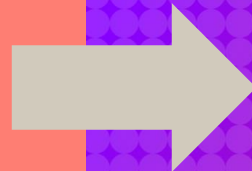


REPORT DRAFT | GIT REPOSITORY | APP



University of Surrey
Artificial Intelligence MSc Project 2023 Feb
Project Supervisor 1st : Dr Erick G. Sperandio Nascimento
Project Supervision 2nd : Dr Oliver Fischer
Project Owner : Harjeet Singh

AI techniques to simulate the Proton Exchange Membrane (PEM) water electrolyser behaviour for hydrogen production Machine Learning Model Prediction

electrolysis type: PEM
Anode type: carbon_plate
Cathode type: carbon_plate
Anode GDE: porous_carbon_catalyst
Cathode GDE: porous_carbon_catalyst
electrode area (cm sq): 9.0 cm sq
cathode flow area (cm sq): 0.05
anode flow area (cm sq): 0.05
membrane type: Nafion115
cathode catalyst: MoS2
anode catalyst: MoS2
catholyte: choline_0.5M
anolyte: H2SO4_0.5M
Cell design type: single
Cell design (number): 1
Cell voltage (V): 2.0
Cell current des (A/cm sq): 0.0000433005
power (W): 0.010003742
power density (W/cm sq): 0.010003742
water flow rate (ml/min): 0
Temperature cell (K): 298.15
Pressuer (atm): 1
Electrode shape: rectangular
Flow type A (number): 1
Flow type C (number): 1

Predict

Prediction Result:
[10.15875244] (mL/min)
Hydrogen Production Rate

AI Project
Web App



JavaScript

