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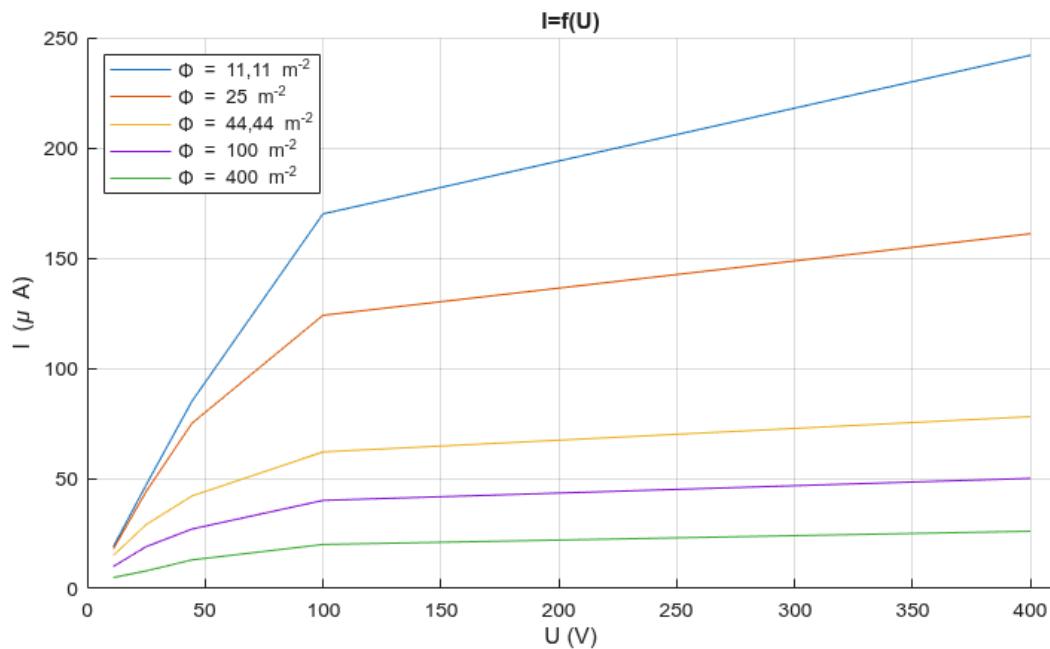
# Grafiks I=f(U)

```
clc, clear;
Phi = [400 100 44.444 25 11.111];

phi = linspace(11, 400);

i_11 = [242 170 85 47 19];
i_25 = [161 124 75 44 18];
i_44 = [78 62 42 29 15];
i_100 = [50 40 27 19 10];
i_400 = [26 20 13 8 5];

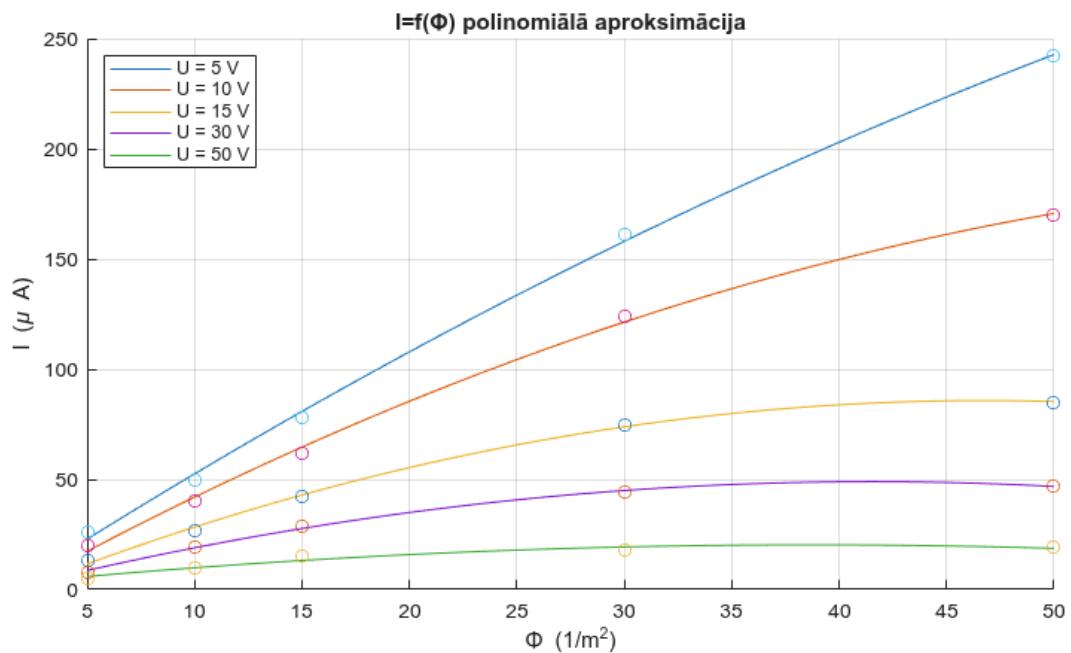
figure;
hold on;
plot(Phi, i_11, '- ', 'DisplayName', 'Φ = 11,11 m^-2');
plot(Phi, i_25, '- ', 'DisplayName', 'Φ = 25 m^-2');
plot(Phi, i_44, '- ', 'DisplayName', 'Φ = 44,44 m^-2');
plot(Phi, i_100, '- ', 'DisplayName', 'Φ = 100 m^-2');
plot(Phi, i_400, '- ', 'DisplayName', 'Φ = 400 m^-2');
hold off;
xlabel('U (V)');
ylabel('I (\mu A)');
title('I=f(U)');
legend('Location', 'northwest')
grid on;
xlim([0 410]);
ylim([0 250]);
```



---

## Grafiks $I=f(\Phi)$

```
U = [5 10 15 30 50];  
  
u = linspace(5,50);  
  
I_5 = [26 50 78 161 242];  
I_10 = [20 40 62 124 170];  
I_15 = [13 27 42 75 85];  
I_30 = [8 19 29 44 47];  
I_50 = [5 10 15 18 19];  
  
p_5 = polyfit(U, I_5, 2);  
p_10 = polyfit(U, I_10, 2);  
p_15 = polyfit(U, I_15, 2);  
p_30 = polyfit(U, I_30, 2);  
p_50 = polyfit(U, I_50, 2);  
  
I_fit_5 = polyval(p_5, u);  
I_fit_10 = polyval(p_10, u);  
I_fit_15 = polyval(p_15, u);  
I_fit_30 = polyval(p_30, u);  
I_fit_50 = polyval(p_50, u);  
  
figure;  
hold on;  
plot(u, I_fit_5, '--', 'DisplayName', 'U = 5 V');  
plot(u, I_fit_10, '--', 'DisplayName', 'U = 10 V');  
plot(u, I_fit_15, '--', 'DisplayName', 'U = 15 V');  
plot(u, I_fit_30, '--', 'DisplayName', 'U = 30 V');  
plot(u, I_fit_50, '--', 'DisplayName', 'U = 50 V');  
plot(U, I_5, 'o', 'HandleVisibility', 'off');  
plot(U, I_10, 'o', 'HandleVisibility', 'off');  
plot(U, I_15, 'o', 'HandleVisibility', 'off');  
plot(U, I_30, 'o', 'HandleVisibility', 'off');  
plot(U, I_50, 'o', 'HandleVisibility', 'off');  
hold off;  
xlabel('Φ (1/m^2)');  
ylabel('I (μ A)');  
title('I=f(Φ) polinomi i aproksimacija');  
legend('Location','northwest')  
grid on;  
xlim([5 50]);  
ylim([0 250]);
```



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