```matlab
clc; clear; close;

% Control variables
Lx = 8;            % Overall length in the x-direction
Ly = 8;            % Overall width in the y-direction
Amplitude = 1;    % Amplitude of the Gaussian peaks
Period = 1;       % Period of the lattice (distance between peaks)

% Generate the coordinate plane
dL = 0.05;
x = -Lx/2:dL:Lx/2;
y = -Ly/2:dL:Ly/2;
[X, Y] = meshgrid(x, y);

% Define the lattice vectors (adjusted by Period)
v1 = Period * [-0.5, -sqrt(3)/2]; % triangular lattice vector
v2 = Period * [1, 0];             % another triangular lattice vector
[X, Y] = tran_lattice(X, Y, v1, v2);

% Generate the lattice plane
datom = Period;
xatom = -Lx/2:datom:Lx/2;
yatom = -Ly/2:datom:Ly/2;
[Xatom, Yatom] = meshgrid(xatom, yatom);
[Xatom, Yatom] = tran_lattice(Xatom, Yatom, v1, v2);

% Calculate the surface profile
Z = 0;
sigma = datom/2;
for i = 1:size(Xatom, 1)
    for j = 1:size(Yatom, 1)
        Z = Z + Amplitude * cal_Gauss(X, Y, Xatom(i,j), Yatom(i,j), sigma);
    end
end

% Plot the surface
surf(X, Y, Z);
view(2);
axis equal;
xlim([-Lx/2, Lx/2]);
ylim([-Ly/2, Ly/2]);

%% Triangulate the surface and export as STL
tri = delaunay(X, Y);
TR = triangulation(tri, X(:), Y(:), Z(:));
stlwrite(TR, 'surface_mesh.stl');
```