

## Advanced Topics on Spectroscopy 2020 report 7

From “[Applied Physics Letters](#)”, which is a letter journal and you can download from HP of Nagaoka University of Technology Library, choose a letter (1) which published after 2019 (2) which reports on photoluminescence spectrum (spectra) from semiconductor and (3) in which band gap energy of the semiconductor was estimated by experimentally and the estimated band gap energy was shown.

- (1) Show doi of your selected letter. (doi is such as “<https://aip.scitation.org/doi/10.1063/XXXXX>”)
- (2) Show the semiconductor which PL was observed, estimated band gap energy of the semiconductor and observation region in wavelength.
- (3) Show the aim of the observation of the PL. (write with 30~ 60 words)
- (4) Show what was found from the PL. (write with 30~ 60 words)
- (5) Show wavelength of the excitation source, photo-detector, and temperature of the sample. (So you must choose a paper in which those are shown.)

Caution: You must choose a paper about PL spectrum from semiconductor. If you choose non-semiconductor (for example organic chemicals) and non-PL (for example EL, CL, Raman spectrum) and not PL “spectrum (or spectra)”, score of this report will be 0.

If you chose other Journal or if you chose “Applied Physics Letters” but you did not show title of the paper, authors, vol, and manuscript number, that is I cannot recognize the paper, your score will be 0. If you did not show doi, title, authors, vol, or page, your score will be reduced.

(\* Caution: Not chose “Journal of Applied Physics”)

Deadline 2020/7/17 15:00(JST)

Submitting place: mail box at room 406 of the electrical engineering building.

Write your e-mail address which can receive from [tanaka@vos.nagaokaut.ac.jp](mailto:tanaka@vos.nagaokaut.ac.jp).

If your score is less than 60, I will inform you. If your written address rejected my mail, I will not inform you.

If you resubmit report, your final score of this report is 80% of resubmit report, however, if the final score is higher than 60, your final score of this report is 60. You can resubmit only one time.