

## List of Dissertation Abstract

Name	Supervisor	Title	Abstract
Yoshikazu KONNO	Kenji ARAMAKI	Study on Liquid Ordered (Lo) phase like structures in Lysophospholipid and surfactant system	In this study, the formation of liquid ordered (Lo) phase-like structure was investigated by mixing cholesterol (Chol) with lysophospholipid, stearyl trimethyl ammonium chloride, hepta (oxyethylene) octadecyl ether. It was revealed that Lo phase-like structure was formed in any surfactant system. In addition, it was suggested that the concentration of Chol in which only the Lo phase-like structure is formed depends on the ionicity and structure of the hydrophilic group of the surfactant.
Satoshi ARAI	Tomoharu NAGAO	Toward Explainable Deep Network Models	Deep learning has performed remarkable results in the image recognition field, and huge number of applications are being developed for industry. On the other hand, lack of explainability is becoming a big issue for practical applications. In our research, we propose new deep network models for the image classification task to improve the explainability at the two viewpoints , those are (1) easy to explain the evidence of classification, and (2) easy to explain the principle of operation. We confirmed the effectiveness of our methods via experiments using well known datasets for the benchmarks.