [1] Akitomi, S., Hirose, K., Fukue, T. and <u>Suzuki, J.</u>, “Basic Study on Discharge Flow Characteristics of Roller Tube Pump”, International Journal of Engineering Research and Development, Vol. 12, No. 12 (2016), pp. 47-52. [2] <u>Suzuki, J.</u>, Suzuki, N., Hirose, K., and Fukue, T., “Basic Study on Effects of Dimensions on Heat Transfer Enhancement around Heating Components by Pulsating Airflow”, International Journal of Engineering Research and Development, Vol. 14, No. 3 (2018), pp. 22-28.</p>
<b>Related Technology</b>
<ul style="list-style-type: none"> <li>• Mechanoptics</li> <li>• Micro Electro Mechanical Systems</li> </ul>