

Forum for Education Studies

1. Section Collection:

2. Deadline for Manuscript Submission:

3. Section Editors' Information:

Name:	Dr. Sri Vidawati
Email:	sri.vidawati@istn.ac.id
City,Country	Jakarta, Indonesia
Affiliation:	<i>Faculty of Post Graduate Engineering, National Institute of Science and Technology, Jakarta, Indonesia</i>
Homepage:	https://loop.frontiersin.org/people/166393/overview
Research Interest:	Langmuir Blodgett film (lipids), Nanoparticles, Nanomedicine, thin films and nanotechnology
Profile Photo(for web-page)	https://www.researchgate.net/profile/Sri-Vidawati

4. Summary: **Special and Inclusive Education (300-500 words)**

My doctorate research study (sandwich program from Material Science-Physics Department University Indonesia and Institute Physiological Chemistry/Biochemistry-Medicine Faculty-University Martin Luther-Halle-Germany about monolayer Langmuir-Blodgett Films of archaeal tetraether lipids on silicon wafers at the water-air interface. For the experiments, lipids from the archae *Sulfolobus acidocaldarius* were used.

I have several Postdoctoral/experiences research study on Synthesis, characterizations and study of polymeric biodegradable nanoparticles co-loaded with SPIONs (super paramagnetic nanoparticles) and protein/antibodies for biomedical application (drug delivery, cancer theranostic); etc.

I have also researched the deposition and characterization of thin film GaN using Ion Beam Assisted Molecular Beam Epitaxy (IBA-MBE), this thin film fabrication uses very high vacuum up to 10^{-9} Pa. These thin films were characterized and analyzed using RHEED, SEM, XRD, XRR and resistivity/magnetization of thin film using Physical Properties Measurement System (PPMS- Quantum Design PPMS EverCool-II™).

5. Keywords (8-10 keywords)

Membrane/monolayer lipid, nanoparticles, super paramagnetic nanoparticles, nanomedicine, thin film and nanotechnology.

Reference(Only refer to the format)

Summary:

Dear Colleagues,

In the digital age, data is the main source of information. If this information is handled correctly, it helps authorities make efficient inferences and apply them successfully. “Data Science” is recently recognized as an interdisciplinary field covering Mathematics, Computer Science, Statistics, Engineering and practically all technological disciplines by using data mining, data-bases, knowledge management, virtualization, high-performance and cloud computing to discover useful information from structured or unstructured data. “Data science” uses scientific algorithms, methods, systems, and processes to predict important information from large, structured or unstructured data, and focuses on applying knowledge learned from that data. Mathematics is very important in data science as mathematical concepts aid in identifying patterns and assists in creating algorithms. “Computational Mathematics” is the mathematics behind computations, especially computer algebra and algorithms. As it continues to advance the computational capabilities of modern computers, it also investigates the limit of what math-based computers can achieve and prove. In terms of data science, computational mathematics contributes to mathematical understanding of structured or unstructured data.

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The main objective of this section is to play a leading role in establishing “Data Science” as an important discipline within "Computational Mathematics". However, considering its interdisciplinary structure and potential impact to scientific and technological development in almost all fields, the goal of the section is to publish research articles/reviews supporting the theoretical and algorithmic advancement of “Data Science” based on computational analysis. “Mathematics of Computation and Data Science” provides an opportunity for the interaction among mathematicians, including computer scientists, statisticians and other scientists interested in the computational aspects of data science in branches such as natural science, formal science and life science.

It is important to collect the experiences of "Mathematics of Computation and Data Science". Seminal research articles and reviews in this area of study are welcome.

We look forward to receiving your contributions.

Dr. Hüseyin Kamacı
Section Editor

6. Keywords: (8-10 keywords)

Cloud Computing; Computational Mathematics; Data Analysis; Decision Science; Image Processing; Knowledge Management; Machine Learning; Linear Algebra; Numerical Analysis; Computational Complexity; Data Visualization.