

List of Dissertation Abstract (Department of Information Media and Environment Sciences)

Name	Supervisor	Title	Abstract
Kagimoto Akari	Okajima Katsunori	A study on contributions of melanopsin and rod photoreceptors to color perception in foveal vision	In the present study, we quantitatively investigated the contribution of melanopsin and rod photoreceptors to color perception in the foveal vision, in addition to the three types of cones based on the conventional color vision theory, by considering the individual ophthalmological characteristics. As a result, melanopsin and rod photoreceptors contribute to color perception in the foveal 2-degree vision. We also showed that perfect color matching can be achieved between heterogeneous display devices by matching the amount of five photoreceptor cells. Finally, we formulated a color vision model for each participant that takes into account the five types of photoreceptor cells.